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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

In the Matter of:)
) File No. SF-04030-A
THERANOS, INC.)

WITNESS: Ramesh "Sunny" Balwani
PAGES: 1 through 394
PLACE: Securities and Exchange Commission
44 Montgomery Street
Suite 2800
San Francisco, CA
DATE: Wednesday, August 9, 2017

The above-entitled matter came on for hearing, pursuant to notice, at 9:03 a.m.

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PROCEEDINGS

MR. KOLHATKAR: This is the testimony of

Ramesh Balwani. Going on the record in San Francisco, California, at 9:03 a.m. on August 9, 2017.

Mr. Balwani, can you please raise your right hand.

Whereupon,

RAMESH "SUNNY" BALWANI

was called as a witness and, having been first duly sworn, was examined and testified as follows:

EXAMINATION

BY MR. KOLHATKAR:

Q Could you please state and spell your full name for the record.

A First name is Ramesh, R-A-M-E-S-H; last name is Balwani, B-A-L-W-A-N-I.

Q Do you also go by Sunny?

A Yeah. Mostly -- most people call me Sunny.

Q My name is Rahul Kolhatkar. With me are Jessica Chan, Michael Foley, Jason Habermeyer, and Monique Winkler. Ms. Chan and I are staff attorneys, Mr. Foley is a staff accountant, Ms. Winkler is assistant director, and Mr. Habermeyer is a trial counsel in the San Francisco regional office of the U.S. Securities & Exchange Commission. We're officers

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of the Commission for the purpose of this proceeding.

This is an investigation by the Securities & Exchange Commission in the matter of Theranos, Inc., SF-4030 to determine whether there have been any violations of certain provisions of the federal securities laws. However, the facts developed in this investigation might constitute violations of other federal or state, civil, or criminal laws.

Prior to the opening of the record, you were provided a -- with a copy of the formal order of the investigation in the matter. It's this document (indicating).

A Uh-huh.

THE REPORTER: Counsel, can you slow down, please.

MR. KOLHATKAR: Sure.

BY MR. KOLHATKAR:

Q The formal order will be available for your examination during the course of this proceeding.

Have you had an opportunity to review the formal order?

A Yes.

Q In connection with your subpoena, you were also provided with a copy of the Commission's Form 1662.

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MR. KOLHATKAR: I'm going to mark it as 233 (handing).

MR. COOPERSMITH: Thank you.

(SEC Exhibit No. 233 was

marked for identification.)
BY MR. KOLHATKAR:
Q So for the record, Exhibit 233 is a copy of the SEC's Commission Form 1662.
Have you received the copy -- a copy of Exhibit 233 before?
A I may have, but I don't recall reading this.
Q Have you had an opportunity to review it in the past?
A I don't recall.
MR. KOLHATKAR: Why don't we go off the record briefly at 9:05. And if you want to take the opportunity to review it with your -- with your attorney, you can.
MR. COOPERSMITH: Yeah. We can have a quick conversation about that. We won't take too long.
MR. KOLHATKAR: Sure.
MR. COOPERSMITH: Yeah.
THE VIDEOGRAPHER: Okay. It's 9:05. We're going off the record. Please don't forget about your microphones.

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(A brief recess was taken.)
THE VIDEOGRAPHER: Rolling.
MR. KOLHATKAR: Back on the record at 9:07 a.m.
BY MR. KOLHATKAR:
Q Mr. Balwani, after each break, I'm going to ask you a question which is just to ask if you had any substantive conversations during -- during the break.
Did we have any substantive conversations during the break?
A With the Commission?
Q With me.
A No, I did not.
MR. COOPERSMITH: Oh, by the way, before we go, we should probably just introduce ourselves to -- for the record.
MR. KOLHATKAR: Yeah. That --
MR. COOPERSMITH: Are you going to get to that?
MR. KOLHATKAR: -- that's my next question.
MR. COOPERSMITH: Fair enough.
BY MR. KOLHATKAR:
Q So -- so the question is: Have you had an opportunity to review Exhibit 233?
A Yes, I have.

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Q Mr. Balwani, are you represented by counsel today?
A Yes, I am.
MR. KOLHATKAR: Would counsel please introduce themselves?
MR. COOPERSMITH: I'm Jeff Coopersmith with

Davis Wright Tremaine, representing Mr. Balwani, and with me is John McKay, also representing Mr. Balwani, Kelly Gorton, same, and Mr. Jim Topinka who is also representing Mr. Balwani.

MR. KOLHATKAR: Mr. Coopersmith, this is a bit antiquated. We also ask for a firm address and phone number still.

MR. COOPERSMITH: Okay.

MR. KOLHATKAR: Yeah.

MR. COOPERSMITH: So this is the San Francisco office. I'll let Kelly speak to that.

MS. GORTON: 505 Montgomery Street, Suite 800, San Francisco, California 94111.

MR. KOLHATKAR: And do you represent Mr. Balwani in his personal capacity?

MR. COOPERSMITH: Yes. All of us do.

BY MR. KOLHATKAR:

Q Mr. Balwani, have you been deposed or given testimony under oath before?

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A I believe I have done that once before.

Q When was that?

A I think it was either 2003 or 2004, and it was right here in San Francisco.

Q So this is sort of similar to a deposition or testimony under oath, but I just want to give you some -- some sort of basic ground rules that -- that I'm going to be operating off of and -- and I want you to be aware of.

A Sure.

Q Does that sound okay?

A Yeah.

Q So first, the court reporter is going to be recording and transcribing what we say today, so it's important that we talk only one at a time. I'll -- I'll try and wait until you finish a question -- an answer to my question before asking my next one, and I ask that you please do the same for me.

A Okay.

Q Does that sound okay?

A Yes.

Q For the same reason, it's also important that you answer audibly rather than responding with gestures or nods.

Is that okay?

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A Yes.

Q Even though this is a somewhat less formal setting than a deposition, the oath that you just made has the same effect as if you were testifying in court and carries with it the same penalty for perjury.

Do you understand that?

A I do.

Q It's also a crime to knowingly present false

information during the course of this investigation.
Do you understand that?
A I do.
Q If there's any -- if there's any question that I ask that you don't understand, please let me know so I can repeat or rephrase the question. If you don't ask me or tell me that you don't understand, I'm going to assume that you understand the question.
Is that okay?
A Yes.
Q If you need a break at any time, please let me know and we'll try to accommodate you. Generally, we'll ask that you answer any pending questions before taking a break.
Is that okay?
A Yes.
Q Is there any reason why you can't give full,

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complete, and truthful testimony today?
A No.
Q So, Mr. Balwani, when was your last communication with Elizabeth Holmes?
A I think earlier this year, I had run into her when I was running -- I had gone for a jog, and I saw her, we just said "Hi" to her, and we moved on. That's it.
Q Earlier in 2017?
A Yes. Probably January or February timeframe.
Q And I guess other than -- and Ms. Holmes hasn't given you any -- let me ask it in a more open-ended way.
Has Ms. Holmes given you any instructions on what your testimony should be today?
A No.
Q And I'm going to try not to inquire about any conversations you've had with counsel, and that's something that you should keep in mind kind of throughout my questions today. But other than your discussions with counsel, has anyone provided you with comments on what the substance of your testimony should be today?
A No.
Q I'm also going to hand you what's -- what

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I'll mark as Exhibit 234.
MR. KOLHATKAR: Sorry, I think the courtesy copy is --
THE WITNESS: Yeah.
MR. COOPERSMITH: Sure.
MR. KOLHATKAR: Yeah.
THE WITNESS: The last page?
MR. COOPERSMITH: Yeah.
(SEC Exhibit No. 234 was marked for identification.)

BY MR. KOLHATKAR:
Q Mr. Balwani, do you recognize Exhibit 234?
A I do.
Q Do you understand that it's a subpoena compelling your testimony today?
A Yes.
Q And you understand that you're appearing today pursuant to subpoena?
A Yes.
Q So I want to get just a little bit of background information about you. I'm hoping the easiest way to do that might be to refer to a document.
So I'm going to mark as Exhibit 235 a multipage document. For the record, 235 is a -- is a document Bates-stamped SEC-PRM-E 6971.

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(SEC Exhibit No. 235 was marked for identification.)
BY MR. KOLHATKAR:
Q Mr. Balwani, you -- do you recognize Exhibit 235?
A I do.
Q What is it?
A This is a response to a questionnaire that we had received -- I received from PFM's counsel as part of a complaint they had filed against the company and myself.
Q And did you provide information -- let -- let me rephrase that.
Why don't we turn to Interrogatory Number 5, which is -- starts at 6975 and it goes on to the next page.
A Yes. Okay. I see that.
Q Actually, why don't we start with Interrogatory Number 4 describing your educational and professional background.
A Uh-huh. Yes.
Q And you see the description that begins on Page 4 and goes on to Page 5 here?
A I do.
Q Is that a fair and accurate representation of

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your educational and professional background?
A Yes, it is.
Q Is there anything important in terms of your educational and professional background that -- that you would add to this list that appears here?
A I mean, just -- no, I -- I don't think so.
Q Have you employed since -- have you been employed since you left Theranos?
A No, I have not.
Q The -- one of the items here is listed as CommerceBid.com --
A Yes.

Q -- from 1999 to 2001?
A Right.
Q What was CommerceBid.com?
A CommerceBid.com was a startup that I had cofounded in '99. And it was an e-commerce business -- a business -- an e-commerce startup. It's a software company and -- that we sold I think later that year to a company called Commerce One. And it was at that time a very large e-commerce company. And we sold the company in December or January of 2001. I forgot which exact month. And then I stayed at Commerce One as part of that transaction.
Q And I guess did -- were you a part owner of
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the -- of the startup that was sold to Commerce One?
A Yeah. I was a cofounder, so I was part owner.
Q Okay. And so I guess how much -- what proceeds did you receive from the -- the -- the sale to Commerce One?
A I don't remember exactly what, but it was tens of millions.
Q So I guess I've seen reference to CommerceBid being sold for about $350 million; is that -- is that accurate?
A Yeah. I think the -- I don't remember the exact number. This is about 15, 20 years ago. But the total size of the transaction was about -- about that.
Q And was it a mix of cash and equity or --
A It was very little cash. It was, I think, 4 or $5 million in cash. The rest was equity.
Q And after -- after you left -- after you left Commerce One, did you retain equity in Commerce One then?
A I think I had sold pretty much everything. I doubt if -- if I retained anything. If I did, I probably sold it right after I left, is my -- my recollection.
Q Okay. So you -- I guess my main question is:
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You didn't continue to be involved in any way in Commerce --
A No.
Q -- One after you left?
A I was not.
Q If you look at Interrogatory Number 6, which is a couple of pages later in Exhibit 235 --
A Yes.
Q -- there's a question asking you to identify all e-mail addresses and social media accounts.
Do you see that?
A Yes. That I've used since January 1st. Yes, I see that.
Q Since January 1st, 2013; right?

A Correct.
Q And you see the answer that's provided on Pages 6 and 7 of this document?
A Yes, I do.
Q Is this a complete list of the e-mail addresses and social media accounts you've used since January 30 -- January 1st, 2013?
A Correct. Yes, it is.
Q Any updates since you -- since you filed this interrogatory response?
A I have a couple of old e-mail accounts

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that -- that I have not used since January 1, 2013, and they just forward everything to (b)(6); (b)(7)(C) here. So that's the only details.

BY MS. CHAN:

Q What are those other e-mail accounts?
A They are -- I think it's (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) and -- actually, it's listed here. Never mind. That one is already here. It may be (b)(6); (b)(7)(C), but that's linked to this e-mail account.

BY MR. KOLHATKAR:

Q And -- yeah. What is (b)(6); (b)(7)(C)?
A It's just a domain name. I was -- I was thinking about starting a company in education at some point. And I had registered a domain, but I never did anything more than that. But it's still (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) though.
Q Okay.
A It's hosted by (b)(6); (b)(7)(C)
Q The Interrogatory Number 7 references your ownership stake in Theranos.
A Yes.
Q And you provided -- the answer provided here is that you currently own (b)(6); (b)(7)(C) Class A common stock as well as (b)(6); (b)(7)(C) as -- and as well as the

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fact that the company is committed to issue (b)(6); (b)(7)(C) RSUs?
A Correct.
Q Is -- does that continue to be correct?
A It continues to be correct. The company has not issued those yet. I have not asked for it yet. But the information is complete.
Q In other words, you haven't done any secondary transactions with respect to your Class A Theranos shares?
A No, not -- not now, not ever.
Q The -- if -- if you turn to Interrogatory Number 8, the -- there's a question concerning your salary and compensation from -- from Theranos.
A Yes.
Q And it looks like your response lists a

salary and -- and the stock options that are -- that are listed in response to Interrogatory 7.

Other than the -- sort of the salary, the stock options, the healthcare benefits, and vacation that are listed here, did you receive any other compensation from Theranos?

A No, I did not.

Q And does this -- does your response to Interrogatory Number 8 continue to be true today?

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A Yes, it does.

EXAMINATION

BY MS. CHAN:

Q Mr. Balwani, where do you live today?

A (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

Q And what are -- what are some of the phone numbers that you use?

A I only have one phone, and that's the cell phone here -- listed here somewhere, I think. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C).

Q Okay.

A I used to have a landline that I disconnected a few years back, probably four or five years ago.

Q What was that line?

A (b)(6); (b)(7)(C).

BY MR. KOLHATKAR:

Q You can put Exhibit 235 aside.

So I want to turn to the main reason why we're here today, which is to talk about Theranos.

Can you just give us some background on when you first met Elizabeth Holmes.

A Sure. I met Ms. Holmes (b)(6); (b)(7)(C). We were both (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)

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So I had gone to (b)(6); (b)(7)(C) It seemed like a good place. And Ms. Holmes was there (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) Well, she was (b)(6); (b)(7)(C) there.

Q And I guess, can -- can you place that in your -- in your -- I guess in your career mindset at the time. You know, you've just sold this company for a significant amount of money.

A Yeah.

Q What made you decide to go to business school and to -- to study Mandarin at the time?

A Well, I mean, I was fortunate that, you know, I had some success in business, but my passion has always been, you know, to study more, education. I wanted to do more and contribute more.

So I had started my MBA before I sold the company, and then I dropped out to focus on my company. But now I had more time, so I wanted to go and finish

my education. So I was doing my MBA when I decided that at some point, I want to do more work in China, potentially even live there for some time. And that's why I got -- I went to Beijing and studied Chinese.

Q And I guess what can you recall from kind of those first interactions? I mean, did -- was it -- was it in a class setting or is it a social setting?

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A Well, we were living in the dormitory on campus, and her room was, I think -- all the foreign students from Berkeley -- I actually went there as part of the Stanford program, Stanford summer program. So all of the Stanford students were on the same floor, and her room was somewhere on the same floor. So this is how I met her.

Our interactions at that time were friendly, you know. We had conversations. She was very famous in the Stanford Chinese program because the entire department knew about her Chinese, her skills. And so that's how -- when I -- when I first met her, I'm like, "Oh, you must be the Elizabeth Holmes."

And so that's how we formed the friendship there.

Q And at that time, you know, when you were -- when you were in Beijing, were you -- were you discussing the -- was she discussing anything about Theranos or starting a technology company?

A Not in 2002. But even back then, I had shared with her my background, that I had just finished my startup and I'm, you know, doing Berkeley, but I was going to do the same thing again because this is what I want to do. And she told me that this is what also is her passion, except that she wanted to do, I think,

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something in healthcare.

But nothing specific with Theranos at that time. And I didn't pay much attention, to be honest, also.

Q To the best of your recollection, was it specific to -- to work with blood at the time or it was just more generally healthcare was the focus?

A I think it was -- at that time my recollection is generally healthcare.

Q So when did you first hear about her interest in starting a healthcare company focused on blood testing?

A I think it was later. In 2003, I think we met again, and that's when she was doing some work in Singapore at that time. I don't recall the details of which lab and where, but she was thinking about lab testing and blood tests at that time.

Q And were you in Singapore as well at the time?

A No. I was actually in Asia. I was in

Thailand.
Q I guess when did you first hear kind of that she wanted to start a company?
A I think the firm recollection is 2004. In two thousand -- so I finished my MBA in 2003, and then

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right after that, I applied to Stanford for my computer science degree. And so immediately after my graduation from Berkeley, I started studying for my GRE so I can apply to Stanford.

And I got into Stanford March of 2004, and that's when I reached out to her, and I said, "Hey, guess what? I'm also going to be joining Stanford." And I believe she was thinking about dropping out at that time, or she may have already dropped out. I don't recall the exact details. And that's the first time I heard about it.

Q At the time, had you expressed any interest in joining the company when -- when she was first starting to talk about the company?

A No. I -- I didn't express joining interest, but I expressed a very strong interest in what she was doing. I thought -- I mean, I had some exposure to diagnostic testing. (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

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(b)(6); (b)(7)(C)

So I -- I started, you know, digging into this thing, saying, "Why is the system the way it is?" But I didn't think I was going to be able to do anything because it seemed like a complex problem to me back then.

So when I met with her and she said she's doing something in diagnostic, I thought this is a great idea. She should do it, and if you have the passion, continue.

Q And did she say what her goals were in the diagnostic space?

A Yeah. I mean, she was very ambitious. (b)(6);

(b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

(b)(6); (b)(7)(C) And we both discussed a lot about how our entire healthcare system is focused on disease care. We were focused on catching diseases when it's too late and we cannot -- even though most of these diseases can be caught if you just catch them early, and you can do something about them.

So her vision was to try to see if she can change the paradigm from catching the disease too late, not being able to do anything, and shift it to early detection and prevention.

So even in 2004, she thought, you know, if we can get the information to the patients, or the physicians, or -- or both in time early on, we can change the healthcare system from, you know, $4 trillion and continuously going up to empower the individual, empower the patient, give them information so they can take control of their own health.

So that was her passion from -- from day one early on.

Q And did you think that sort of -- that sort of message from her remained consistent from the time you first heard about the company until the time you joined?

A Yes, very consistent.

Q And I guess -- you joined in 2009?

A September 1st, 2009.

Q Between that time you first heard about Theranos and the time you joined, I guess what else did you hear about the company?

A She used to share with me details about diagnostics, small sample. And I was curious, so I was obviously learning on my own. Anytime I would see a news -- in the news about diagnostic testing, I would share it with her, I would point it to her.

But she used to -- you know, she was working a lot of long hours, so, you know, we didn't really have much conversations. But, you know, she did share with me the impact a small sample was going to make and how, you know, access, and low prices, and cost, and transparency are just unheard of in healthcare. And obviously, after firsthand experience, I knew that already.

So it was more of a general conversation that we were having about, you know, trying to solve this problem about watching -- instead of watching people die, maybe we should -- entrepreneurs in technology should come to help and see if we can catch diseases early and provide a better quality of life.

Q I guess did she ever invite you to join the company before you -- before you initially joined in 2009?

A No, not -- I mean, she didn't exactly say that. But we used to think about the tremendous impact software was going to have on the world, and my background is software. And I -- the more I looked at this problem, maybe because, you know, when you have a hammer, everything looks like a nail, to me, this looked like a software problem, the healthcare. And

the more I dug into this, the more I was convinced this
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is a pure software problem. Of course, there's diagnostics and -- and, you know, other things to that, but software was going to be the key of how this is going to grow.

And when I spoke with her -- and my background is machine learning. And we talked about how this data comes in. And why is it that there's so much health data and nobody is doing any data mining on it to see what are the patterns? Can you -- just like Google Maps. You can see a car driving and we can predict, you know, when you're going to get somewhere. Why is that -- from lab results and health diagnostic information, why is it we cannot predict people's health, especially if the markers are available? We talked about some cancer markers which are available in the -- and research that predicted lung cancer 17 years before the lung -- it showed up in the lungs.

And breast cancer, obviously, we know there are markers there at least in research. And why is it that we are not broadening it? Maybe, you know, we haven't proven yet that -- conclusively that they can predict something. But if we, you know, engage individuals and they voluntarily said, "You know what? I want to get more testing done because I want to know what's going on with my body. My family history is
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XYZ," and they provide this data to a company and we can do machine learning on it and start to predict things, I believed then and I believe now it's absolutely possible. Nobody is doing it. And as we dug into this thing, I found out why nobody's doing it. It's a very difficult problem to solve.

But that's -- as part of the conversation, I started thinking more and more about how can I help you? And I used to talk to her about, you know, think about software this way, think about software this way. And so I was advising her a lot on -- more and more over the years.

And in 2009, there was a special project that popped up that was close to my heart, and I thought, yeah, maybe I can contribute more to the company now. So that's when I joined.

Q What was that project?

A If you recall, in 2009, there was a big outbreak of swine flu, H1N1, and it was killing people. I mean, in Asia, it was a disaster. (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

(b)(6); (b)(7)(C) And people were saying swine flu is going to spread like Spanish flu.
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And Theranos at that time was working on a diagnostic test for H1N1. And I thought how cool it would be if you can put these devices near patients where nobody wants to go -- people didn't want to go and get samples from them, but if the device is there, suddenly you can start saving lives, especially kids. And, you know, in developing nations, it was a major problem.

So I thought that and then using the data coming in and be able to model it to see where the flu is going to spread. It's possible. This is not, like, Fantasy Land here. That you can actually look at the data and say, "You know, here is a predictive model. It shows that the way H1N1 is spreading, it's going to attack that school next because that kid who came here is going to go back to his family," and so on and so forth.

So all of this data coming into software, the combination of those two, I thought this is a great opportunity for me to contribute. So that was the project.

Q In the 2004 to 2009 time period, were you getting updates on -- it sounds like your focus was software, that's what we saw your main contribution was. Was she describing the company's hardware and --

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and sort of micro sample capabilities at the time or was it -- I guess was it more a general discussion at that point?

A It was a broader discussion. I didn't have the depth of the background to understand diagnostics at that time, and so it was a general discussion. I knew that they were doing finger sticks. I knew because, you know, we had discussions on that. But I didn't understand the hardware. I saw the hardware, but I didn't understand the hardware. I clearly didn't see the box inside out.

Q What do you mean by the "box"?

A Sorry, the TSPU. I'm sorry.

Q And by -- by "the TSPU," you mean, like, the --

A At that time it was TSPU 3.0.

Q And does "TSPU" stand for Theranos Sample --

A -- Processing Unit, yes.

Q The -- did you sign an NDA with Theranos before you joined the company?

A No, which is why we were not discussing the specifics of the -- what was going on in the company.

Q When did you see the TSP unit?

A I don't recall the exact date, but I think it was before the company -- before I joined the company.

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Q Like what did it -- what did it look like back then?

A It was still a small device. It looked like a microwave oven, like a small coffee machine. So it's about -- actually, it was 14 inches tall, six inches wide, and I think about 12 inches deep, approximately.
Q I guess those are pretty precise descriptions of dimensions. Does that -- one thing I'm trying to distinguish is just, you know, your memory at a certain point in time versus what you've come to understand based on --
A Yeah.
Q -- prior events.
Is that -- is that kind of what you've come to understand that -- that machine --
A Yeah.
Q -- its size is like based on your work at Theranos?
A Yes. Now, I know the size back because -- back then, I didn't take out the tape and measure it.
Q Yeah.
A But it looked about -- you know, I could see that it looks like a microwave oven, or a small microwave oven, I must say.
Q So you joined the -- the company in September
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2009?
A Yes.
Q What was your role when you joined the company?
A Yeah. So what happened was: In the summer of 2009 when we started talking about the H1N1 project, I wanted to join. That was also the time when the company was very low on cash. If you recall, August 2009 was also the Great Recession. It was -- turned out to be the bottom of the recession, but at that time things were still nose diving across the -- across the world.
So the company was low on the cash, and -- and I knew this mission, what the company was trying to do, was paramount. So I offered to help the company. And I met with the board members. And I -- long story short, I ended up giving a 13-million -- or a 12 or 13 or 14-million-dollar personal loan. I guaranteed a loan to the company. And it was interest free. I didn't get any stocks in exchange for that, I didn't get any warrants. It was a good faith loan.
And so as part of that, I joined the company. I met with the entire board, and then we decided that my focus initially was going to be this H1N1 project so I can add immediate value. But I came initially in the
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title of vice chairman; however, over time, it -- I was fully operational and I was working seven days a week right off the bat. Just my nature, unfortunately. And I was in operation alone.

And I think at some point after that, six months later, when I had decided that I'm going to stay here for the long term, and the board said, "Absolutely, you must," they made me the president and COO.

Q And your -- you had been in this -- in the computer science program at Stanford from the 2004 period to the 2009 period?

A Yes.

Q And you decided to leave that program in order to join Theranos?

A I dropped out. Yes.

Q The -- when you first joined the company, I guess, what was your understanding of what its business strategy was?

A When I joined the company, there were 45, 50 people in the company. So it was a very small company. It was more about what is the mission and the vision of the company necessarily -- and not necessarily the strategy. I think the strategy was still being formed. So I didn't pay much attention to what was the

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strategy. I knew they had a product. It's a diagnostic space, small sample potentially near a patient at some point, and I could kind of visualize and spin my brain to see what could be done with this product.

So I don't think it was necessarily the strategy that was a reason I came, it was more the vision and the possibility and the potential.

Q You mentioned sort of the company had a product. I guess what was its product when you -- when you started?

A Yeah. I mean, it was a solution stack. There was the sample processing unit, then there were some components that -- consumables, cartridges that went into the sample processing unit that contained the reagents and a bunch of other chemistry. The company also used to have a small sample collection-type device to be able to get the blood from the finger. And then there was a lot of software on the back end.

One of the unique things about what Theranos came up with, and I think is absolutely breakthrough, is that unlike other traditional diagnostic devices where you have a device in the clinical lab where, you know, somebody is watching over it and somebody QC's it, somebody makes sure everything is good, or on the other hand, you have the glucose meters, the

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CLIA-waived devices which are in the field, but if you put it in your home, there's no oversight. Right? I mean, you can go buy it from CVS and bring it home and leave it in the car for a day, and the strips may have expired, but when you run them, the machine is not going to tell you your result is wrong. Right? So

there was no oversight.
One of the breakthroughs that Theranos came up with was: The use of the Cloud and the -- and the software. So Theranos's TSPUs were -- were always connected to the Cloud. So what happened was: When you insert a consumable, the cartridge, in the device, it would send the message to the Cloud saying, "Hey, somebody has inserted this bar code -- this cartridge. What do you want me to do?" And the Cloud will tell the device what to do.
And the cartridge in most cases, not always, but most cases will always also include the quality and the calibration controls with known values. So we can run them first and see if the quality of the cartridge is good, nothing bad happened. Right?
So -- so it was a pretty complicated stack. Then obviously, there were chemists in the lab who were making the chemistry. Then there were people who were looking at this thing called the binders. It's the

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antibodies that are used in -- when you make chemicals.
So it was a pretty broad, complicated kind of system in place already.
Q And sort of between the -- I guess the chemistry, hardware, and software mix that you described there, what was the employee split roughly?
A There was also manufacturing, so -- and hardware manufacturing and hardware design.
I think the software was the smallest piece at that time. My recollection is maybe five people in software. And I'm -- this is basically a long time ago, so my numbers may be significantly wrong. But my recollection is: Five in software, I think maybe 20 in chemistry, 15 to 20, and the rest were in -- mostly in hardware, whether they're sampling hardware, manufacturing, designing hardware, and then a few were in administration. Administration was pretty light.
Q You mentioned guaranteeing a loan for the company when you joined. Do you remember which institution that it was guaranteed with?
A Yes. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) And the easiest way we thought was to -- for the company to open an account (b)(6); (b)(7)(C) and me to guarantee a loan or line of credit to the company. So I used my personal net worth to guarantee that line of

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credit and the company could draw against it.
Q Did -- did the company pay back its line of credit?
A At some point, yeah, about a year later.
Q Do you know how it raised funds to --
A Yeah. We raised I think what was called Series C-1 in 2010, 2011.
Q Did you participate in those Series C-1

discussions?
A I did.
Q In any of those discussions with potential C-1 investors, did you disclose this line of credit the company had --
A Yes. As a matter of fact, at least one large investor was also on our board, which is Blue Cross Blue Shield. That was a gentleman called (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) He was on our board. He was also the -- I think (b)(6); (b)(7)(C) at the Blue Cross Blue Shield Venture Partners.
Q Who was on Theranos's board when you joined?
A (b)(6); (b)(7)(C) that I just mentioned, Elizabeth Holmes, Don Lucas who was the chairman of the board at that time; (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)
Q I guess when did the board sort of shift in

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composition? Was it -- was it a gradual process or was it --
A I think it happened over time between -- again, I'm forgetting the precise dates, but I would say between 2012ish, it started changing.
Q From that time you first joined to that 2012 time period, what was the board's role at Theranos? Was it a fiduciary board? What level of oversight did it provide the company?
MR. COOPERSMITH: If you know what that means. It's a legal term, "fiduciary."
THE WITNESS: Yeah. Actually, I was going to ask that. I don't know what that means. But I can tell you what our engagement with the board was. I didn't engage with the board that much. We had quarterly meetings or frequent meetings. I don't know if they were every quarter or every four months, but we had three- or four-times-a-year meetings. There were some board members who were more engaged. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) was more engaged in the chemistry and R&D side, Don Lucas was extremely engaged, and at least Elizabeth used to seem quite a bit. But that's kind of what I remember.
BY MR. KOLHATKAR:
Q When did you join Theranos's board?

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A Right -- right away. When I joined the company, I was on the board. Like I mentioned, I had given a significant loan to the company, and in exchange -- I didn't ask for any dilution, didn't -- didn't get any equity. They gave me some options, but it was a very small number. But I requested that I be on the board. I didn't demand it. Certainly, I could have demanded, actually, one or more board seats. Then they interviewed -- all -- all the board members interviewed me, and as part of that, I joined the

board.
Q Throughout -- throughout your time at Theranos, was -- was Elizabeth Holmes on the board?
A Yes.
Q And as -- was she always a majority shareholder during your time there?
A No. She was a -- majority is anything greater than 50 percent. No.
Q I guess, did she have majority of the voting power throughout the time you were there?
A No. No, she did not.
Q What -- sort of what was her power -- her voting power when you started with the company?
A She was just one member on the board, and I think she may have had access to one more board seat

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that she could fill if she wanted to. But that was it. She didn't have the majority power or majority vote is what I remember.
Q Did that change at any point over time?
A It changed over time, yes.
Q What -- what do you remember changing?
A I think around twenty -- 2013 maybe, 2012, I don't remember exact dates.
Q How did her role change with respect to the board at that time?
A Well, I think over time, my recollection is: She got more options as part of her role and that increased her shares above 50 percent. And then she had a long conversation with different board members about, you know, keeping the company private for long term or having more control over the decisions, and I think as part of that, she got more -- more power and more control of the -- of the company.
Q You just mentioned kind of her desire to keep the company private. Was that always the case from the -- from the time you first heard about the company?
A You know, she didn't -- I don't remember if she used the word "private." I think she used the words, "I don't want to go IPO anytime soon." The reason is -- this is later -- I mean, over time,

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obviously, there were some times where the board would talk about IPO, but it was not a serious discussion. But her desire always was: Look, in order for us to do what we want to do, we may have to, you know, stay private and -- and -- and -- because we -- our goals are ten-year goals. You know, some goals may not happen for 15 years, and there are not a lot of investors in the public market who may understand that.
(b)(6); (b)(7)(C)
So she had that thought in her mind that in order to achieve the goals -- long-term goals, in the short term and the long -- the medium term, you know,

we may not be making money, but in the long term, if we want to shift this discussion from disease to prevention, it required a longer-term commitment. So yes.

Q And in your role as president and COO, who did you report to at Theranos?

A I believe I reported to her officially.

Q Did that change at any point in time?

A I don't recall. I don't think so, actually.

Q What were your responsibilities as -- as president and COO?

A It changed over time. As I'm sure you already know, when you're building a technology

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company, things move really, really fast. So it was more whatever came my way first, I would tackle if I had the bandwidth.

But right from the start, I owned all the software. I owned all the electronics because that's my background. I made direct decisions there. I owned all the IT. Like I said, there were five people, so not much to own.

But, you know, I started putting my vision in place about what this software is going to do over the next ten years with the company. So software, IT electronics fell under me.

Q Sorry, if I can interrupt you there. What do you mean by "electronics"?

A As part of -- of our automation and a lot of the work that we were doing, whether in robotics or TSPUs, anywhere, required electronic boards, kind of like motherboards in the computer. At Theranos, we used to design all of our boards -- pretty much all of our boards, which is a pretty significant undertaking.

But we designed all the boards. A lot of the -- even the chips, we kind of either designed it or we picked custom chips that fit our needs and then designed more circuits around it. So all of that fell under me, that team.

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Also the third team was -- again, it was the software, but it's the -- it's called embedded systems. That's the operating system that runs on the chip itself, the realtime OS. That also fell under me. So I started, you know, making all the decisions there right away.

And then in addition to that, I was involved -- because, you know, five -- 15 -- 45, 50 people, a small company, we needed to grow the company. So recruiting was a major part. I spent a very significant amount of my life recruiting at Theranos, probably thousands of interviews.

And after I joined, I don't think, you know, anybody maybe except for five or ten people who were

recruited were actually hired unless I met with them and I had interviewed them and recruited them. So I spent a lot of time doing that. I started focusing on building the HR organization, even though it was a lower priority initially because the team was small, and I also spent a lot of time on field activities.

So I mentioned earlier the H1N1 project. I joined Theranos on September 1st, and we had this H1N1 assay done -- or almost done, but we didn't have any samples because getting swine flu samples was not easy. And nobody wanted to go to Asia because everybody was

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sick of dying -- afraid of dying. So I got on the plane and I went to Asia, I went to Thailand, and I started sourcing places where I could find samples. And -- and I did that.

And so again, that was not -- that was something that was not in the job description, but -- but I was on that project for -- for some time looking for samples. I was actually running some assays and R&D. When there was a shortage of people on weekends and we needed to run some samples, then I would say, "Okay. Train me. I'll do it." And I did that.

Q Well, I -- what does that mean, you were running assays and --

A Basically what it means -- that means is: When the samples come in, you need to aliquot samples on a -- either a tray or a cartridge, mix reagents, wash buffers, pipette stuff around. You know, basically chemistry lab -- chem lab kind of stuff.

Q And you learned how to do all of that?

A Yes.

Q Okay.

A Life in the startup. Right?

Q And you mentioned a job description in one of your answers. Did you ever get a formal job description at your time at the company?

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A No. I don't -- I don't think there is job description for a president and a CO of -- a COO of a startup. You do whatever it takes.

Q And so you -- you mentioned that over time, sort of your responsibilities grew. Can you -- can you briefly explain how that --

A Yeah.

Q -- what got added to your portfolio?

A Sure. So after I was doing this project, we started also spending -- I started spending more time on the hardware side to understand the supply chain, you know. Because the machine had a CPU and a motherboard, I wanted to see what are the decisions being made there. By "machine," I mean the TSPU, sorry, 3.0.

So I spent a lot of time on hardware and

learned how the hardware works, the supply chain for the hardware, supply chain for the reagents. I learned that there are many, many chemistries for which there's just one supplier, some guy in Ireland who found a way to grow some antibodies using his sheep. Seriously. And -- and then you need to secure the supply chain. Right?

So I spent -- I learned that part of the business. And then 2010 March, February time frame, I

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was also spending time on the road, me and Elizabeth Holmes, meeting with the retail pharmacy businesses, and as that evolved, I took the leadership role there in negotiations and contracts. So -- and then after that -- I mean, I can -- there was a lot of other things that happened after that.

Q Sure. I guess by "retail pharmacies," do you mean Walgreens --

A Walgreens.

Q -- primarily?

A Yes.

Q What about the Safeway?

A Yes. Yeah. Same thing on Safeway. I spent -- I, you know, spent time with Safeway. Even though initially, I would say, the first year, year and a half, Elizabeth spent a lot more time on Safeway [(b)(6); (b)(7)(C)] [(b)(6); (b)(7)(C)] Safeway at that time. He was obsessed with this project, with Theranos' project, building a lab inside Safeway.

His reason was that Safeway one day is going to be a healthcare company, not a grocery. Because he saw that giant in Seattle, Amazon, entering this space, so he said, "We've got to be in the healthcare business." And he was very clear that Safeway wants to

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be a healthcare company, and a diagnostics lab testing has to be a key part of that.

So she spent a lot of time on Safeway initially, but ultimately, I took that over also.

Q Do you -- I mean, I guess -- so would you say you took over responsibility for the Safeway relationship more so [(b)(6); (b)(7)(C)]

A Yeah.

Q -- Safeway?

A Yes. Pretty much right after that.

Q And Walgreens, was it sort of similar, both you and Ms. Holmes were involved in the start and then you took more of a lead after --

A Yes, it was similar. However, in Walgreens' case, I was deep into Walgreens from the start. So unlike Safeway where she was spending more time at Safeway, with Walgreens, I was spending at least as much time as her on Walgreens from the start.

Q What about Theranos's relationships with pharmaceutical companies, what were your responsibilities in that space?
A Not much. A lot of the work that was done was done before I came. I did make a couple of trips to meet GSK in Europe, and there was another -- Sanofi-Aventis in London, we had met with them. But,

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you know, I didn't understand that business at that time. I was too new. This is early part in 2009. I was just kind of sitting there learning to see how things are progressing.
Q And did your responsibility for Theranos's relationships with pharmaceutical companies change over time or --
A No, they didn't.
Q Was Elizabeth Holmes primarily responsible for those relationships?
A Yes.
Q What about with the Department of Defense, what were your responsibilities there?
A I would say similar to pharmaceutical companies. Most of the work with DOD or the defense department was done before I joined the company, so I didn't have the background. I may have participated in, you know, a few meetings when somebody came because we were such a small company that Elizabeth Holmes just sitting by herself sometimes was, you know, not appropriate. I wanted to at least be taking notes or, you know, being there.
And so in some DOD meetings, I -- I sat in, but again, I didn't play a bigger role there of negotiating, or dealing, or even understanding the

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projects.
Q What were your responsibilities with respect to the company's financials when you -- early on in that president and COO role?
A At that time we had a controller in the company. (b)(6); (b)(7)(C) So she was in charge of all the financials. Initially, I didn't spend any time on financials. There was too much to do and there's not much finance -- finances. I had loaned the -- the money to the company, so I knew about the finances.
So I didn't spend too much time there. Even over time, I would -- I used to get updates from (b)(6); (b)(7)(C) about what's the cash position? I mean, that's kind of where my eyes were, how much cash we had. But I didn't spend much time in financials until then.
Around 2010 when we started engaging with the retail pharmacies, Safeway and Walgreens, I started building a financial model with the help initially from Safeway and Walgreens that I owned and -- until I left

the company.
Q By saying you owned, you mean you were the person responsible for the company's financial projections as you just described?
A Financial model.

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Q Financial model.
A Yes.
Q And I -- what was the distinction in your -- in your mind?
A Well, I can tell you what I thought about the financial model. It was a planning tool that I was using to see the potential of the business. And also, it was -- it was basically a spreadsheet, Excel spreadsheet literally, and that included a lot of the learnings that I was doing from -- about the industry. You know, how many patients typically come at Quest Diagnostics. That's another lab company in the field. Or LabCorp, what's going to be the R&D burn expenses, and how many patients you can get in a ceratin location, how many sites you can have.
So as those assumptions came in, I would just put all those data into this model and see how it changes the model over time. So I was using this as a planning tool, and some of the tabs in the model would spit out as the end result of, you know, changing any assumptions in the model.
Q When you started with the company in that sort of early, you know, say, 2010 to 2012 time period, did you share financial documents with the board at all or --

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A I mean, I -- I think 2010 to '12, we would show the balance sheet and -- but it was part of the model. So I would often show the model to the board pretty much almost every board meeting just to show them how it is evolving. And so that was always almost every part of a board meeting. So I would say yes.
Q Who created the balance sheet?
A It came from a software, I believe, that we had in the company called QAD. And it -- I used to get it from (b)(6); (b)(7)(C) but I think she got it from that software automatically generated.
Q You -- you wouldn't personally go into the QAD and -- and work on those?
A No. I didn't -- I've never have logged into QAD. It's not an easy software to use.
Q I believe you.
What about with respect to the company's media or press strategy, were you responsible for that when you -- when you started -- joined the company?
A No.
Q Did that change over time?
A No.

Q Who was responsible for the company's media strategy?
A You know, I don't think we had anybody. We
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were both engineers, you know. Elizabeth Holmes is a chemical engineer and I was a software guy. So neither of us had media or press background. In 2012 and 2013, we had hired a consulting firm called Chiat/Day. They are a marketing and PR firm. They are not, like, a media/press kind of firm. I learned the distinction later. I didn't know -- I thought it was all the same.
Q What is the distinction?
A The marketing and PR guys are -- they create your marketing collateral and how to get -- get the message across. And the PR -- and the media guys actually literally work with the journalists and the reporters, and they say -- tell you which ad to run in which paper. The marketing guys will create the ad for you, but then they don't know what to do with it. And then the media experts will say, "No, don't run it in this magazine, run it here because it's going to have a greater impact." That's kind of my loose understanding of it.
Like I said, I -- it's -- it was not interesting to me, that whole area of business, and I didn't have the time, so I didn't spend much time there.
Q What about with respect to investor communications, what were your responsibilities there?
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A So there -- I think there are two pieces for that. One was: The existing investors mostly interfaced with Elizabeth, but if they had a question which was about the model or anything else, they would reach out to me once in a while. But mostly, the interaction with the investors was with Elizabeth early on.
Once we got into 2013 and beyond, there were a few investors who interfaced with me more. PFM is one example. And then in 2014 and '15, as we met with any investor, I would always be in the meeting. So before the investor invested, I would always be in the meeting. In most cases, to answer their questions, you know, they had, but I was always in the meeting.
Q At some point did you come to supervise the development of the TSPU itself?
A Not officially. But I was so deeply engaged with that -- I didn't do the R&D part of TSPU. That was something that was not my expertise. But I was engaged with the TSPU's timeline, project management, resources, what is needed where, and understood it fairly -- reasonably well enough to be able to at least understand in a meeting what people were talking about. I would not be able to set the direction of the TSPU in

the future, but what was being done today, I could
understand and manage.
Q What about with respect to Theranos's other sort of hardware development, like the creation of the nanotainer, did you -- did you supervise that process?
A No, I didn't supervise that.
Q Who did?
A You know, there was no one -- the equation was very complicated. So unlike a software module or, you know, a bottle of water where somebody can own it, what Theranos was doing was so tightly integrated and so complicated that I don't think it was possible for one person to supervise it.
So a lot of times when we did meetings on nanotainers or CTNs, like capillary tube nanotainers, the old device, or the TSPUs, or even the chemistry, or in some cases software, we would also have multiple people in the room. So it would be, for sure, Elizabeth Holmes, for sure, myself -- myself. Now, obviously, there were meetings where we were not available, but in general, we would be in the meeting.
And there would be other people with expertise. And the reason was: Anytime we made a decision that was a dumb decision, somebody who is an expert in the field would be able to say, "You know, I don't understand the whole big picture, but that piece is not going to fit there." Right?
So it was more of a collaborative decision-making environment. Ultimately, on many things, either I would make a decision or Elizabeth would make a decision. I mean, there's always one decisionmaker. But there was not a supervisor. It was not like a hierarchy where, you know, people reported a certain way. It was a very complicated product as hopefully you'll -- you have developed some appreciation that it was not possible for one person to supervise things.
Q I guess, overall it sounds like you had a large number of responsibilities at the company.
How -- how would you describe Ms. Holmes's responsibilities as compared to yours?
A Yeah. So, you know, she is a -- in my opinion, a very brilliant inventor. So a lot of the -- the meetings that we had on product, future of the product, detection systems, you know, all of the things that run in the device, even things that -- on software, like what kind of things we can be putting in the software, she had just amazing ideas.
So she spent a lot of time with engineers and scientists kind of picking their brain, discussing with them and -- and figuring out the strategy for the

product's -- the technology for the next, you know, five years, ten years. And so that's just kind of her expertise.

Q Were there any areas of the company that were -- other than the ones you've sort of described in terms of, you know, the early stage -- the early pharmaceutical relationships and DOD, any other areas where she was more familiar with the company than you were?

A I think over time, 2014 and '15, I was not spending as much time on the media and PR piece, so I would say, you know, she was probably more exposed. I'm not saying that out of firsthand knowledge. I'm just guessing that she was probably more exposed. But I don't think there are too many areas.

BY MS. CHAN:

Q Who was responsible for the company's strategy with respect to hospitals?

A I think it was mutual, it was collaborative. Kind of as we learned, we would discuss. And the landscape was also shifting. And because of the ObamaCare passage, the Accountable Care Organizations became very interesting for us because these people are on the hook if they don't save money. Unfortunately, in our healthcare system, as we learned, nobody really

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cares about cost unlike a technology company where you come up with a cool product and it's cheap, people are all over it. In -- in healthcare, not the case. If you don't increase the cost of healthcare, it seems like people are not interested.

So as -- but accountable care was a good, positive development because these were hospital systems who were going to the government and saying, "Give us a fixed amount, dollar amount and we'll manage these patients for you." And kind of the good old days where doctors were responsible for keeping you healthy.

And that was the thought behind the ACOs. So when that happened, we thought, hey, this is a great place for us to showcase low cost, better access, transparency, convenience. Patients like this. So that's -- it kind of evolved over time, but both of us were engaged in that.

Q So with respect to managing and negotiating those relationships, you think you were equally involved in --

A Yeah. I mean, we --

Q -- those discussions?

A We didn't spend much time on those. So we -- I would say yes. I mean, we were -- I made presentations and I met a few people by myself once in

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a while, but mostly because the topics were so technical, they were talking about chemistry, and

biology, and -- and medical stuff, that was her -- her forte. She knew that really, really well. So I would say we were both complementing each other in those meetings.

Q Is your answer the same with respect to discussions with physicians' offices? Were you both responsible for that aspect of the business?

A Well, if the physicians' offices were part of the hospital network, the health systems, then the answer is yes. But if the physicians' offices were not, then I would say no. Those are more one-on-one kind of sales, or negotiations, or deals, and we had a sales team in Arizona that was doing that.

Q Who was overseeing that team?

A I was.

Q And who was -- I guess who would be the head of the sales team?

A Yeah. We had a person in Arizona. (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

BY MR. KOLHATKAR:

Q You mentioned you had a big role in Theranos's hiring of employees.

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A Yeah.

Q Did that go down to sort of the phlebotomist level?

A Yes.

Q You were involved in hiring all those individuals?

A Even the security guards.

Q Why was that?

A Well, I mean, there are multiple reasons. I'll give you -- try to give you a short answer. When I was working at Microsoft -- I was -- I was there for some time -- I heard (b)(6); (b)(7)(C) say many times, "The most important thing a manager does is recruiting," and I believe that. And there's a famous quote by Peter Drucker that says, "Culture eats strategy for breakfast." The point is: Culture of a company is infinitely more important than strategy, and I believe that too. And the culture of the company comes from leadership, leading by example, and the kind of people you hire.

And so I was absolutely obsessed with making sure we hired the right people. And what was happening was: A lot of the times, our managers or team leads, because they really needed warm bodies to help them get the project moving, they would hire somebody that --

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that I knew they would regret six months down the road because they may not fit in the team. And they would tell me that. After I said no to that person, they'd say, "You know, you're right. I shouldn't have hired

that person."
And so I started making sure that -- I clearly didn't have the technical background to interview every single person, but I have done hundreds of interviews in my life, and here at Theranos I did thousands. I wanted to make sure these people are coming for the right reasons and they have the stamina to work with us for the long run. We didn't want, like, tourists who just wanted some, you know, name on their resume and then move on after 12 months. We wanted people who were committed to the mission of the company, to the cause that required a ton of hard work. And -- and I was able to sense that. And when I met with them, I would ask people why are they coming here and -- and direct questions.
The other reason is: I -- is: Also, I learned a lot from interviews. I interviewed a ton of lab directors, I interviewed phlebotomists, and I got to find out how other labs work. Because even if I didn't like somebody, I would still ask them, "So what do you like about your job?" "What you don't like about

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your job?" And, you know, you learned a lot from people during interviews, especially when they're thinking about leaving their company, and so they tell you a lot.
Q What was the culture that you were trying to create at Theranos?
A I mean, it's difficult to describe, but I think the most important attributes were people who loved doing what they were doing. It was really important that you hire a chemist that loved chemistry, not that I'm a chemist now, but I really want to be a lawyer six months down the road, then, you know, we should hire them as lawyers.
So it was important that you hire people who love -- who have a passion for what they're doing because they will work hard at it. You don't have to micromanage them because they just love doing what they're doing. We liked people who obviously had good work ethic because we worked really, really hard, and so that was really important.
And I think the other things were people who were humble. Because we were doing such a complicated project that if you hired somebody in software who thought, you know, that person was a genius, you know, you're going to fumble big time. You will not be able

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to get along with people who are not geniuses in software, but they are geniuses in biology, or chemistry, or bioinformatics, or mechanics.
So it was important that you hire people who are team players, (b)(6); (b)(7)(C) you know, like, flashy people. So -- and we were a conservative

company, we wanted conservative people. And so, you know, that was kind of the culture.

Q Do you think Ms. Holmes shared that vision of -- of what Theranos's culture should be?

A Absolutely. This was -- came from her primarily.

Q I guess how did she communicate that to you?

A Well, we used to talk about -- she interviewed everybody also. At some point, I think in 2015, I said, "Look, you need to stop doing this because I am interviewing people, and you are so busy, it's difficult to find you sometimes for an interview when a candidate is waiting there."

And she goes, "Yeah, yeah, I think my bandwidth is -- no longer allows me to interview everybody."

So she not only communicated this to me, we were both living this culture. I mean, there were a ton of weekends -- we were always there -- almost

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always in the office on weekends. And Saturdays and Sundays was my interview jam. I mean, I would interview 15, 20 people sometimes on weekends, Saturdays and Sundays.

And -- and many times, I would interview people after 8:00 p.m. because I was busy throughout the day, and that was a fairly good -- good barometer for us, it turns out in the long term, because the candidates who are interested in you after 8:00 p.m. and come on weekends, that's a good sign they have good work ethic to begin with.

So -- so -- and she was there. She was there every weekend we were interviewing. So it was a constant dialogue. And we would come out from an interview and say, "I didn't like this person."

I'd say, "Well, I really liked this person."

"Well, why did you like it?"

And I'd say, "Here's the reasons." And this is how the -- you know, our understanding of the whole thing.

"Oh, yeah, that makes sense. I picked up that too."

So culture is one of those things that evolves over time. The other reason why it was so critical for us to interview ourselves is, because we

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want our -- wanted our managers to do the same thing and -- otherwise, the managers will delegate it to their managers, and soon you have a lot of people that nobody has really interviewed well. So it was mandatory that if you wanted to be a team lead, you have to interview in the company.

And then we made it mandatory for employees that if you are a scientist, you're working at the

company, are you going to be able to interview five or ten percent of your time? So we wanted to make sure everybody was part of that.

And then people took responsibility. If somebody doesn't -- didn't work out, I didn't have to be the person trying to get the -- fire somebody. The manager is responsible.

Q I -- I guess how many managers, you know, would you say reported to you at any given point in time? I assume it grew over time, but --

A Yeah, it grew over time. But like I said, the organization was literally like a -- you know, a Rubik's Cube. So there were a lot of people reporting to me, but people knew that, you know, we were running so fast. So even if somebody was reporting to Elizabeth, you know, they were kind of reporting to me because they -- if I ask something, I get the answers.

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So there were a lot of people reporting to me.

Q What kind of positions would you describe as managers as Theranos?

A I would say team leads and above. So there who -- whose official title was not necessarily manager. Sometimes senior scientists were managing, you know, four or five other scientists, but they were managing them. So we didn't give them the official manager title until we saw and they proved that they actually are a good manager, but I would still consider them as managers.

Q Did Ms. Holmes ever express any goals to you about how she wanted the company to be valued externally?

A That was not on our radar. We were -- our focus was: We're going to build the company for the long run. She wanted to build something for the next 20, 30 years, 40 years. She wanted to run this for the rest of her life. And so this -- this question about how others value was -- I mean, it was very low on our priority.

Q Did she ever describe that she wanted to have a -- to lead a billion-dollar company or something like that?

A I think it was more as a metaphor that she

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wants to build a company that has that kind of impact. But I don't think she personally said, "I want a billion dollars." That's not what drove her at all, and certainly it didn't drive me. I would not have stayed at the company or even worked for a day there if what was driving the CEO or the founder was: "I want to be a billionaire." I would -- that's -- life is too short to waste like that.

Q And you personally didn't have any financial need to do that; is that --

A No, no. I was happily enjoying my life and enjoying the beach, and then I came and worked seven days a week for seven years. I used to joke I'm a seven-year slave.

Q I'll hand you what I'm going to mark as Exhibit 236. And just for the record, Exhibit 236 is a -- a document Bates-stamped Balwani-2870.

(SEC Exhibit No. 236 was marked for identification.)

BY MR. KOLHATKAR:

Q Do --

A (Witness reviewing document.) Uh-huh.

Q Do you recognize Exhibit 236?

A It's an e-mail from myself to Ms. Holmes and her response.

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Q And you -- and you see that it looks initially like you forwarded her an announcement of -- relating to Facebook's acquisition of Instagram?

A Yes.

Q And it looks like you say, "very annowing." Do you mean annoying?

A Yes.

Q "Why are we not there yet"?

A Uh-huh. Yes.

Q What did you mean by "Why are we not there yet"?

A Yes. When we were under the radar, it was excruciatingly painful to recruit people, to bring people on board. And we wanted to grow faster. We wanted to add more engineers, more scientists, more computer scientists. Especially in computer science, I was struggling hiring people.

So the point I was getting across here from my -- and this is the discretion we always have is: How much people should know about who we are and what we are doing. This is in 2012 still. And we were under this radar on the stealth mode. Had we hired more people faster, had people known that they, you know, this is a company. They have a Walgreens contract. They have a Safeway contract, I think our

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recruiting would have been easier.

And this is what I was referring to, is that we have -- when we recruit people -- when you call people, nobody has even heard about us, so it was impossible to hire people.

Q I guess, so what did -- what did Facebook's acquisition of -- of Instagram have to do with, I guess, being under the radar or not?

A Well, that's because Instagram was not doing, in our opinion, anything as significant or important as what we were doing, and everybody was talking about Instagram as if it's the greatest thing ever. And my

point was: People should be focusing on us so we could recruit more people.
Q When -- her response to you is: "I had the same reaction yesterday."
What did you understand her to mean?
A Well, that was the constant conversation. The -- the reason I know or I feel that that was the case here is: Every time you saw how difficult it was for us to get traction in recruiting, and especially in Silicon Valley, this was her reaction. That these companies who are not doing anything really close to what we are trying to do, the impact we are making, you know, they get all the buzz.

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And because of that, I mean, we -- I used to interview software developers and even reaching out to them, they would say, "Oh, no, no, I got an offer from Instagram."
And I used to say, "Instagram is not going to get you the kind of passion and satisfaction in life that we will."
But he said, "So what are you guys doing?" And we couldn't tell him.
Q So why was the company in stealth mode back in this 2012 time period?
A You know, we -- Theranos is in a -- in a -- in a brutally cutthroat industry from many directions. Had Theranos succeeded in laboratory services, we would have shaved off billions of dollars of revenue from our competitors, basically -- primarily that they make from Medicare and Medicaid. They overcharge Medicare and Medicaid. I don't know if you guys know that.
So we knew we were going to get attacked in the marketplace as soon as we launched, and we wanted as much headroom as possible, as much runway before we launched. Stay under the radar. Don't alert people what we are doing.
The other thing is: A lot of the things we were doing were supercool ideas, how we're going to

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execute not just the software, hardware, data, and so on and so forth, but our business strategy. The fact that we picked Walgreens and Safeway, and this is how we're going to grow the business, we didn't want anybody to know until we're out there, until we no longer can hide it. So that was the primary reason.
Q And in your mind at the time, what -- what did -- what sort of objectives did Theranos need to achieve in order to be able to make that transition from -- from stealth mode to -- to being around in the marketplace?
A You know, if what -- if it was my -- if I had control over it, we would still be in stealth mode. The reason is: I wanted us to capture a couple of

markets, like, good, decent market share. You know, launch in Arizona, maybe Pennsylvania, and then when we launch in California is when people would get to know us more. Until then, ideally, people should have just assumed we were just another lab. They -- I -- I didn't want people to know the incredible software that was behind the company, and that, we wanted to protect.

Because, again, a discussion that Elizabeth and I used to have is -- and we've had this with many people is: Our main competitors were not LabCorp and Quest. They were the competitors in the short and

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medium term, but our long-term competitors were Google and Amazon.

And as a matter of fact, that fear came true in 2013 when we launched and we came out. Since then, Google has built this life sciences company and they're spending a billion bucks a year on that. And I actually believe a couple of months ago, they actually renamed that to Google Diagnostics.

So this was about data. I mean, for us, data was the gold. And the conversations, as you'll see, with Walgreens were all about data, or were mostly about data, because of how we thought about data. So I wanted to keep us under the radar.

Even if people knew who we were, we wanted them to think, like, we are this, you know, plain ole lab company, like a Yellow Cab, just another cab company.

Q Who -- I guess why didn't Theranos stay in that sort of stealth mode?

A I think it became difficult once we launched. And unfortunately, you know, media just paid more attention to us, you know, than we were ready for.

Q Did you and Ms. Holmes share the view that it would be preferable to stay in stealth mode --

A Yeah. I mean, she -- she was the CEO. When

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we closed the round in 2011, I think we had a 7 billion valuation even back then. And unlike other Silicone Valley companies, once they just raised a few million bucks, they will do a press release, and now -- and once they hit a billion valuation, of course, they do a bigger press release.

And here, we had signed a contract with Walgreens, and we didn't say "hush" to anybody. It was our idea, saying, "Let's -- why -- why educate others until we are ready?"

And the same thing with Safeway. And we raised the capital. Even when we raised the capital in 2014, '15 when people knew who we were, we didn't tell people we had raised the capital. For us, that was a way to basically tell -- poke the bear. That now we have resources that we will -- invest in our business

and we can grow faster. And we didn't want to do that.
So it was absolutely her -- her thoughts and her strategy.
Q So in your view, sort of the -- sort of additional media attention that came -- that the company had in 2013, 2014, that wasn't something that Theranos went out and sought?
A No. We -- I mean, I was hell-bent against media. And we both shared that vision. We didn't want
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too much attention. We didn't have any media person on our team. Like I said, we had literally one person in all of our company was the communications director.
I think what happened was: People got interested. And at least at that point, you know, Silicone Valley had not seen a female entrepreneur, and I think a lot of people in media, I mean, not to that level -- were obsessed with her. And even when the Fortune article came out in 2011 or '12, something like that, we didn't disclose to them what our valuation was. But they were snooping around. Obviously, once media gets involved, they snoop around.
So, you know, we -- we didn't -- we were trying to not get media. Now, once they reach out to you -- to us -- reached out to us, things changed because you lose control, as you learn unfortunately, over what you can say or cannot say to media or how much you can engage or not engage with media. It seems to be, now in hindsight, it was kind of an all-or-nothing kind of thing.
BY MS. CHAN:
Q How did the media find the company then? What -- was there an event that took place that precipitated the media attention?
A Yeah. So what happened was: In 2013, when
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we were launching at Walgreens in September, one of our board members, Mr. George Schultz, said, "Somebody should do a simple write-up, not much -- much in detail, about the company," and he knew somebody in media at Wall Street Journal, ironically. His name was Joe Rago. And he came, he spent some time with us, and he wrote just an editorial, but I don't think there was anything significant there.
After that, we had a -- a lawsuit against a patent troll who had been trying to steal our patents and -- according to my understanding, and we had engaged a big law firm, David Boies, Boies Schiller and -- BSF. And we won the lawsuit. And (b)(6); (b)(7)(C) wanted us to do a small article for Fortune, and we said, "Why do we need that? I don't think it's necessary."
And said, "No. The reason I took this lawsuit is: There are other patent trolls. You guys

are a patent factory, you know. And there are a lot of patents you haven't even filed yet, and there are other people who are going to try to steal your patents. And so if we print a small article that, you know, you went after a patent troll, anybody who tries to steal your patents or patent trolls will think twice."

So that was going to be the theme of that --

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that article. Initially, this is how it started. But I think that reporter, once he met with the company, and then I think he spoke with a few board members, got the wind that the company was valued at a high valuation, and that he got obsessed with it. And this is how it happened.

Q Was that [b)(6); (b)(7)(C)]?

A I don't remember the name anymore, but I think it was in Fortune magazine.

MR. MCKAY: Is now a good time to take a break --

MR. KOLHATKAR: Yeah.

MR. MCKAY: -- for just a minute?

MR. KOLHATKAR: Why don't we go off the record at 10:22 a.m.

THE VIDEOGRAPHER: We are going off the record.

(A brief recess was taken.)

THE VIDEOGRAPHER: Rolling.

MR. KOLHATKAR: We're back on the record at 10:33 a.m.

BY MR. KOLHATKAR:

Q Mr. Balwani, just to confirm, you didn't have any substantive conversations with the staff during the break; is that correct?

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A No, I did not.

Q So I want to turn a little more specifically to just telling more a little -- a little bit more about Theranos's technology.

So you've described a few different things. Sort of you viewed the software as a -- as a major component of it?

A Yes.

Q And when you joined, there was -- there was a sort of the hardware aspect in terms of the TSPU as well as the cartridges and the capillary tubes; is that right?

A Correct. And the manufacturing.

Q And the manufacturing. Am I missing anything in terms of what the technology was at that time you first joined?

A When I joined?

Q Yeah.

A No. I would just add that as part of software, there was this machine learning and

bioinformatics piece that was also in place. But that's -- I include that was part of software.
Q And over time, did -- did Theranos's technology sort of expand in terms of what it included?
A Yes, it did.

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Q What else did it grew -- include?
A Well, that's -- there were a lot of pieces as we grew. I can give you maybe a broader overview, and then if you want more details, I can drill down.
In chemistry, for instance, initially when I joined, the team was small. We were just developing chemistries, buying ingredients or reagents and -- and other things from outside. Over time, we started adding more and more of those components in-house.
Initially, also, for example, some of the core technologies we started developing in-house. So this -- this term called binders or antibodies, most companies buy from outside, and in our case, we knew that we may be locked out of some binders by our competitors. Deliberately, they will tell the suppliers not to sell to them. So we developed our own in-house team that creates binders, like artificial life basically is -- is the high way of describing it. It was a very critical thing for us.
Then we have a few other teams in chemistry that were doing nucleic acid amplification. This is a form of technology that they were doing. There was a team that, you know, does, like, sequencing work, genomic sequencing stuff. So that team was built, and we brought a lot of people in. We hired excellent

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people in that team. Then we also hired specialists in fluid dynamics, so we had people doing that.
And the mechanical engineering side, we added more people on the firmware side who can do embedded systems.
Q What do you mean by "embedded systems"?
A Yeah. Embedded systems is a technology that allows you to put software on a chip itself. So I don't know how to -- I mean, if you want -- I can go deeper into that if you want.
Q No. I think that's good.
A That's good enough?
Q Yeah.
A Okay. And then we also had mechanical engineers with deeper specialties in small volumes, microfluidics. And then we also added a lot more expertise on the manufacturing side. We added people who were specialists.
Manufacturing in the U.S. is a -- as difficult a task as you can imagine. It seems simple. It's not. The reason is: Most of the manufacturing is out in China, so to hire people who are specialists to

be able to make plastic parts, especially really high-precision plastic parts, is a major challenge here, so we built the team in-house.

Then we went further downstream to saying, "Okay. There are components that we need in order to build those plastic parts. Let's hire those specialists." So there's a thing -- technology called injection molding and making the mold itself.

So if you think about a plastic cap, for instance, you know, this (indicating) is made in a factory in an injection moldings machine, but the system that tells it to make a cap that looks like this with rings inside it, that is called a mold. It's a very difficult art. Even people here in the U.S. don't like to tackle that problem because it's very complicated to make molds for high-precision parts.

Especially where the precision is not just the tolerance, but the precision is also the reflection of light, and how light enters, and so on and so forth. So it's a pretty -- it's an art. We built that team in-house. And then -- it's just a fantastic team.

So we did manufacturing there. We then also built an automation line inside of a CLIA lab, so all of that was new technology. We built a lot of software for CLIA lab automation. We also built automation lines for manufacturing our capillary tube nanotainers, CTNs. I'll just refer to it as "CTNs" if that's okay.

Q Okay.

A So CTNs. That includes the nanotainer, by the way. So CTNs.

We then also added manufacturing lines for assembling our consumables cartridges. And that was a monumental project because we go there, it's just a beautiful space, medical-grade clean room. The robots are moving around and doing things. And we had to program those robots. We had to design controller boards to control those robots because it's realtime. You cannot be off by one millisecond. Things will go wrong. So that, we built in-house.

So that's just the -- one component. Then we built a ton of software, a lot of software. And I can go into detail if you want in software. But our -- what we built was a tight integration of pretty much everything that the company was going to do all the way from welcoming a patient into our stores, so when somebody walked in, if they had our app, we knew who is coming in before even they showed up, if they allowed us to, obviously, and -- to the tiny details of tracking the sample. You know, a sample is picked up, who picked it up, and you can click on the name of the courier and see what is the history, how many times they've picked up from that location.

We also built cool apps that allowed us to
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make sure that -- be aware that -- you know, in the lab industry, people do a lot of dirty tricks. Somebody is going to show up pretending they are our people and pick up our samples and -- except they're not our people. So we built smartphones to be able to do a two-way handshake, so they have to be our people using the thumbprints. So all the way from there to when the sample came to the lab, we were tracking it, scanning the sample there, aliquoting it.

Then in the -- we built our own lab information system because we looked at the LISs, or live information systems, in the market. And the lab industry is like -- literally, in my opinion, like a cab industry. They don't have much cool software. It's old, probably made by the Soviets in the '80s. I don't know who made them, but it's pretty bad.

And so we built our own software that allowed us to directly link with smartphones. We could do a lot of things with LIS on a -- in a browser, and then also, we put many key components of that on iPads and iPhones. Then we built our crown jewel app, which is the Theranos.Me app for consumers.

So you could download the app, you could scan your lab order, take an image on it, and it will go to the Cloud, and we will automatically transcribe for you
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so you don't have to type anything in. You can look up your physician, you can look up your insurance, you could take a picture of your insurance card and we will see if you are eligible or not. We will tell you up front how much the lab is going to cost you, which is a breakthrough in healthcare in general.

So we developed all the software completely tightly integrated, and then reporting the results out to the physicians using an electronic medical record connector that we also developed in-house.

And I'm sure I'm forgetting a bunch of other things. I mean, we had a lot of technology.

Q What about on the -- the analyzer side, what did Theranos develop over time in terms of sample processing units?

A Yeah. I mean, we filed a very large number of patents on the analyzer, so I would not be able to capture everything. Some of them are actually above my pay grade because they are too technical for me to describe. But we developed an analyzer, I think, that's -- actually, I believe it's a major breakthrough that allowed us to do samples for multiple different types of chemistries in one device.

And so today, if you go to a typical lab, you have analyzers that do general chemistry, you have
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analyzers that do amino acids, you have analyzers that do nucleic acid amplification, and you have analyzers for hematology. So it's literally like you have a calculator for calculations, you have a typewriter for typing stuff in, and you may have other things, and somebody brought a PC to you that can do all of those things in one system.

And we built a system, so now you can basically collect a sample from the patient and theoretically put it in the machine, and we can intelligently distribute the sample in parallel and be able to give you the result from all four different systems.

So it's like putting kind of like a lab in a box as technology. No, it's -- sorry, go ahead. You have a question, it seems like.

Q What is that analyzer? What was it called?

A It's TSPU 4.0, and obviously, it involved 3.0, 3.5. And then 4.0 had dozens of permutations. So 4.0, 4.0s, 4s, 4sv1. There were -- sorry, should I slow down?

Q Maybe.

A Yeah.

Q If you could just run through those one more time.

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A Sure. So System 4 had many different versions. Think about Windows. You know, Windows 3.0, Windows 3.1, 3.1.1, so on and so forth. And partially, I brought that mindset of versioning product like this, like Windows for Microsoft, I guess.

But -- so our products were 4.0, 4s, 4sv1, 4sv2, 4sp2v1, 4sp2v2, and I'm sure I'm forgetting half a dozen or a dozen more. So there were a lot of different permutations as we were tweaking and making the device better. And this was going to be a never-ending process. We just gave it a new version number, like the iPhone IOS.

Q So you used some sort of a software nomenclature to describe the different 4 -- System 4 machines --

A Yes.

Q -- you just described?

I guess, setting aside the -- sort of the software element, did the different 4 systems, I guess, look and -- and function differently?

A Yeah. There -- there were --

Q Was the hardware different in the machines?

A Yes.

Q Okay.

A Yeah. The hardware was different. The

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electronic boards were different. And the hardware was different to what a nontrained person will miss in a

subtle way, but to the systems person, a person who is responsible for assays would say pretty significant ways. So the hardware was different, yes.

Q And before we go -- kind of go through those -- those 4 system machines, you also mentioned kind of a 3.0 and a 3.5.

A Yes.

Q What were those?

A They were early incarnations of System 4 -- System 4.0.

Q When did Theranos create the 3.0 system?

A 3.0, I think existed before I came to the company. As a matter of a fact, when I joined the company, 3.0 was the system in place. And then 3.5 was created, I think, in 2012ish or 2013 time frame. And then -- but 4.0, we started working on back in 2010.

Q Could the 3.0 TSPU conduct all four type -- types of tests that you described?

A No, it could not.

Q What could it -- what could it do?

A Yeah. There were -- and again, this is my understanding. I'm not a chemist, so I'm going to describe it loosely. But there is a class of assays

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called immunoassays and ELISA. 3.0 could do those.

Q Do you know what "ELISA" stands for?

A I have no idea. It's a technical term, like -- it's a name -- it's like a chemistry name. I -- I read it a few times, but I have never been able to memorize it.

Q What about the 3.5, what could it do? How was it different than the 3.0?

A 3.5 did similar things like I described earlier. And in addition, we had also done a prototype of general chemistry in 3.5, but we would not be using it for that yet.

Q Okay. So it could do -- in other words, the 3.5 could do immunoassays, ELISA, and had the potential for general chemistry?

A Yes.

Q And then what were -- so what were the different methods that were in the System 4?

A The remaining fourth one, which is the nucleic acid amplification test.

Q Okay. And so then you described sort of a number of System 4 devices.

A Uh-huh.

Q I guess let's start with the 4.0. What was sort of the original 4.0 and how did it change from the

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4.0 to the 4s?

A You know, those, I would not -- I wouldn't remember those details, because like I said, there were small differences sometimes. And sometimes the board

will change, sometimes some robotics will change, sometimes the gantry that moved inside and out would change.

So I don't recall exactly what was changing between those, you know, dozen or so -- or two dozen versions. But I know -- or it may be they were -- many of them were changing because we were constantly improving. So when, you know, let's say Piece Number 1 was changing, then the team with Piece Number 2, that thought was done but would come up with improvements, and they'd say, "Oh, well, let's just put it inside the next version."

So it was kind of an integrated process.

Q The -- I guess I want to give you a couple of terms and see if you can put it in the context of those devices you just listed.

The term "Edison," was that a term Theranos used internally?

A Edison was a code word that was used for the 3.0 version. The 3.0 version was the one that was existing before I came to Theranos.

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Q What about "miniLab," did you hear that term --

A Yes.

Q -- in your Theranos -- what was that used to refer to?

A It was a loosely defined term. We had visited Johns Hopkins as part of our relationship with Walgreens, and they had used this term to describe our system, and then we started using it loosely. But we didn't -- I don't recall ever referring to a machine like, "This is the final miniLab." It was -- sometimes we would, you know, refer to the 4.X machines as miniLabs. Sometimes a prototype would be a miniLab. So it was loosely used.

Q The -- the machine that -- did you bring a machine out to Johns Hopkins for that --

A Yes.

Q -- for that meeting?

A Yes.

Q Do you -- do you recall what version it was?

A I believe it was 3 dot -- either 3.0 or 3.5. I think it was 3.0.

Q And did -- did Theranos use "miniLab" to describe either those 3.0 or 3.5 machines internally?

A People may have. I mean, like I said, it

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was -- a lot of these code names, even Edison, was a name of a room, was the name of a project. It was Edison 3.0. Some people even called 3.5 Edison 3.5. So we were not strictly enforcing rules on code names. People kind of used different names to describe different things.

Q And I've also heard the term "monobay" and "multibay."
A Uh-huh.
Q How does that fit into the -- the nomenclature of the devices that you described?
A Yeah. At some -- at one point -- so if you look at our TSPU, we wanted -- our goal was: In the long run, this is going to be in the field, and we wanted to minimize the repair and downtime, you know, when we go service something.
So we designed it as a -- unfortunately, I came up with the name. And we designed it as a data center. If you go to a computer data center, you can just pull out a server and put in a new one and the -- the Cloud doesn't have to shut down, right, the Google doesn't shut down to replace components. And they call them blades, right, those computers.
And I used the same terminology for our 4.X machines. They were designed so that you can take out,

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like, the guts of the machine and it was like a blade. I don't know if it makes sense. And then you can just pop in a new one and then bring the blade home for service, but the -- you don't have to replace the entire machine.
So any machine that could allow us to do that, we used to refer to it as monobay or multi -- what was the term you used?
Q Multibay.
A Multibay, yes.
Q So monobay and multibay didn't have anything to do with the number of samples you could put into the machine?
A No. You could always put only one sample at a time in TSPUs. So theoretically speaking, you could put more, but we never did. It was always one patient, one sample, one sample at a time.
Q Why was that?
A It was a design choice. It's like mainframe versus PC. Right? When you -- in the old days, on a mainframe -- or even today, multiple people log in and do -- they use the same -- at that same time, multiple people are sharing the machine. But an iPhone, you know, usually one person uses it, a PC, one person uses it. And our thinking in the mind was that these

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devices are more personal like PC devices.
So there's like -- ultimately, you know, ten years down, if you put it in somebody's home, they can prick a finger, put it in the cartridge, shove the cartridge in. If you have to put two samples in, it complicates things, and it's no longer a CLIA-waived device in your opinion -- in my opinion because it's complicated. The average person doesn't know which

blood went where, and it's going to complicate the whole equation.

So we decided that you can only do one -- you will -- we will do one sample at a time. But, however, the system was designed to do, you know, many, many samples at a time if you reduce the number of assays.

Q I guess how could the -- I'm just trying to think in terms of the mechanics. How could the system -- how could you put in multiple samples at a time into one of these TSPUs?

A So there was a cartridge, and the cartridge had holes. Right? And like I mentioned earlier, our entire system was designed and controlled by the Cloud. We could create a new protocol very easily.

And the protocol in chemistry means instruction sets to the machine. So we could send a new instruction set to the machine saying, "You know,

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instead of assuming blood is in just one hole, blood actually is in two holes and there are two different samples." So that's just software.

Now, obviously, there was more work involved in designing this cartridge because if you're processing, let's say, four samples, you need four times the reagents and four times everything. Not necessarily four times or more.

Q The 3.0 machine, I guess, how many -- how many tests could it run at a single time?

A I think we had tested it eight assays at a time. It could have done more. We never pushed it beyond that. But eight is what I remember.

Q What about the 3.5?

A I would say same.

Q Did that change with the -- with the 4.0?

A Yes, significantly.

Q How many assays could the 4.0 run at a time?

A Theoretically -- so it depends on how you design the cartridge. There was no limitation in the system that would -- even 3.0 or 3.5. So what we are talking about is the consumable. Right? And the consumable, if you shrink it and make it smaller, then you could add more and more tests.

So in 4.0, we had designed a cartridge. I

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think we had pushed the limit to, like, 65 or 70 tests at a time. Now, we couldn't come up with a realistic scenario where people would actually use it anytime soon, but theoretically, we could have done 70 tests at a time. Or probably 65, 70. I don't remember the exact number, but it was a high number.

Q More than the eight --

A Oh, yes.

Q -- by a significant measure?

A Absolutely. Yes, yes.

BY MS. CHAN:

Q How did that -- how did the capabilities of the 3.0 and the 4 series TSPU, how did they compare to commercially available machines? Can the commercially available machines conduct testing on multiple samples at one time? And how many tests can be conducted on -- on those machines?

A Yeah. In general, the commercially available machines, the ones that you put in the lab, are designed for high input. And -- and I can go into as much detail here as you want. But the -- the -- the thought behind that is: You wait until enough samples have been collected, and then you run them at the same time as a batch. Right?

So let's say if you're in a hospital lab or

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a -- or an -- an independent lab, these machines are designed to run, say, 96 samples. 96 is, for some reason, a magic number in chemistry. Just like in computer science, it's binary, 0, 1, and 16, and 64, chemists are ninety -- based on 96. So most of these machines will be the 96, or double of that is, what, 180-something or 384. Right?

So it depends on the machine, it depends on the chemistry, but most of them batch them in large numbers. And the primary reason is: Economics. When you buy reagents, the reagent base in the chemistry packs, they come in bottles. So once you open it, you have to use it because they come with an expired date that you have to use it within 24 hours.

So if you don't have 96 samples, you don't want to open that thing because they're expensive. Right? But once you open it, then you use it. So they are more traditionally batch oriented.

The other big difference is: These machines are designed for batch processing, so they usually do a smaller set of assays. And this is my understanding. Right? And is -- for example, a machine will do only certain general chemistry tests. And if you want to do hematology, it's a completely different machine. It has a different detection system, it has different

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mechanics, it, you know, has lasers or whatever. Right? It's different. If you want to do nucleic acid amplification, it's a completely different machine. You cannot run a nucleic acid amplification test in the machine in which you did the immunoassay, right, because they're completely different. They won't know what to do.

And that was one of the big differences. Like, we put together a system where you can do all of that together. Just like I said, the traditional lab, think about it more as, you know, there are calculators and typewriters, and here, we had a PC where you can do

different types of tests.
And you can do them in parallel was the beauty of it. You could aliquot the sample and -- let's say, a nucleic acid amplification test would be like a Zika test. You can take a sample, put it in the tray, put it in front of a detection system, and it's going to heat it up -- and I can define to you in more detail. But it's going to do its thing to detect the signal from it. And then you can -- in the meantime, the robot can go and say, "Oh, let me go and run the vitamin D test here." So theoretically, you can do that.
Does that answer your question?

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Q Yes. Thank you.
BY MR. KOLHATKAR:
Q So you mentioned, I guess, the -- the -- sort of the -- the throughput issue. Did -- did you supervise Theranos's CLIA lab?
A Well, there are lab directors. There are legal requirements on the word "supervision." So the lab directors are responsible for all the medical decision stuff. So I cannot make any medical decisions in the CLIA lab. However, all labs report ultimately to business, so -- not all, but most, I should say. Independent labs for sure.
And so there's recruiting to be done in the lab, decisions to be made on how to negotiate contract with the vendors, scheduling employees because overtime is a big issue in the lab. Because of how the machines work, you have to design the employee schedules around machines.
So all of that came to me -- reported to me, but there were other people managing it, but they did report under me.
Q And who were -- I guess when did Theranos create a CLIA lab?
A Yeah. Our first CLIA lab was 2011. I forgot the month, but it was open in 2011. It was tiny, very

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small. And the lab director at that time reported to Elizabeth Holmes. He didn't report to me. There were five people there. I didn't spend much time there, to be honest, in that lab until 2013.
Q Why did Theranos have a CLIA lab in 2011?
A Well, there were a lot of reasons. We wanted to be in the business, a CLIA lab, there's one reason. We also had a lot of samples we were developing in R&D that you have to run and compare to what the predicate device or the commercial machines say. In chemistry, one of the biggest challenges is: What is the truth? For example, if I were to say, "What is your vitamin D level," to say what actually is your vitamin D level is not an easy answer. It changes depending on which lab

you go to.

So what happens is: People pick a predicate device that has been cleared by FDA and say, "Okay. I'm going to match my device to that because I know FDA has already cleared that." And those devices run in a CLIA lab. And they bring the structure, and the SOPs, and the rigor of a CLIA lab so that you know everything that is running is correct and right.

Q By "SOP," do you mean standard operating procedure?

A Yes. Yeah.

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Q Who was the lab director that reported to Elizabeth Holmes?

A It was a person named [redacted]. I think his full name was [redacted].

Q And did that -- did Theranos close that 2011 CLIA lab at some point in time --

A No.

Q -- or it -- it did -- it just continued the certification and grew the lab in 2013; is that fair?

A Correct. Yes. It was the same lab certificate. We opened in 2011 and then we started adding more and more capability to the CLIA lab.

Q So following [redacted] who were the other lab directors at Theranos?

A Yeah. [redacted] also had a co-lab director who was working part-time with him. I forgot his name. He was a consultant. I mean, lab directors, it's not required that you have to be full-time. As a matter of fact, up until recently in California, a lab director could be a lab director for an infinite number of labs. Now I think it's five.

So [redacted] was our employee full-time on site. And we had a consultant whose name I forget. He was also a co-lab director. Then we had hired another

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lab director full-time. His name was [redacted] I think around the time [redacted]

And after that, we had a few other lab -- I mean, I can give you the names if this is what you want.

Q Sure. Yeah. That would be helpful.

A Yeah. So [redacted] -- and even when [redacted] was a lab director, we still had this consultant as -- on our lab certificate because we were asking him for advice and other things.

[redacted] we had another gentleman, his name was [redacted], as a lab director. We also had another consultant who was co-lab director at that time for the lab. Her first name was [redacted]. I forget her last name.

And then after that, we hired two additional lab directors in two thousand -- the end of 2015, I think January of 2016, (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) They were both full-time lab directors. I'm talking about Newark lab here in California.

Q Was (b)(6); (b)(7)(C) ever a director of any CLIA lab for Theranos?

A Yes.

Q When was that?

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A (b)(6); (b)(7)(C) the Arizona lab, which is a different lab, not the Newark lab. And we started the Arizona lab, I believe -- you know, I'm going to get the date wrong. But it was the winter of 2014 and '15. So either December or January time frame.

Q You mentioned the -- the Newark lab being the CLIA lab. Was that always the location of the CLIA lab?

A No. Our CLIA lab moved around. It started out -- as -- as the company moved, the CLIA lab moved with -- with us. It was in Palo Alto, it moved to another location in Palo Alto, I think, and moved back to Palo Alto. And then once we acquired a larger space in Newark, California, across the Bay, we built a brand new lab. The lab guys actually designed and built the lab the way they wanted it for the future. And then the lab moved there.

MR. KOLHATKAR: We have to switch the videotapes, so we'll go off the record at 11:20 a.m.

THE WITNESS: Can I run down and use the restroom?

MR. KOLHATKAR: Yeah. I think it's five minutes.

THE VIDEOGRAPHER: Off the record. Please

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don't forget your mics.

(A brief recess was taken.)

THE VIDEOGRAPHER: Rolling.

MR. KOLHATKAR: Back on the record at 11:08 a.m.

BY MR. KOLHATKAR:

Q Mr. Balwani, just to confirm, you didn't have any substantive discussions with the staff during the break; is that correct?

A No, I did not.

Q Ms. Chan has a question.

BY MS. CHAN:

Q The consultant that you mentioned that was the lab director with (b)(6); (b)(7)(C) and sort of stood by for (b)(6); (b)(7)(C) as well -- or (b)(6); (b)(7)(C) is that -- is that (b)(6); (b)(7)(C)?

A Yes, that's correct. Yeah.

Q And is he still -- to your knowledge, when

did he stop being a consultant to Theranos?
A Yeah. Actually, let me clarify. With (b)(6); (b)(7)((b)(6); (b)(7)(C) I don't exactly recall if he was a co-lab director or not. I earlier said he was. He was definitely on our certificate. He may have been a technical supervisor, but I actually think he was a co-lab director, but I'm not sure. But he was

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involved.
And he stopped -- I think once we had (b)(6); (b)(7)(C (b)(6); (b)(7)(C) full-time, at some point during that time frame, we had removed him from our certificate because we didn't think we needed someone. We just hired a full-time lab director.
BY MR. KOLHATKAR:
Q And you mentioned that it was your understanding -- let me rephrase that.
Was it your understanding that the lab director had sort of the final say on all medical issues?
A Yes, absolutely.
Q Was that your understanding throughout your time at Theranos?
A A hundred percent, absolutely.
Q Do you know if Ms. Holmes shared that understanding?
A I believe so, yes.
Q What's your basis for that belief?
A Because I never heard her overrule a lab director, and in general, whenever we had any discussions on patient reports or results, we would always say, "Talk to the lab director" or "Make sure the lab director knows."

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So it was a strong implication there that we were not -- she -- she knew the lab director is the final decision maker.
Q You also described Theranos's CLIA lab moving around to different locations.
Did Theranos maintain a separate sort of R&D lab?
A We had a lot of R&D labs, yes.
Q And I guess specifically for -- for actually running patient samples?
A Well, you -- you don't run patient samples in an R&D lab. They are just considered samples. If it is a patient sample just tech -- strictly defining, it has to go to a CLIA lab. We just broadly used any patient that gave us blood. But the samples that come into R&D labs cannot be CLIA lab patient samples. They can only go to CLIA lab. And if a sample comes to an R&D lab, it's no longer a clear sample, period. Cannot -- there's no overlap between them.
Now, you could use the CLIA lab to run some

samples that are not meant for CLIA lab reporting. So, for example, if you have a machine, and during the day you get a hundred patients, you run the samples, everything is done, now the R&D guys say, "Hey, look, we need to run some samples on this machine to generate
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data to compare" to whatever study they're doing, they will go and get the samples and run them. And according to the protocol, you can either buy samples from outside or even the leftover samples. As long as they're anonymous -- anonymized, you can use them for R&D.

Q And, I guess, what did -- what was the -- what was the -- were Theranos's R&D labs always located in close proximity to its CLIA lab or were there times in those moves where they were kind of in separate buildings?

A So the strictly R&D-only labs, for a long time, were in the same building as the CLIA lab. So between 2011 and 2013ish, we were strictly in the same building. But CLIA labs have to have their own separate rooms. R&D guys cannot go wander into CLIA labs. CLIA lab employees usually cannot wander into R&D unless there's a purpose for it. A project that, you know, has been approved.

The CLIA lab has its own protocol. The samples that come from the CLIA lab must go to the CLIA lab. I mean, you can store them in a storage space, of course, until the CLIA lab picks them up, but they cannot go to R&D labs. So there's a strict protocol, even though they're in the same building. And you
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point to actually, a good question because maintaining that separation was important.

And then at some point, the CLIA lab moved into a separate building in Newark. However, the R&D guys were still going there. And then I believe we had a small area designated in that CLIA lab space which people were exclusively using for R&D, which is okay. In the CLIA lab, as long as you put signs that say, "These machines are not being used for patient samples," then you can do your R&D there. Companies do that, according to my understanding.

Q Was there a -- was there sort of a name internally for that -- that R&D space within that CLIA lab?

A No, I don't recall it. It was -- because the R&D kind of happened in all different areas of the CLIA lab, depending on what assays you need to develop, there was no R&D space there.

Q The -- well, actually, why don't we just go through maybe Theranos's different buildings. I think -- I think that will help the discussion.

A Sure.

Q So you described that 2011 to 2013 time frame where the -- as I understand it, the CLIA lab was in the same building as the R&D lab?

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A Yes.
Q Although in separate rooms?
A Correct.
Q Was that -- was that at the Hillview address of Theranos?
A Actually, yeah, that's -- and -- and when I said -- it moved around in Palo Alto. Our CLIA lab originally started in the 3200 Hillview building. It was a really small room, the size of this room. But the entire 3200 building was an R&D building at that time. And again, a CLIA lab, only CLIA lab employees. I think we had three employees at that time. A very small lab.

Then the company moved into the 1601 California Avenue address. This was the old --

Q No, go ahead.
A This was the old Facebook headquarters. And we signed the lease. They had trashed the entire building before they left, so we had to go and rebuild everything and clean out everything. They even removed the cables, the Ethernet cables. Literally, we had to lay out everything.

And -- and the CLIA lab moved as part of that move to that building. But we had another building, I forgot the address. It was also in Palo Alto. It was

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near San Antonio Avenue. I forgot the address. It was called EMC building for some reason. Maybe the name of the street was EMC. We may have moved the CLIA lab there temporarily while we were moving from the 3200 building to 1601. It's possible. I don't recall.

Like I said, 2011, '12, I was very little involved with the CLIA lab. So we may have moved there temporarily and then moved it to 1601 once we moved there, the entire company. And so that's where the CLIA lab was.

Q When did the company make that move to 1601 California?
A I think maybe 2012 or early 2013. I don't remember the exact dates.
Q And when was the Newark facility opened?
A I believe end of 2013 or early 2014.
Q And at that point when the Newark facility opened, is that when the CLIA lab moved to --
A Yes.
Q And when did the company move to -- is it 1701 Page Mill?
A Yes.
Q When did that happen?
A I think end of 2014. We had a deal with

Stanford that we had to get out, I think, by
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Thanksgiving, and if we didn't, they were going to charge us a hundred thousand bucks a day in rent. So we rushed out of that building probably around Christmas, Thanksgiving time frame. That's my recollection. I may be off by a month or a couple of months here and there.

Q When the CLIA lab moved to the -- the Newark facility, was the -- did most of the R&D lab move with it, or as you said, it was more -- kind of some would still be out at 1601 and some would be out at Newark?

A The R&D lab didn't move with the CLIA lab, so only the CLIA lab moved. But the CLIA lab equipment -- the CLIA lab had all the equipment the R&D guys used -- needed for R&D. So even though the CLIA lab had moved to Newark, the R&D guys were still at 1601. But -- oh, the move may have been in -- around the same time. I actually don't remember by month what happened first.

But the point is: The R&D guys stayed back at the headquarters, whether it was 1601 or 1701. However, because, like I said, R&D guys needed access to the CLIA lab, a lot of the R&D guys were approved. They had badge access to go to Newark, get in the building, go in the CLIA lab, and do their thing, whatever experiments they needed to run.

So they -- they were -- they had -- the R&D
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guys had access to the CLIA lab. The other way around was not -- not necessarily true.

Q And when you at the -- when both labs were at the 1601 California address, were there labs upstairs and downstairs at that building?

A Yes.

Q And what was the distinction between kind of the upstairs lab and the downstairs lab?

A Well, this building was really poorly organized. It was not designed the way we wanted it. So we had taken one chunk of the space in 1601 as R&D lab, and we had put our CLIA lab also upstairs, but it was disjoined. They were not adjacent to each other. They were far away, and they had separate badge access.

And then downstairs, we had another room where it was just used by CLIA lab. So you -- CLIA lab, as long as the -- you're in the same building, you can have rooms that are not -- they don't have to be connected by walls. So we had another lab, a CLIA lab room downstairs in 1601.

And then, of course, the entire mechanical engineering team was downstairs. I believe even the -- some of the software guys were downstairs. It may not be the case. And the cartridge manufacturing guys were -- were downstairs too.
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Q Did you ever use the term "clunkers" to refer to part of the CLIA lab?
A Yeah. There were some machines in the CLIA lab which were third-party commercial machines we bought, and they used to break down quite a bit. And this was during the time when President Obama had the "cash for clunkers" program for turning in your cars and buying a new car. And I used to say these machines break down so often, they're like old trucks, like clunkers. So that's the background.
Q And did the -- "clunkers" didn't refer to all third-party machines --
A No.
Q -- in your mind?
A Yeah. There were some. I mean, people may have started to use that word for every big machine because they -- all of them mostly did used to break down a lot, at least you had to quality check them every eight hours. So it's possible people just loosely started referring to any big machine that breaks down as a clunker.
Q What about the "Normandy" lab, what does that refer to?
A Yeah. Again, another name that I came up with, unfortunately. I'm a big history buff, and in my

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mind, when we launched in any geography with Walgreens, that served as a beachhead so we can go and pick up samples from physicians' offices and grow our business, kind of like Normandy. I don't know if you know the history. But the U.S. troops landed in Normandy. That was the beachhead. And then the Army and others came, and we beat the bad guys.

So that was the term. So the term "Normandy" came from the project of our launch at Walgreens initially. And then somebody said, "Well, the room where we are doing finger sticks is Normandy." And then some of the software guys said, "Oh, that's a cool name." They started using it for some software modules as Normandy. So then it kind of mutated and people were abusing it.

But that's the name. But there was a room called Normandy.
Q That was a room within the CLIA lab?
A It was. So in 1601, there were two rooms. One was an upstairs room and a downstairs room. The downstairs room was named Normandy.
Q Did the upstairs room have a --
A Have a name? Yes. The upstairs rooms had all these big machines, so the lab guys had put names of dinosaurs on these machines. And one time I was in

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the lab, and I'm like, "This feels like Jurassic Park because all the machine names are named after

dinosaurs."
So the lab said, "Can we use that name as the name of the room?" So they started calling it Jurassic Park.
Q Okay. So just to recap it, upstairs at 1601, that part of the CLIA lab is Jurassic Park?
A Yes.
Q And downstairs was Normandy?
A From -- for the CLIA lab.
Q For -- for the CLIA lab?
A That's right.
BY MS. CHAN:
Q And so were there different machines being used upstairs versus downstairs where the older commercially available machines were used in Jurassic Park?
A Yeah. In Jurassic Park was mostly all FDA-cleared, unmodified devices. So any machine that we bought from outside that we didn't touch, didn't modify -- there may have been some modifications, but nothing significant, was all in Jurassic Park. And the Normandy lab was where we had what I refer to as Theranos's patented -- Theranos's technology, our --

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our trade secrets or our patented technology. And that was all in Normandy.
So that did include some commercial analyzers initially when we purchased them, then we modified them significantly, and they were part of the Normandy lab.
Now, there may -- may have been some other small tiny machines that we bought commercially that were part of the Normandy that were not modified, but they were part of the, you know, for workflow, it was easier to have them downstairs. They were tiny. No reason to just move the sample upstairs again. So that's the reason behind it.
Q So you mentioned earlier, you know, there were times when the R&D staff would need to go into the CLIA lab. Why did they need to go in there?
A Yeah. I think I briefly alluded to that earlier. There were a lot of samples we needed to run to match them to what was being developed in Normandy.
So, for example, you know, let's pick vitamin D. You are developing vitamin D assays and you run -- let's say you get blinded samples, I get samples from everybody in this room. And the R&D guys would run it, 30 samples, they would get the values, and they would run it multiple times. And then they would run it on the predicate devices, which are in the CLIA lab to see

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what answers you get from them. And if you don't match, then you calibrate devices to each other until all the answers are matching. Now you know you have matched yourself to a predicate device.

So the R&D guys -- that's one use. The R&D guys used to go in the lab to run patients -- R&D samples so they can get the values from there. So that's one -- a lot of times, they would go there just to understand how the commercial devices work. So R&D guys want to see how to software works. I used to go and observe the software on those machines to understand how other labs, what kind of challenges they faced when they used the machines.

Q So there were no predicate devices that were in the R&D lab, they were all in CLIA?

A Well, there were some predicate devices that we could buy cheaply that required minimum maintenance in the R&D lab. We had a lot of devices -- commercially available devices in the R&D lab. A ton of them.

But there were some devices which were expensive in the CLIA lab, and also, maintaining them is a major pain. Like I said, that's why I called them clunkers, because a trained person has to literally, you know, wash and bathe them, and, like, clean them,

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and QC them, and calibrate them every eight hours.

And R&D guys -- and usually R&D guys, they're PhDs. They don't like following standard operating procedures. CLIA guys are guys that live by SOPs, you know. You tell them, "Pick up this bottle from here to here (indicating), they'll do it perfectly." Right? R&D guys would never be able to do it. They would drop something or put it here (indicating), you know.

So -- so that's the reason.

Q And what was the CLIA lab doing in the 2011/2112 time frame?

A Well, there were two things. One was: They were helping the R&D teams. Like I mentioned this example, they were using -- helping with our assay development. And they were also running patient samples. We had one patient service center open at Safeway -- at Safeway's corporate headquarters where we were collecting patient samples, and the samples were coming to our CLIA lab and we were running them there.

BY MR. KOLHATKAR:

Q The samples that were being collected from Safeway, those were being collected from venous draws; is that correct?

A Yes. We were doing venous puncture. And this was a time when we started -- I think 2011ish or

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2012, we started developing our CTN, the one -- the final product that you see. And as we were doing R&D on CTNs during that time frame, we also asked people if they would volunteer and participate in an R&D -- in research. And some participated, so we would also do a finger stick on them and get the sample and run them in

the R&D labs.
Q What was Theranos's goal in creating a CTN? Why -- why did you need to develop them?
A Yeah. The CTN is a -- it was a very complicated project. I can give you a short answer, then I can get into detail.
The main purpose of that was to transport samples from across the nation to our lab from finger sticks. Right? Technically from -- it doesn't have to be a finger stick. It's capillary blood. You can actually draw from other parts of the body. But basically capillary blood.
And we wanted to develop something that provided an excellent patient experience because that becomes your interface with the patient. And so -- so you collect the sample -- and there's a lot of engineering and science that goes into that to stabilize the sample, make sure you don't lose any blood cells and proteins and all that stuff.

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So that was the main reason behind it. And it came about, I think, around 2011, 2012, '12ish.
Q Just so if I understand, you don't need a Theranos designed CTN in order to run a blood sample on a Theranos SPU (sic); is that --
A Correct.
Q Okay. So you mentioned the -- from the 2011 to 2013 time period, Theranos was primarily collecting samples, specifically a lot from Safeway. Was there any other sort of use for the CLIA lab in that time frame?
A There were multiple uses. One was that -- serving the Safeway patients. Also understanding the CLIA lab business and how -- I used to spend time on the software side to see how these machines -- how the software works. We also acquired a lab LIS system -- third-party LIS system called LABDAQ that we were using in the lab because primarily to see how other labs used it. There are, like, 2,000 labs that use their software. It's pretty bad.
But I wanted to see how others were using it, so that was the other reason. Start running the R&D samples was the other reason. So there were quite a few reasons.
Q There were other patient samples being run

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other than those at Safeway; is that --
A Not that I remember at this time.
Q And so at what point in time did Theranos decide to pursue a broader patient sample market?
A Like serving the consumer testing?
Q Correct.
A We decided in 2010.
Q Okay. So the goal in 2010 was always

going -- was always going to be consumer focus; is that --

A Well, by "consumer," you mean physician-ordered tests that consumers today take to LabCorp and Quest, we wanted them to bring those tests -- those records to us. So yes.

Q Okay. And when did the -- when did the company first start buying commercially available analyzers with the objective of modifying them?

A 2010. 2010 is the first time when we bought the Siemens machines. Like I said, one of the purposes of the R&D and CLIA lab was: We wanted to see how others do it. And we, you know, dug pretty deep into a lot of different machines from a lot of different vendors.

Q And was it Theranos's intent in 2010 to do microsample testing on the -- on the Siemens machine?

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A Not specifically on the Siemens machines. There are three elements here. It was our intent to do microsample testing. We were also looking at a way to do high throughput microsample testing potentially if we needed to.

Because like I said, our TSPUs are discrete. One sample at a time. And if you're doing 96 samples at a time like a clinical lab, how would you do it? You can do it 96 times on the TSPU, but can we do it faster plus -- you know, a more high throughput way?

So that was the other reason. And third was: Just to, you know, see other devices. Get more experience with the devices.

BY MS. CHAN:

Q I'm trying to understand sort of the business strategy of the company.

A Yes.

Q In the 2009/2010 time frame, you developed a TSPU. And as you said, it could only test one sample at a time.

A Right.

Q Why at that point did the company decide to go into commercial testing if the TSPU wasn't sort of suited to the high throughput situation?

A Yeah. Initially, our goal when we met with

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Walgreens was that we would get our TSPUs FDA cleared. We would put them at Walgreens locations. The patient come in, you do a blood draw, insert the cartridge, and by the time the patient gets to the doctor, the most commonly ordered tests, we can run in the TSPUs.

Because, you know, about two-thirds of the tests that are ordered by physicians are about 60 to 70 tests and maybe 80, 90 if you include urine and some other tests. But it's a small universe.

So our intent was -- our idea was that we

would focus on those tests, put them on cartridges, put them in Walgreens locations so that we can run -- after FDA clearance, of course. And we would run those tests right there on the spot.

And so that was the primary objective at that point. So TSPUs were suited for that purpose.

Q Okay.

THE VIDEOGRAPHER: Can you check where your mic is and where yours is. I'm getting some rubbing.

THE WITNESS: Maybe --

THE VIDEOGRAPHER: There you go. No, you're good.

THE WITNESS: Okay.

THE VIDEOGRAPHER: Thank you. Sorry to interrupt. Please go ahead.

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BY MS. CHAN:

Q So how did the company, then, decide to go from that model to the larger commercial testing model where it would need to consider high throughput methods?

A So I just want to make one small correction. They're both commercial models. The difference is centralized lab model versus what we call on-site model, which is we put the machine on site model.

It evolved over time. 2011ish, we were thinking about, you know, how would we -- you know, the FDA clearance was the key element there. We were talking to Walgreens. We had some opinions from our counsel that as long as we were not commercializing devices, we didn't need FDA clearances. So we were still kind of speculating, you know, which direction to go with that. We had a lot of discussions with Walgreens. Walgreens was nervous about the strategy of putting TSPUs without explicit FDA clearance like a CLIA waiver because they thought that they may have to get a CLIA license for every location, like a moderate complexity lab or a CLIA-waived lab.

And we said, "Well, if you do this, then that would basically mean that we are commercializing the TSPU, and we're not going to do that." So we were

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having discussions around the time.

And then I think around the end of 2011 or early 2012, we said, what if we shipped sample and ship them to a central location? Yeah, it changes a few things in the model, but it allows us to launch faster. In the meantime, we can work with FDA, and if at some point we decided to do the TSPU on site, we can do that too.

So it evolved from the discussions in 2011, 2012, but in the back of our minds we were evaluating that we didn't commit to Walgreens or comment to Walgreens that we can or we will do this. That

happened once we had a little bit more confidence that we can.

Does that make sense?

Q Sure.

BY MR. KOLHATKAR:

Q Throughout -- once you took a more active role in sort of the -- in the CLIA lab space, I understand it to be -- is that fair in the 2013 time frame? Let me rephrase that as a question.

Did you take a more active role supervising the CLIA lab, meaning, the lab director would report up to you around the 2013 time frame?

A Yeah. The lab directors still continued to

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report to Elizabeth. But like I said earlier, the reporting structure was less important, more was who is spending more time. In 2013, because of software primarily, because we were going to deploy our software in the CLIA lab, I started to engage with the CLIA lab more and more. But I would still kind of a differentiate supervising. I was -- I was more focused on software processes people, not the medical side, which I didn't have the background.

Q And so as part of that sort of additional engagement in the CLIA lab space in 2013, did you become familiar with the devices the company was using for different categories of patient samples in the CLIA lab?

A I knew that before, before -- I mean, in 2013, I was deep into it, but even before that, I knew the different devices we were using in the CLIA lab and what different devices we needed to develop different assay. So I had -- I had the background because since -- between 2009 and '12, I was in a ton of meetings with CLIA lab, with R&D people, so I had the background.

Q So you would generally understand which tests would be run on which device at the time?

A Yes. I would be able to -- I mean, I'm not a

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hundred percent, obviously. But some tests, you can actually run on multiple. But -- but in general, yes.

BY MS. CHAN:

Q With respect to the Safeway samples that were being run in the CLIA lab in 2011 and 2012, what -- what machines were being used or what analyzers were being used to generate results?

A They were all FDA-cleared commercial analyzers. So Advia 1800, Immulite. There was a machine called DiaSorin. There was a machine called Etimex, E-T-I-M-E-X. Those are the four big ones that come to my mind, but there were others. They were all FDA-cleared or approved machines.

Q Were any of them modified for smaller sample

testing?
A Not at that point. Not -- not for clinical samples during that time.
Q And was Safeway aware that you were using just -- you know, commercially modified FDA-cleared analyzers to process those tests?
A Well, at this point we were not -- these devices were not modified. They were out the box just the way FDA approved them.
Q Right. And I was just wondering, did you tell Safeway that you were using these commercially
0126
available machines to process these blood --
A The unmodified?
Q -- samples?
A Yes?
Q The unmodified?
A Yeah. Because we were collecting venipuncture.
BY MR. KOLHATKAR:
Q Could you use venipunctured blood on the TSPU in 2011?
A Yeah. I mean, it depends on the assay. But yes, when you validate an assay, you can define what matrix you are going to develop the assay for. So you can say venipuncture, or capillary, or anything else.
Q So there's nothing specific about venipunctured blood that would preclude the use of the TSPU; is that fair?
A Technically speaking, yes, that statement is correct. But however, once you have a large volume, the novelty or the reason why, your TSPU goes down, it reduces. Right?
Q Sure. It wouldn't make sense to take a big thing of blood to --
A Yeah.
Q -- to run a small sample; is that -- is that
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what you're saying?
A Correct. Yes.
Q The -- at the time you understood, you know, in the -- in the 2013 time period, did you also understand which assays Theranos had validated on its TSPU?
A I mean, I used to get updates. I was on many e-mails. So I would say specifically on TSPUs, the validation is -- there are two types of -- at least two types of validation. One is: You validate stuff in the R&D labs and then you validate something in the clinical lab under CLIA guidelines. So they are two different things.
Q When did Theranos start validating assays under the -- under the CLIA lab guidelines for --
A For patient testing?

Q -- for patient testing on a TSPU?
A I would say summer of 2013 would be my guess. It may have happened sooner, but I think that was the time frame.
Q And were you kept apprised of the progress in validating -- CLIA validating those assays onto the TSPUs?
A Loosely. I mean, I -- I used to pay attention to see what was going on, but at that time,

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there was so much work that I was not monitoring on a day-to-day basis.
Q Was this around the same time that Theranos began modifying commercially available devices?
A Correct.
Q What was the purpose of modifying the commercially available device?
A Well, in one word, there was a high throughput. But back in 2011, we were looking at how we could process a large number of samples even just for R&D purposes. But if we launched in the clinical space and if a large number of finger stick samples came in, how would we process them? Obviously, one answer is: TSPUs. But if you do the math and we looked at the economics, it was going to be a slow process.
So we started looking at high throughput solutions back then. And in 2013, as we closed in, we looked at these different machines, and we said, "These machines will work." I mean, you'll spend more R&D time on that, obviously. But that was kind of the need for it.
Q I guess, was there one person or one moment when there was this breakthrough that these commercially available devices could be modified to -- to use smaller samples?

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A No. I don't think -- I wish there was one moment and one person. That would be a great person to hire. But no, this was a collaborative process. Once we started working on CTNs in 2011/2112ish -- because we knew we needed to ship the samples, so the version of CTNs that you see now, we started developing that in 2012 to be able to make sure can stabilize the sample, it had anticoagulants, a bunch of other stuff that goes in CTNs to ship the sample properly was the time frame we said, "Can we just pop this thing in and put it into the big machines?" And we started looking at the whole process flowing. And it happened over time.
Q So what were the modifications, I guess broadly speaking, that had to be made to -- to get blood from that CTN onto a -- and use it on a modified commercially available device?
A Yeah. There were quite a few significant modifications. One was: We had to modify the software

on the machine. The protocol that is used to process, you know, the steps that are taken to process a sample, we had to modify the software. We also had to modify the preprocessing. Some of the steps that the device would take -- the problem with these big machines is that you lose a lot of blood. They kind of use blood very cheaply. You know, they assume there's a lot of

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blood available, so even when you draw blood, there's a lot of overage left at the bottom and people just throw it away. In our case, every drop mattered.

So we also created our own vessel to be able to eliminate or reduce the wastage of the blood. And then there were a few other pieces in the workflow that we had created. So some component -- hardware components we had to create that would mimic what a Vacutainer looks like. There was more software up front we had created on this machine called Tecan which is a preprocessing robot.

So those are pretty elaborate changes that we had made with software and hardware pieces. We also looked at chemistry and tried to understand the chemistries will work the way we wanted them to work. So a lot of the chemists spent lot of time on chemistries.

EXAMINATION

BY MS. WINKLER:

Q In response to one of the prior questions in discussing TSPUs, you used the phrase "commercializing machines." What do you mean when you say "commercializing machines"?

A So, yeah, I think what I was referring to is commercializing our test services. And commercializing

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services is: If you are providing a lab testing service to a patient which -- for which you get paid by either Medicare or insurance or whoever else.

Commercializing machines is a very technical term that FDA uses that you cannot sell a machine to any other lab or anybody else for clinical diagnosis purposes without FDA's clearance or approval.

BY MS. CHAN:

Q Whose idea was it to -- for Theranos to enter into the commercialization business?

A You mean the lab business?

Q Into the lab business?

A I think it's also over time. But I know Elizabeth wanted to be in the services business for the following reasons is: If you look at our healthcare system, somebody comes up with a cool product, and then you sell it to hospitals, or doctors, or whoever, and they charge up -- or labs, other labs, and they add a margin. You know, and especially if it's new, chances are you're paying more. Right?

And one of the things that we really wanted to do was: We said, "If we work hard using software, hardware, chemistry, and all that, and come up with something that can reduce cost, we want to pass the cost directly to the consumer and to the taxpayers, the

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cost savings."

And we did the math. And, for example, Medicare pays, you know, a hundred dollars for a test that hospitals will charge you about $2,000. Right? And an independent lab will charge you 50 to 60 bucks if you have a preferred contract with an insurance company, but they would still charge Medicare a hundred bucks. Right?

And when we launch, we said, "If we sell these devices to hospitals, we know because of the utility of the device and the value add this brings, they're going to amp up the pricing." And we didn't want that to happen. And we wanted to give Medicare -- we said, "We're going to give taxpayers the lowest price," and that could only happen if you control the pricing.

So that was the -- the thought behind providing, you know, lab services so that we can control the pricing. And when we met with the insurance companies, for instance, even when we were going to put our services on hospital sites, this is unheard of, but we wanted to control the pricing because we wanted to make sure that we become a service provider in the lab. We will collect the samples, bring them to us, but we would bill the insurance companies

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directly.

Same thing with physicians' office. And when we are a service provider in a doctor's office, what other labs do is: They will bill the doctor, and in many states, doctors will mark it up and bill the insurance companies. And we said, "No, we -- we are going to bill insurance companies directly, which is what we did."

So it was primarily to make sure that we provide the service at price points that we wanted.

Q So I don't mean to belabor -- belabor this point, but I'm still trying to understand. You know, you've developed this device that's more of a, as you said, you know, the patient -- it's a one sample at a time --

A Right.

Q -- device and the patient has control over it, so it's more -- I think you alluded to envisioning that patients would be able to have this at home --

A In the long, long run. Yeah.

Q In the long run?

A Yeah.

Q Okay. But why not just continue going down that route versus going into the commercial lab business where you would need a machine that would be

0134

able to conduct high throughput testing?

A I think it was more reaching out to more people faster. Because if you go to the patient path, like direct to consumers, sell the device at home, first of all, there were so many tests that we were doing on the device that were -- in order for us to put the device in somebody's home and do clinical diagnoses, we have to get it FDA cleared or FDA approved, depending on the test. There are many tests which are considered as complex. Even if you can do them simply, they are still marked as complex, like HIV tests. You want a physician involved. Back in the days. Now it's changed in the last couple of years. But -- and there are many other tests like this.

So even if you develop the assay, it doesn't mean you're going to necessarily get a CLIA-waived designation right away. It could take many, many years. However, if you have an assay cleared by FDA, you could put a TSPU in Walgreens and run it and get the results to the doctor. So that's possible.

So it was more of a progressive path of how do we reach the most number of people through the service? It's like, you know, iPhone 7 is a very cool product, but so was iPhone 1, and you don't get to iPhone 7 until you ship iPhone 1 in some cases, some

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features. You don't wait until you're done with, you know, a 10-megapixel camera before you ship iPhone 10.

So from that perspective of a service that, you know, we know there's a pain in the market. We know the people are, you know, going broke paying for labs and healthcare bills. Can we get this faster in the market? That was one purpose.

The other one was: This was -- even when we start selling to physicians, not everybody could afford to buy this. You know, like any consumer product, there's a cost curve. Right? As more people buy, it gets cheaper. So that's what was going on during that time frame.

Q Was there ever a thought in your mind that -- that the company would be developing the TSPUs, that it could conduct high throughput testing?

A On TSPU?

Q On TSPU.

A TSPU was designed for discrete processing. It's possible. The scientists and engineers had a discussion for high throughput. But -- and may -- they may even have talked to me, but sitting here today, I think our focus of TSPU was discrete processing.

Q So it just seems like when you're going into

the commercial lab business, if you don't have a
long-term plan to develop a product that can do that high throughput testing, then you're essentially -- was the company thinking about essentially -- I guess I just don't understand why you would go the commercial lab route if you don't have a product that is going to get you there and you're always going to be using, you know, the commercially available machines?

A Yeah. I think our plan was that we will have a device in Walgreens locations in medium, long term, you know, five, six years or whatever to however long it took. And that would reduce the number of samples coming in to a central lab. So that was always the plan. So it was not necessarily that we are not doing TSPU anymore, we will never be in the field anymore. That was still the plan.

The other thing is: Yes, it is not ideal for batch processing the TSPUs, but you could still use them. I mean, we actually had a prototype of a robot that could just pick up a cartridge and put inside the TSPUs and we would send it to control when it's done, and take a cartridge, throw it away. It was doable. But that meant -- and in the long run may have even been economical, but it just meant a hell of a lot more work for us on the software side for sure.

Plus, we found a good solution, and, you know, by creating this platform, we knew we could scale it beautifully.

BY MR. KOLHATKAR:

Q I'm sorry, what do -- what do you mean by your -- "a good solution"?

A Modifying the predicate devices and putting more technology on it. It's like taking Linux and putting on a different hardware. Once we did that, we knew we can do that more and more if we wanted to.

And we also had -- it was not just about the third-party Siemens or, you know, vendor devices. We also this -- a general purpose robot that we referred to called Tecan. Tecan is basically a machine the size of this table (indicating), this piece of the table (indicating). And it's a general purpose robot. You can program it to do anything you want, like batch processing.

So that was always an option in front of us that, you know, this is a no-brainer. And at some point, if you retire, you know, the third-party machines that we've modified that we bought from other vendors, Tecan is going to scale. And we used to call that project T. rex. Unfortunately, another code name.

But we were spending resources on that as a Plan C that if we wanted to scale around a truly

independent platform, batch processing, this would do that.

BY MS. WINKLER:

Q That -- that would require stacks of TSPUs?

A The one -- yes. One plan would require stacks of TSPUs. The third one, the Tecan that I was referring to, that doesn't. That -- that works like the modified third-party machines except there's no third-party machines, it's just a lot of our software that's controlling the robots doing what the machine would do inside the machine.

Q And that would have been theoretically capable of a high throughput?

A Yeah. We tested it. We tested it. It was capable of high throughput. We actually had a couple -- a couple of assays that we pushed it all the way to end on that to know that it was going to work.

BY MR. KOLHATKAR:

Q I'm going to hand you a document that's been previously marked as Exhibit 215.

A Sorry.

MR. COOPERSMITH: Thank you.

BY MR. KOLHATKAR:

Q Just for the record, 215 (sic) is a document Bates-stamped SEC-PRM-E 3430.

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Mr. Balwani, I'm not going to ask you to read this entire thing.

A Thank you.

Q But generally, do you recognize what this is?

A I do.

Q What is it?

A This is the complaint -- or one of the complaints filed by PFM and Partner Investments, L.P., against Theranos, Ms. Holmes, and myself.

MR. COOPERSMITH: So read -- read it carefully because he may have some questions.

BY MR. KOLHATKAR:

Q And, you know, I think my question --

A Oh, sorry.

Q My question was even flawed before that. I think I was referring to --

A I was just reading --

Q -- Exhibit 217, not 215 which you have in front of you.

MR. COOPERSMITH: 217?

MR. KOLHATKAR: 217. Right.

THE WITNESS: Yeah. It looks like our responses and objections to plaintiffs' first set of interrogatories.

BY MR. KOLHATKAR:

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Q Do you know if you reviewed these at the time they were -- at the time they were filed in the

lawsuit?
A I believe I did.
Q If you look at the page ending in 3465. 3464 is the interrogatory and 3465 is the -- the answer.
The interrogatory asks for the versions of the TSPU that were -- that were used for --
A Uh-huh. Yes.
MR. COOPERSMITH: I'm sorry, what page are you on?
MR. KOLHATKAR: 3464 and 3465.
THE WITNESS: There's a -- it's tagged 36. 36 is --
MR. COOPERSMITH: I can't read it. Yeah. Okay.
MR. KOLHATKAR: Page 37 -- 36.
MR. COOPERSMITH: No, I can see it.
THE WITNESS: Page 36.
MR. COOPERSMITH: Okay. Great. Thank you.
BY MR. KOLHATKAR:
Q The interrogatory refers to what TSPUs were used for -- for patient sample testing following January 1, 2013.
Do you see that the answer there is that the

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3.5 was the one that was used?
A Yes.
Q Were you aware of any other TSPUs being used for patient -- patient testing in the CLIA lab?
A Not at this point.
Q From 2013 to the present, was any other version used -- or how about 2013 to the time you left the company?
A I don't recall. I don't think so.
BY MS. CHAN:
Q Was it your understanding at the time in 2013 and 2014 that the 3.5 TSPU was being used for patient testing?
A Yes.
BY MR. KOLHATKAR:
Q And did you understand in -- in 2013 and 2014 that the -- the other 4 series devices you mentioned were not being used?
A Yes.
Q The -- the response also lists the -- the tests that were -- that were run on the TSPU. Do you see that? So it's on Page -- the page ending 3465 to 3466. There's a bullet point list of tests.
A Yeah, I see that.
Q Was it your understanding in -- in 2013 and

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2014 that -- that these were the tests that were capable of being run on the 3.5 in the CLIA lab?
A No, that's incorrect. The capabilities went way beyond this. I think this answer says what tests

were you running, if I'm not mistaken. I can read the question again. "In our direct testing menu, the Theranos TSPU --" These were the tests that we were running in the CLIA lab at that point. The capability of TSPU was significantly more.

Q Were there any other tests other than the ones listed here that were, as you described earlier, CLIA validated for use on the TSPU?

A You know, I don't remember the list. I think we had 12, or 14, or 15 in that range tests validated on 3.5. So -- eight, nine, ten, eleven, twelve. Yeah, this seems right.

Q And you mentioned that the 3.5 was capable of a lot more. Did you have an understanding why the 3.5 wasn't used for additional tests?

A Yes. It's a combination of decisions. One is: You need to -- even if you have assays validated in R&D, and we had many more, before you bring them to a CLIA lab, you have to go through a process, the CLIA lab validation process. And our plan was: Over time, as we added more assays, that's the path we were going

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to follow.

The other reason is: Like I mentioned earlier, there was a large number of other assays for which we had implemented our technology on top of the combination of Tecans and third-party modified machines that allowed us to process samples in high throughput. So that was the other reason why we focused on these assays in 3.5s.

Q And maybe it makes sense here to talk about sort of the different CLIA samples that Theranos was processing.

Was Theranos, in the 2013 and on time frame, processing samples in its CLIA lab both from finger stick and from venous blood?

A Yes. And from urine and other matrices.

Q Sure. And I'm trying to focus on blood.

A Sure.

Q The -- is it true that finger stick samples could either be run on the TSPU or modified commercially available devices?

A And like I said, noncommercially available devices like Tecan which are not designed for any assay processing, but we can modify them, we can program them to do whatever we want them to do. So in -- you are broadly right. TSPUs, modified commercial devices, and

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some third-party devices.

So, for example, if HbA1c came, there was a test which is available, we'd run a small sample on a third-party machine. Like I said earlier, there were some machines -- small machines that were in the CLIA lab for workflow purposes. It was just more efficient

to put them there. So that's -- the finger sticks were also being processed on those.
Q Okay. So would an example like a -- be akin to, like, a glucose meter?
A Something like that.
Q So you could run a finger stick sample on that?
A Correct.
Q Were venous draws ever used on TSPUs in the CLIA lab?
A Yes.
Q For what tests?
A Probably for these tests, the ones that I listed here.
Q Okay. So in other words, the fact that the blood was drawn venously didn't mean -- didn't limit the -- the analyzer that was -- the CLIA test was run on?
A Yeah. It depended on the validation

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approach. If the assay was validated also for venipuncture, then the answer is: Yes. There's also another layer. It also depended on how the sample -- what was the sample type. So even when you collect whole blood, you can do plasma or serum samples. So again, if they were -- these assays were validated for the right sample matrix, only then you can run them on the TSPUs.
Q Did -- did Theranos use -- use venipunctured blood on the modified commercially available devices?
A Yes. We validated those assays for venipuncture also. Correct.
Q So -- so venipuncture could be used essentially on all analyzers that Theranos had?
A Theoretically, yes, if the assays were validated being the qualifier.
Q Do you know if Theranos validated the assays on -- on all categories of devices?
A I don't recall that level of detail, but I would think that most assays were validated would be my guess, but I would not be a hundred percent sure. And again, it's not just venipuncture. Like I said, it's the right matrix -- sample matrix, serum or plasma.
So you can collect serum and plasma from venipuncture, and then you could have some assay, my

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understanding is, validated from serum but not from plasma and vice versa. So even though, technically speaking, you can run venipuncture on a TSPU or a modified device, but you wouldn't because the matrix is wrong -- sample matrix is wrong.
Q I'm sorry, can you explain that to me one more time.
A Sure. Sure. Speak slowly also.

When you draw blood from venipuncture, from somebody's arm, it's not just called venipuncture blood. Right? There are different tubes, if you recall, maybe you guys haven't been to labs yet, but you will. And if you go there, when they draw blood, they use different types of tubes. Some are purple top, green tops, tiger tops. They're different tubes. And they have different purposes.

And -- and so they're not all the same. Right? So you could draw blood from an arm and go into a purple top and green top. And one has to be spun down right away, centrifuged right away. The other one has to be -- be sitting for 10 minutes and then spun down. Some you don't spin down at all because you'll destroy the blood. That's my high-level understanding. Right?

And the assays running on machines are

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validated for different tubes. To simplify my answer, sample matrices. Some tubes are serum, some are plasma, some are something else. Right? So just because an assay is said to be validated from venipuncture on a device doesn't mean it can run serum and plasma. Make sense?

Q Okay.

A It depends on how you collect it. And there are technical reasons why you would use one device versus another. In most cases, or many cases, many devices are either only -- serum-only devices. Right? And you -- if you put plasma on them, wrong result, and vice versa.

Q Did Theranos ever disclose to Walgreens what devices it was use -- using to run different test types?

A No. We would never do that.

Q Why not?

A Well, there was -- there was a lot of trade secret here. That's the one -- number one. Besides, Walgreens was our distributor, not necessarily owned -- a company owner. Walgreens was also in the habit of, let's say, copying other people's idea. If you just walk down a Walgreens store two blocks from here, you will see that there's Robitussin and, right next to it

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is Walgreens' Tussin. It even looks like Robitussin.

So they take a lot of products with high volume, and sooner or later, they OEM it or private label it. During our discussion with Walgreens, it was absolutely clear they wish they could be doing the lab themselves, and at some point we always thought they would do a lab themselves. And they were just going to be like a sponge and learn from us.

In 2010, 2011 when we were a tiny company, Walgreens brought a lot of their executives to spend

time with myself and Elizabeth. And we would talk about software and data, and they would be jotting notes. And we were small, so we had to share the details at that time, so -- but we knew they were going to copy our stuff.

And over time as they started, you know, building their iPhone app, it had a lot of my ideas in there. So we were very cautious what we were going to share with Walgreens, and we were absolutely not going to share our trade secrets with Walgreens.

And to add to that, when we were doing the contract negotiations with Walgreens, they had asked access to the labs, and I said nonnegotiable. No.

Q What about Theranos's board, did you share with the board the fact that Theranos was -- was only

0149

using the 3.5 for about 12 tests?

A No. I mean, I don't think we ever, in my memory, we restricted our discussion to this test or that device. I mean, the board walked through our lab. They saw all the machines. These machines are pretty big. They're like elephants. You can't hide them, so they are there.

But our discussions with the board were very frank, and we would provide them all the updates in our board -- in our quarterly meetings.

Q Did you ever update them on the fact that Theranos was -- had modified commercially available analyzers?

A To the best of my recollection, yes, we told them we have high throughput solutions in the lab. I actually shared with them my -- our Siemens contract in one board meeting. That we are a high-volume vendor with Siemens. We have been given a high volume discount. And that's because we buy so much reagent from Siemens that we are a preferred vendor. And I had picked -- I actually showed them the -- our price sheet.

And I remember one example. There's a test called CBC, complete blood count, and complete blood count is one of the most commonly ordered tests. We

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used to sell it for 6 bucks, I think, on our website. UCSF sells it for $1,200. And we had negotiated the price of that to $0.18. And I thought it was worth sharing with the board something we are selling for 6 bucks, we are paying $0.18. For the reagents. Obviously, there's other costs. That we are paying $0.18.

So I shared that with board, so I believe they were fully aware.

Q Do you remember when that board meeting was?

A I don't remember a specific board meeting, but I think -- sorry.

Q Just I mean in terms of what year or --
A Probably end of 2014 would be my guess because that's when we got that high volume discount from Siemens.
BY MS. CHAN:
Q You mentioned that you shared the Siemens contract with the board and also told them about the discounts that the company was receiving for reagents. But do you remember telling the board that the company was modifying commercially available machines for use in patient testing?
A You know, it was -- the word "modified" was not -- I didn't used to use that word that often. Ours

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was: We have high throughput solutions in the lab, is what I used to use. Obviously, TSPUs is not high throughput, but a single -- one sample at a time. That we were doing batch processing and we have solutions in the lab.
When we walked through the lab with the board, I showed them the -- the Tecan device that I earlier talked about, the high throughput sample processing. This is where the CTNs come in. They go into this tray. We put -- take all the CTNs and we run it through that machine. So I walked them through the workflow, so --
Q But you never told them that Theranos was modifying commercially available machines for testing purposes?
A The reason -- I mean, I think that "modifying" is not necessarily the right word here. The reason is: We are -- that we're doing a lot more than modifications to the -- to the machine. We also had the software outside the machine. We had the new workflow. So I showed them the whole workflow, and -- and I don't remember if I told them, "By the way, this is the protocol that we have modified this machine" or "We modified the software in this machine" or not. You know, the board was not necessarily interested in that

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level of detail. They never engaged with me at that level of granular detail.
BY MR. KOLHATKAR:
Q Did you ever disclose to any investors or prospective investors that Theranos was using third-party commercially available devices in its CLIA lab?
MR. COOPERSMITH: Do you mean modified or unmodified?
BY MR. KOLHATKAR:
Q Why don't we start with unmodified.
A Can you repeat the question.
Q Sure. Did you ever disclose to any investors or perspective investors that Theranos was using

third-party unmodified devices in its CLIA lab?
A You know, I don't recall any detailed conversations because we were doing venipuncture, and so I don't think that was a topic of discussion that came up. But in my mind, it was implied that we had because it was on our website that we do venipuncture. I may have mentioned that we have contracts with Siemens. Actually, you know what? I actually mentioned several times to the investors that, you know, we have devices from Siemens, from Abbot, from Roche, you know, labs, and we know exactly how they work. So I did

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mention that we have those labs -- their machines.
Q I hear your answer at the beginning, you mentioned that Theranos had the machines, but did you ever tell any investor or prospective investor that Theranos was using those machines for patient testing?
A You know, I don't recall any specific conversation where we went into that level of detail. But my recollection is that they knew that we were doing venipuncture and we were using commercial machines.
Q And I'll just ask -- it's the same as my initial question, but for the modified devices. Did you ever disclose to investors or prospective investors you were using modified commercially available devices in the CLIA lab?
A Our investors, the conversation that I used to have with them was: "We have high throughput solutions in the central lab model." So we -- because the discussion used to often come around one sample processing at a time. You know, these machines are discrete machines. So we'd just say, "No, we also have technology in the lab that does high throughput processing." And I would do the math for them and say, "We can do 240 samples per day in that high throughput solution." I didn't name the devices by name because I

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considered that as our trade secret, and I wanted to protect them that way.
Q Did you -- did you share information about the TSPU with investors and prospective investors?
A What kind of information?
Q The fact that Theranos was using it for --
A Yes.
Q -- sample testing?
A Yes.
Q Was that considered a trade secret at the time as well?
A Well, most of the time, we used to have TSPUs in the room when we were talking to the investors. Not always, but, you know, we used to have the TSPUs.
So the discussion was: "Are you using TSPUs" -- I mean, first of all, I don't think any

investor said, "Are you using that machine or TSPUs?" Our conversations with investors were very long term, you know, vision conversations. We were always talking about, you know, what the impact will be in the emergency room, in ICU. We used to talk about the scenarios, about Walgreens. You know, what does it mean -- when a patient comes to Walgreens to get a test done, goes to the doctor's office, what does it mean for an insurance company? Well, you just reduced them

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a visit -- a physician's office visit. Because in one visit, they have their lab results before they see the patient.

So we used to talk about the conversations on impact, long-term vision, what it would mean when the device is in a home. I don't recall any investor who said, "What machines are you using in the lab," or, you know, showed any great interests into the operations of the lab.

BY MS. CHAN:

Q Did you ever tell prospective investors or existing investors that the TSPU was only validated under CLIA to perform about 12 tests?

A I don't recall that conversation, no. I think we used to talk about we have -- we were -- we were clear about that we are -- we have 60 or 70 or 80, depending on the time frame, how many tests we had from finger stick. So we used to say, "Yeah, we have 60, 70 tests we used for finger stick using Theranos's technology," but we didn't name device by device, saying, "We have ten on this device, five on that device, three on this device." No, we didn't. Well, I didn't for sure.

Q Did you ever tell Walgreens that the TSPU was only validated under CLIA to perform 12 tests?

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A We would not tell that to Walgreens period. That was confidential information. No. I mean, in my view, it was none of Walgreens' business. We were the lab providing a service. Even if the Walgreens' guy said, "Which commercial machines you are using," and they knew we were using commercial machines because our lab in Arizona was moderate complexity, I would not tell them we had bought something from Siemens.

The reason is: Once you show somebody a roadmap of what you're buying, they know you've done a ton of research buying that thing. And it's a common thing in IT. When you pick a vendor or when you pick a hardware, you -- you know, you did a lot of research on that before you bought it.

So to me, that information was just -- even the commercial machines, who our vendors were, was proprietary information I would not share with Walgreens.

BY MR. KOLHATKAR:
Q You mentioned an answer a minute ago that you were sort of open about the fact that the company used venipuncture. Is it fair to say that in your mind, that meant you were being open about use of other kinds of analyzers?
A Yes. I mean, depending on which time. But
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once we were -- were in -- in Arizona, which people knew was a moderate complexity lab, people in the industry know moderate complexity means you can only run FDA-cleared devices there. You cannot run LDTs there period.
At that point -- I mean, the Walgreens guys asked me what kind of lab it is. "Moderate complexity."
"Oh, so you're only running commercial devices there?"
"Yeah, so that we can process venipuncture samples and return them right away."
THE REPORTER: Can you slow down, please.
THE WITNESS: Sorry. Do you want me to back up?
THE REPORTER: No.
THE WITNESS: Okay. So that was, you know, common knowledge in my mind.
BY MR. KOLHATKAR:
Q So how about before the -- the Arizona lab, did you -- did you ever -- I guess, what about venipuncture, in your mind, disclosed the fact that the company was using commercially available machines?
A To who?
Q To investors or prospective investors.
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A I think the point about commercial machines was clear in my mind. Because when we spoke, we said, "Yeah. We use machines from other vendors. We also do venipuncture." But I would say 99 percent of our conversation was about the future applications of software and technology.
So no investor ever dug into that by saying, "Tell me which vendors," or "Let me understand correctly. Are you using venipuncture here or there?" In our mind, it was implied that, you know, venipuncture, commercial devices.
And -- and many times, we would -- we would share that. I mean, once, like I said, the moderate complexity lab opened, then it was a no-brainer, in my mind.
Q I guess I understood your testimony earlier to suggest that you could use venipuncture blood on a -- on a TSPU.
A For the right matrix, yes.
Q Under the right situation, if you validate

the right assay?
A Yes. Yes.
Q So -- so -- and I guess I'm trying to understand why, in your mind, venipuncture implies the -- the use of a commercially available analyzer.

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A The reason is the following: When we met with investors, we used to, you know, obviously talk about Phase 1 and Phase 2, the Normandy or D-Day, on site and central -- centralized lab model in detail.

"What are we doing?"

"Well, right now, the samples are coming to our central lab. We get venipuncture samples, we get finger stick samples, urine samples, and we process them in high throughput. We do batch processing" --

THE REPORTER: Slow down.

THE WITNESS: -- "because samples come on a plane and they come in a batch."

So -- so we used to talk about that. And in that context, we used to say, you know, "We have machines from every vendor." So it was a five-second conversation. Nobody paid any more attention to that.

What was the second part of your question?

BY MR. KOLHATKAR:

Q I don't know that there was a second part, I guess.

A Sorry.

Q I'm just trying to understand why, if -- if you could use venipuncture blood in theory on the TSPU, why does the existence of venipuncture at Theranos imply the -- the use of commercially available devices?

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A Yeah. I don't think it necessarily implies that, but I think that the conversations we had with investors, again, not Walgreens, I'm not talking Walgreens, with investors was: "We have high throughput solutions in the CLIA lab." Because we used to talk about how we would scale TSPUs to process, you know, 10,000, a hundred thousand samples coming in.

We said, "Oh, no, TSPU is not the only way. We have other technologies that allow us to scale. And we also buy product from commercial vendors."

And in some cases when we walked them around, they would see those machines in the lab.

BY MS. CHAN:

Q Which investors would you tell that you had these other machines that were performing testing for Theranos?

A I think that was part of the general flow of the conversation because when we were talking about "We are in Phase 1. It's a centralized lab model. The samples come here. We get venipuncture, urine samples," you know, so in that context -- I actually remember talking specifically about large volume

samples. We used to say, "When we get them, you know, we just run them on commercial machines because there's no point aliquoting, say, something like urine in a nanotainer and then running it on TSPU. There's no value add."

So I would use those examples to illustrate that.

BY MR. KOLHATKAR:

Q Who do you recall using that sample?

A You know, not any one. But I would say in almost every conversation, when the conversation got deep into the flow of the lab, I would use that example. It's a common example that I usually used.

BY MS. WINKLER:

Q Did any of the material that you shared with investors or prospective investors mention third-party machines?

A I don't know. I'd have to see the materials. I don't remember.

BY MS. CHAN:

Q So you mentioned that the TSPU was capable of conducting more tests than the 12.

A Yes.

Q Why weren't more tests brought on to the TSPU and validated under CLIA?

A Yeah. It was a matter of resources and timing. As we added more tests to the menu, we were -- we also started doing more venipuncture. Because as we started getting more experience from the market, we wanted to see -- we had a lot of theories before we launched that what is going to be the most important element of all the service to the people? Is it going to be small volume? Finger stick? Is it going to be price? Is it going to be transparency? Is it going to be access? Convenience? So a lot of different things.

And we had month-long discussions with Walgreens around those. Some people used to say, "Oh, the most important thing is convenience for the physician. Electronic integration." And some would say, "No, the most is the hours." I personally believed it was going to be the hours and the transparency of the prices.

So we were learning as we went. And as we gained more and more experience, that data point started validating that yes, finger stick is a good differentiator, but what most people care about in the market is they're getting crushed under healthcare bills. So the fact that we are giving them price transparency and low prices, this is how we were able to get into a physician's office in one call.

I mean, we would go there. Our price sheet was our calling card. And when people said, "If you

can save my patients money and this means they will
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come back to me for a repeat visit, I'll send you patients."

So we got a lot of feedback as we moved along, and we learned that the number of tests that we had already in place were sufficient. Earlier, I mentioned that about 60 to 70 tests was actually not sufficient, but it was a good start. But 60 to 70 tests covered about 60 to 70 percent of the visits. There were more take -- given the geography. We were going to add more tests to the menu depending on which path we took in the market with Walgreens or a contract with Walgreens. So we were going to add more, but this learning and -- gave us a little bit more breathing room to be able to say, "Let's focus on the long run."

For example, there was one team that was focusing on certain chemistries, and we had a solution for that now with the -- what we are referring to as the modified commercial devices. And we said, "Okay. Let's put the team on the longer term, on Phase 2. Let's not even worry about Phase 1 for this team."

So those were the kind of decisions we were making.

Q So you mentioned there was sort of a change in the business strategy because you learned that people were valuing other things more than finger
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stick?

A Yeah.

Q For the -- the 60 to 70 tests that you said Theranos was offering, so were the remainder being done on the modified commercially available machines?

A No. The remainder were commercial venipuncture assays unmodified. Some may have been running on modified, but in general, the remainder were all on commercial venipuncture machines, like nonmodified machines.

Q So then why use the TSPU at all? Why not just phase that out and just concentrate the company's efforts on using commercially available machines with, you know, price transparency and speed?

A Yeah. And not use finger stick at all, you mean?

Q And not use finger stick at all.

A Finger stick was still a good differentiator, number one. Number two, finger stick was the long-term path for the company because in the long term, we wanted to be near the patient. That's the Holy Grail. If you look at -- even though we were processing the 70 assays in the clinical lab, I would say, you know, two-thirds of our R&D was focused on finger stick. That was the long term for the company for -- and by
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"long term," I mean, you know, five years and beyond, four years and beyond, maybe ten years. So the Phase 2 and the Walgreens.

You know, being able to be in NICUs, that was near and dear to my heart. NICUs, the neonatal ICUs. And some of the babies are born smaller than the palm of a person, and they have no blood to give. And to be able to do a finger prick or a small heel prick on them and be able to the run the test, it will save, you know, I thought millions of lives.

So finger stick was still the central for the long term for the company.

Q And you were still doing some finger stick samples on the modified commercially available analyzers --

A Correct.

Q -- right?

A Yes.

Q Okay. So then -- so why not just phase out the TSPU in favor of a more high throughput situation, which is the modified commercially available machines that could run finger stick samples?

A That's a great question. The reason is the following, and this is also part of the -- the reason why we kept this under -- as our trade secret: Nobody

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knows what machines you can modify. You literally have to go through one machine at a time to see if it is modifiable. Right? It's not like a computer you just buy and modify it and run your OS on this. We went through a lot of research. We looked at a lot of machines online and this and that.

And you pick a certain set of machines that are modifiable. They're open. They fit your specification. The detection systems are sophisticated enough to be able to detect the lens or the signal from the blood. And not many machines can do that. There are very few machines that are modifiable and sensitive enough to be able to run finger stick testing on.

And the tests that we were running here, the immunoassays, this category actually is one where TSPU really shines because we had a lot of experience there. And we looked at other machines that could do it, but they were not quite there yet.

MR. KOLHATKAR: Why don't we go off the record at 12:19 p.m.

THE VIDEOGRAPHER: Off the record.

(Whereupon, at 12:19 p.m., a luncheon recess was taken.)

A F T E R N O O N S E S S I O N

THE VIDEOGRAPHER: It is 1:11. We're

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rolling.

MR. KOLHATKAR: Back on the record at 1:11

p.m.
BY MR. KOLHATKAR:
Q Mr. Balwani, we didn't have any substantive conversations during the break; is that correct?
A Correct.
Q Before we broke, we were talking a little bit about -- I think you sort of mentioned that validation has two different purposes. One was for the CLIA lab. Can you remind me what the other one was.
A For our research and development. When you take an assay through R&D, there are many validation steps, and different teams refer to their task as "Okay. I'm done with this assay" as a validation step.
So when a team is done with an assay on the bench versus different places, they will call it a validation input.
Q What was your understanding in the, I guess, 2013/2014 time period of -- of what the -- what the difference was between the two in terms of actual steps to be completed?
A I mean, there are significant differences. CLIA lab has its own protocol and -- I mean, I don't know exactly the details of every step in the CLIA lab

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or R&D. But I know in the CLIA lab -- they have to follow a certain SOP in the CLIA lab to validate an assay, including some patient samples they have to run by CLIA lab personnel.
So there are things they have to do to validate assay in the CLIA lab. And they have to bring patient samples to make sure they cover a certain range of samples. I mean, that's, like, my high-level understanding that I know because they are a significantly different process.
Q Who -- who at the company, I guess, would know the difference between the two?
A There will be quite a few people. I mean, (b)(6); (b)(7)(C) at Theranos would definitely know. And assay by assay. There were other individuals who were responsible for different assays would also know. So people who are developing the assay in the R&D team, the product development team, they would know what is their protocol for validating the assay. And they had a validation report that would come out at the end of the process.
And then many of them over time had also acquired the skills to know what a clear validation is going to look like. So there will be many, many people who would know.

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Q Who has the ability to sort of sign off and say something was CLIA validated at Theranos?
A Only the CLIA lab director can do that.
BY MS. CHAN:

Q Who were the assay leads during the 2013/2014 time frame?

A So they, I think, changed over time because as the team grew, people changed. But in the immunoassay team, we had a person, her last name was (b)(6); (b)(7)(C), first name was -- that was the first name. Her last name was (b)(6); (b)(7)(C), I think. There was another person whose name was (b)(6); (b)(7)(C) who was in the general chemistry team.

Then we had -- the nucleic acid amplification team I think had two or three people. There was a guy called (b)(6); (b)(7)(C), but I don't know if he was the lead or not, (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)

The hematology team had (b)(6); (b)(7)(C) (b)(6); (b)(7)(C). But these roles were evolving over time. Another person, his name was (b)(6); (b)(6); (b)(7)(C) he was the lead for --

THE WITNESS: Should I spell those?

THE REPORTER: Yes, please.

THE WITNESS: Okay. Let me start from the

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start. (b)(6); (b)(7)(C)

(sic). (b)(6); (b)(7)(C). Then (b)(6); (b)(7)(C) easy to spell. And there's one more.

BY MS. CHAN:

Q (b)(6); (b)(7)(C)

A (b)(6); (b)(7)(C) yeah. That one I haven't spelled for you. (b)(6); (b)(7)(C) and last name is (b)(6); (b)(7)(C)

And let's see, there was another person, and his name was (b)(6); (b)(7)(C) He was also deeply involved in immunoassay, but I don't think he was a team lead, but he used to provide a leadership role in assay development. I've already mentioned (b)(6); (b)(6); (b)(7)(C) in one of the teams.

Oh, (b)(6); (b)(7)(C) He was not an assay, he was the team lead for the -- oh, he was involved in a few things, (b)(6); (b)(7)(C) the team that was creating the antibodies, the binders that I noted earlier, and doing IP work that we -- we were building this artificial life in-house. He was leading that team.

Those are the few names that come to mind. I'm sure there are others.

Q Was there a lead for the ELISA assays?

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A That's the immunoassay. That's the (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)

Q Okay.

BY MR. KOLHATKAR:

Q Are those two, immunoassays and ELISA, are those synonyms or are they just closely related?

A They're closely related. My understanding, and this could be inaccurate, is that ELISA is a type of immunoassay. There's one method when we are doing immunoassay, but there may be other ways of doing immunoassay. I think that is reasonably accurate. But I'm not a chemist, so that's my business level understanding of chemistry.
Q I'm not either, so I'll never know the difference.
A Well, I still want to be accurate, so --
Q And I appreciate that.
I'm going to hand you another document I'm going to mark as Exhibit 237.
A Uh-huh.
(SEC Exhibit No. 237 was marked for identification.)
BY MR. KOLHATKAR:
Q For the record, Exhibit 237 is a document Bates-stamped TH-PFM001829250.

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Do you recognize Exhibit 237?
A I do.
Q What is it?
A This is an e-mail exchange between myself and a few people in the software team, initially, I think -- actually, all the software team. And then towards the end, it seems like [redacted] shared that e-mail with a few other people in the product management team.
Q So who is [redacted]?
A [redacted] working for me in the software team.
Q What was [redacted] role at this time?
A Well, I mean, [redacted] in our company were like Swiss Army knives, jack-of-all-trades. They would do a little bit of a lot. [redacted] was -- his role was to manage -- one of his roles was to manage the LIS, the lab information system we were developing, the training side of that.
And also the features, testing it, rolling out, making sure people are using it properly. So he was managing a software component.
Q If you turn to the middle -- or towards the bottom of the page that's ending in 1829251, do you see

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an e-mail from you dated Monday, November 17, 2014, at 9:00 p.m.?
A I do.
Q And it says, "Please create a plan to mask all of these names" --
A Yup.
Q -- "so only Normandy crew understands these"?
A Yes.

Q What were you asking (b)(6); to do here?
A Yes. Let me give you some background to this. So this is -- again, as you pointed out, the date is November 17, 2014. So at this point, we have been in production in Walgreens and in general for more than a year.

So we were making a change in our LIS system that allowed us to surface a lot more information. "Surface" means to present information to the users about a sample. So as we look at -- look at a sample to see who ran it, who picked it up, who touched is, who draw it, this was a cool feature in an LIS to be able to -- every information you need about that sample will surface, will show up. You just need to click on an icon and it will show you. You keep clicking and it will show you more and more detail.

As part of that, this feature also told you

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exactly which device the sample ran on. Right? So -- and this LIS was used by all labs that we had and in the future. So California and Arizona lab. Because of -- one part of our Newark lab had our trade secrets, which was the Normandy lab, those devices would also show up in that list. So anybody in Arizona can click and say, which device was their sample ran on, so they'll be able to see it.

And I didn't want that to happen. And the reason is, like I said, this -- these devices are one of our trade secrets. First of all, the Arizona lab had no need to even know about any device running in California, not just Normandy devices, our finger stick devices because the labs are separate, the licenses are separate. Usually, Lab A and Lab B don't get to find out, you know, what device is running. Now, in our cases, we were a small company, so people obviously knew.

So in this case, I was masking that trade secret information from anybody who was not just working in the Normandy lab, in the finger stick lab.

Q So does "Normandy crew" here refers to -- refer to people working in the Normandy lab in Newark?
A Yes.
Q And you mentioned that you wanted to mask the

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trade secrets from the -- the Phoenix lab members?
A Well, anybody who had access to the LIS. That would include, for sure, the Phoenix lab members, but even other people outside of the Normandy crew, which is why I narrowed it down to Normandy crew, not even the other people working in Newark.
Q So in other words, other people who were working in Newark not in the CLIA lab space might access LIS for --
A For various reasons. Even they would not be

able to see it. But actually, there's another point, which is: Even people working in the CLIA lab who are working in other rooms, not Normandy rooms -- so in Newark, we had four or five different rooms. Those people had no business going to the Normandy room and vice versa. Even those people would not be able to see which devices we were using in the Normandy lab and -- which is why it's restricted to Normandy crew.

Q So which -- which devices were you trying to -- to mask here?

A Well, here, as you can see, the list says -- I actually -- I think I read it here somewhere. I'm talking about the third-party -- what you referred to as the modified devices, those are the ones that I'm masking.

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Q Was one of the third-party devices the -- a modified Advia 1800?

A Yes.

Q And that -- that's what gets assigned the code name 18C?

A Yes. I would have picked a better code name, but yes.

Q It looks like he was trying to make a joke about these code names.

A Yeah. You know, I actually told him to use -- because I have a fascination with the second world war planes and B-52s and bombers. So I was going to pick planes from the second world war, and people told me nobody knows what they were, so I thought I'd kind of settle with this.

Q The Advia 1800 was being used outside the Normandy lab as well; is that right?

A Yes.

Q So -- so, I guess, why would it be important to mask the use of the Advia 1800 in this instance when it's, you know, openly being used and everyone can see that it's being used in -- in other settings?

A The reason is: In this case, explicitly, people would know that it is the Advia 1800 that had ran a particular finger stick sample for a certain

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assay, and that would basically reveal that the finger stick sample is running on that device.

So if -- if the Advia is sitting in our Phoenix, Arizona, lab and you're running venipuncture and somebody finds out what device are we using, Advia 1800, no problems. But the fact that we had modified this workflow, and as part of that workflow and the technology that we had created, we have Advia 1800 as a component of that workflow will get revealed as part of this, and I wanted to make sure that doesn't happen.

Q You don't mask the use of the TSPU; is that correct?

A Yeah, that's right. Because --
Q Why not?
A Yeah. The reason is: TSPU was our device. We had a ton of patents on that. Other people couldn't just go and buy a TSPU and reverse engineer it to see how the -- how it's being done. Advia 1800 was a commercial device. Even the -- in general, even today, the lab industry, it is not a common knowledge that you can actually modify a commercial device to run finger stick samples. This is considered to be a near-impossible problem. We solved that problem, and not only did we solve it, we solved it beautifully and we could scale with that.

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So even pointing people in that direction, they're saying, "By the way, Advia 1800 is possible to modify it for finger stick," to me, was a huge loss. We didn't want anybody to know that.
Q I guess I understand the concern to -- to try and protect trade secrets, but these were your own employees that you're -- that you're trying --
A Yeah.
Q -- to guard this information from; is that -- is that --
A Well --
Q -- right?
A Well, let me explain it more. First of all, like I said, in general, even people in Arizona have no need for -- to do their job, to know anything about the Newark lab, in general. Forget about the Normandy or the modified devices. However, in the case of trade secrets, it's different. When you have filed a patent like we -- we had patented a lot of Edison, the 3.0, 4.0, a ton of technologies, hundreds of patents, but the modifications we had made in this workflow on Advia and modified devices, we did not file patents. We chose to keep them as trade secrets.

And there's a big difference. From what I understood through my experience and having talked to

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the counsel, if you ever get into litigation around trade secrets, you have to show that you took every reasonable commercial effort to protect, to keep the trade secret as a trade secret. Yes, even from your own employees who have no need to know. You cannot just put on the company's bulletin board that we're using an 1800 or allow anybody to go and walk in and see that we're using 1800 modified to be able to do XYZ, whatever. Your case about that being a trade secret weakens deeply is my understanding, and I think that's correct.

So that's the reason. Even from our own employees. If you want to keep something as a trade secret, protecting it from the employees was critical.

Now, this is not a unique thing to us. If you -- I worked at Microsoft. There were a lot of buildings I couldn't access because the people were working on products that were confidential, not announced, and they were -- I wasn't under an NDA at Microsoft. I was one of the, you know, trusted employees. I couldn't see what they were. This is not an unusual thing in tech companies to keep things trade secret even from your own employees.

Q Who was the Normandy crew that could access this information?

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A There are actually quite a few people. These were people whose jobs required them to go to this lab. I mean, I would -- and there were also R&D people who went there. There were also product development people who went there. So if I were to guess, I would say more than 50 people, but all of them clearly had a need to go into Normandy.

And one more thing, in order to make sure that that process around Normandy is -- is honored and protected, anytime anyone needed access to Normandy, the request came to me, and I would approve. And I would usually talk to the lead saying, "Why does this person need to go to Normandy?" And they would tell me the reason. I would say, "Okay. Make sure they understand this is trade secrets and you will" -- it was a common communication.

And also, a lot of the software and the documentation that are Normandy validation reports and so on, they were all on a separate folder where we did our best that only people who need access to that will have access to that, and people who had no business accessing that information wouldn't even see those reports.

BY MS. CHAN:

Q Why didn't the company patent the method by

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which you were modifying the commercially available machines?

A Yeah. I mean, I can explain to you my understanding of the patent process. What happens is -- and I've filed many patents under my own name. I think, I don't know, 60 plus or whatever. It is -- when you file a patent, at some point it gets published. Right? That means it's accessible, and that's the whole point behind a patent. That you have to describe your method in perfect detail so somebody else can replicate it. That's how you get the patent.

So us educating the whole world that something that the world thinks is impossible, or near impossible, it's not really possible, and we are doing it at the commercial scale would have meant that a lot of other companies would have dabbled with it, and they

may have tweaked it here and there and started copying what we were doing, certainly commercial vendors like Siemens and Abbot and those guys who are not in this business, we would just basically direct all of them to go chase this business now.

And once you do this damage, it cannot be done. It's like unringing the bell. Once the bell is rung, you can't unring it. That was the reason.

Q Did Elizabeth Holmes know that the company

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had made a decision to not pursue the patent for that method?

A Yeah. We had discussed that with our attorneys together, and it -- it was -- my understanding is that I think she had the knowledge of that because we -- we talked about that a couple of times.

The other thing is: In 2015, unfortunately when the Wall Street Journal reporter reached out to us and he shared with us that some employee had shared with him what he thought was a trade secret, that we are, you know, doing the modified devices and so on and so forth, we met with out attorney, and we saw -- we said, "This is ridiculous. Now somebody knows. What should we do? We were trying to keep this a trade secret."

And one of the first things we did was: We tied up the patents because now that the secret is out, you better patent it, like you said. So we filed -- and I believe we filed a lot of patents around this technology at that point. Because we knew now it's a matter of time, the -- even if the reporter doesn't publish it, we knew through him that he had talked to enough people in the industry and had pushed all of them by saying, "Yeah, Theranos is doing this

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modification. They're just diluting the sample and putting it in this machine and making it look like it's a real sample," and those people knew which machine. So it was already out, and we felt the damage was done so we started filing patents.

Q So you started filing patents in 2015?

A Yes.

Q And was that description of how you were modifying the machine, was that correct that you were diluting samples and then just putting it on the machine?

A No, it was completely wrong. It's not possible to do that. That's like saying you can take a gallon of gas and put ten gallons of water, and pour it in the car and you will go ten times farther. No, that's not what was happening. There was a lot of scientific research behind it. We had modified the software, like I said earlier on. There was a ton of

work behind that. You cannot just take a sample and dilute it tenfold.

Now, there are actually tests for which it is required to dilute a sample in a certain way. Dilution actually is part of the laboratory. A large number of samples, especially ELISA samples or immunoassays in general, get diluted when they're run. And machines do

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it automatically, so most people don't get to see the machine actually is diluting the sample because it's closed.

So dilution is common in the industry. The sources of this guy were -- from what we understood, was junior employees who just saw the front-end part, that samples are being diluted. They didn't have access to the lab, and the IP, and the patents, and the trade secrets to see there's a lot of modifications we made in the engine. Right? Like this example of, you know, one gallon of gasoline and ten gallons of water, we made it work on an engine by making significant changes to the controller, you know, making changes in the engine. They didn't get to see that.

And when we approached the journal -- the Wall Street Journal, we said we can -- they wanted us to -- tell us what are the trade secrets. And that's the problem. If you tell them, it's no longer a trade secret, especially if they're in the media.

So we said, "If you sign an NDA, we will tell you what they are and then you don't publish them." But they didn't agree to it because they didn't want to sign an NDA. They already had the information they needed to print.

So I hope I answered your question.

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Q To your knowledge, does Theranos have the patents for that modified method?

A I don't know. Patents usually take time, sometimes, you know, years. But I know that we have filed patents. And I thought they were very tight patents. Clearly, to the best of our knowledge, even today nobody else has been able to do what we did. Even four years after we launched finger stick, I don't know of any lab in the world that can claim that they can do what we did. So I thought the patents were good, but I don't know if they were granted yet.

BY MR. KOLHATKAR:

Q Before the break, you also mentioned that from time to time, there would be tech demonstrations at Theranos; is that fair?

A Uh-huh. Yes. Sorry.

Q No problem.

The -- would those take place at the -- at the company's Palo Alto headquarters? Let me ask it more correctly.

Where did the tech demonstrations take place?
A It depend on -- depended on the demonstration. I would say the overwhelming majority, greater than 90 percent or 80 percent, would be either in the headquarters or it will be at a patient service
0186
center in Arizona or in Palo Alto. But obviously because the -- if I was involved in those, right, or if -- if Elizabeth was involved, then the headquarters would be involved one way or another.
Q And would those -- would the patient demonstrations track -- I shouldn't say "patient demonstrations." Would the technology demonstrations track differently in the -- Theranos's LIS than -- than patient samples?
A It -- it depended, because we did a lot of demonstrations over six years or seven years that I was there. And I can tell you, in my opinion, unless the patient actually went to a Walgreens store and got a test there, most of the demonstrations were all different because they were -- we were demonstrating something completely different based on the audience or whoever we were talking to.
So there was no one set script. However, as a broader principle, if you're demonstrating finger stick and the entire process as part of the CLIA lab, you know, all the way to holding the CLIA lab results, then, yes, it will go through the CLIA lab. Even if it's a quote/unquote demonstration, it would still go through the CLIA lab process.
However, anytime -- I would say most of the
0187
times that I was involved or Elizabeth was involved, we were always demonstrating something about the future. So in those cases, they would not be CLIA lab because those tests are not being run in the CLIA lab.
Q And would it be possible for -- for an individual to get a result from that test without it going through the CLIA lab?
A Yes, absolutely. For the tech demonstration, it would.
Q For tech demonstrations?
A Absolutely.
Q How would -- how would that work?
A Well, there -- like I said, over the span of six years, there were many ways. Our software ultimately got smarter and smarter where you can do more and more automated in the software.
But let's go back all the way early days. In 2010 when there was no LIS, a lot of the software was not there, the demonstration would happen, the results would go to the server, somebody would actually print it, and hand it out to the patient, and say, "Here's your results," because we didn't have the full patient

flow -- workflow built yet. And sometimes we would just cut and paste and put it in the e-mail and send it. Right? So that was early days.

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As we got a little bit better and as we had more people, then we created these Microsoft Word reports, like templates. And then based on the tests you ran, you just basically cut and paste just like Microsoft, and you print it or PDF it, and you send it.

And then at some point, when we had our LIS system, then it just became automatic. However, the demo samples were marked either "demo doctor" or, you know, "demo" something. There was some flag that said this was a demo sample. And this way, you can go through the whole process and even see the results on your iPhone, but it still be a tech demo, technically speaking.

But I'm just describing, like, the three or four more common ones. I'm pretty sure there were, like, dozens of variations here.

Q Yeah. I'm just trying to understand conceptually, you know, how a report gets created in a situation like that.

So is it fair -- is it a fair summary to say that the lab director wouldn't necessarily have to supervise the issuance of a report in that kind of tech demonstration that you described?

A Yes. I would say, like I said earlier, if I was involved in the meeting and if I'm doing the demo,

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chances are it's not a CLIA lab demo, it's a pure technology, future capabilities demonstration. In this case, a lab director would not be involved.

Q What's an example of a CLIA lab demo?

A Well, a CLIA lab demo is: If someone -- let's say you came in and said, "You know, I've heard so many things about you guys. Can I get a finger stick and see how everything feels? And I want to be able to see the results on an iPhone."

And we will have an official phlebotomist in California, it has to be a certified person, do a finger prick on you, get a sample, scan it, and just as if you came to Walgreens or one of our locations. As a matter of fact, in our headquarters --

THE REPORTER: Slow down. Slow down.

THE WITNESS: Sorry.

THE REPORTER: As a matter of fact --

THE WITNESS: As a matter of fact, in our headquarters, we had a small room set up as a patient service center so you could kind of go through the whole process like you would at Walgreens.

And then the sample would go to the CLIA lab, as a sample would go to the CLIA lab. And when they processed it, the results would go to the lab director

and the LIS system, and then they would be released to
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the patient or the doctor based on the law. Well, if it's California, then a doctor has to be involved even for -- if you want to see the whole CLIA lab demonstrations. But as of 2013, fortunately, there's a federal law that says patients have a right to their results right away. And we loved that because that was our mission.

So we built this cool smartphone app Android, and iPhone, and actually Windows were bought that you will get the results right away.

So that would be the demo if you want to see the CLIA lab demo.

Q I guess, in that -- in that instance -- we'll stay in California -- that person requesting a demo would still need an order of some sort from a doctor, or could they get -- could they come in without a doctor's order?

A No. In California, legally you cannot get a lab test done. What happened was: In our case, we had a physician acting as a consultant with us. And our lab director, if the lab director's involved, would be his MD. Initially, it was -- actually, you know, later it was. So the lab director can always write you a lab order, of course.

Q So would -- and again this --
0191
A Actually, in that case, the lab test we will perform on you will be benign. It will be, like, your lipid profile. You're probably not going to be doing your SDI panel with Theranos.

BY MS. CHAN:

Q Who was the physician consultant?

A There was -- actually, I don't remember the name. And she was a consultant who would basically get the results. And then every time in California when that happened, if it was a CLIA lab demo, again, the lab results would always go to that physician, and she would send you a result. And in her case, she would also add a commentary telling you, you know, about your test.

But we only did, like, lipid and glucose profiles with that. I don't remember the name of the physician.

Q Was this (b)(6); (b)(7)(C) ?

A Yes, that's the name.

BY MR. KOLHATKAR:

Q I'm handing you a document I'll mark as Exhibit 238.

A Thanks.

Q And, I'm sorry, this should have came with the attachment that I will provide as well.
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MR. COOPERSMITH: Is it part of 238 or --
MR. KOLHATKAR: It's the parent and child. It should have been stapled as one.
MR. COOPERSMITH: Okay.
MR. KOLHATKAR: So why don't I just mark it as 239 just to -- just for clarity of the record.
MR. COOPERSMITH: 238A.
MR. KOLHATKAR: 239. I've already referenced it.

(SEC Exhibit Nos. 238 and 239 were marked for identification.)

BY MR. KOLHATKAR:

Q So, for the record, Exhibit 238 is a document Bates-stamped TS-1072845 and Exhibit 239 is the attachments, which was produced natively.

Do you recognize Exhibit 238?

A I mean, it's an e-mail from one of our product managers, (b)(6); (b)(7)(C) and I'm included, I think, all the way at the top in this e-mail.

Q So you're not included in the earlier part of the chain, but you're added --

A Yeah, it looks like it.

Q -- at the end?

A Yeah.

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Q Who is (b)(6); (b)(7)(C)?

A Where is the name?

Q Not on the document. I'm just asking aside from this document, do you know who (b)(6); (b)(7)(C) is?

A It may be a chemist on our team. I don't know. I don't know. It doesn't ring a bell.

Q Did Theranos conduct any demonstrations for Memorial Sloan Kettering in 2013?

A I was not in the meeting, or at least I don't recall.

Q You didn't attend -- to the best of your recollection, you didn't attend a tech demonstration for them?

A Yeah. To the best of my recollection, I did not.

Q Do you recall ever meeting with the folks from Memorial Sloan Kettering?

A Not me. I don't recall.

Q If you take a look at this e-mail, the -- the one that actually includes you from (b)(6); (b)(7)(C)

A Uh-huh.

Q Do you see the line that says, "It looks like there is some discrepancy between the two infectious panel runs. Any thoughts on why this is the case?"

A Uh-huh.

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Q "Note that I grouped total HB," do you know what HB is?

A Hemoglobin, I think.
Q -- "with a complete metabolic panel assays, but please advise if it should be a different section. If any other addresses need to be made, do let me know."
Do you know who -- who is he asking the question to here?
A It seems like it is addressed to (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)
Q Do you have any recollection of why you're included on this e-mail chain?
A You know, people used to include me in, unfortunately, too many e-mails. So I don't know why he included me here because it doesn't look like I was in the demo and I was not part of the earlier conversation. So I don't know why he included me.
Q I'm going to hand you another document.
A Should I put this away?
Q Actually, I'm going to have them both next to each other.
A Sure.
Q I'll do the same -- and I'll do the same thing here where I've got 240 and 241.

0195

(SEC Exhibit Nos. 240 and 241 were marked for identification.)
BY MR. KOLHATKAR:
Q So for the record, Exhibit 240 is a document Bates-stamped TH-PFM0000147224. And 241 is the attachment, which was produced at THPFM0000147237.
Have you had a chance to flip through Exhibit 240?
A I'm doing it right now. If I can just have a few more seconds.
(The witness examined the document.)
Okay.
Q Do you recognize Exhibit 241 -- 240?
A I don't.
Q Does it appear to be an e-mail chain addressed to you and others at Theranos?
A Yes. It has my name for sure.
Q So I want to turn to a message that begins on -- in Exhibit 240, page ending 147230. It's a message from Ms. Holmes dated June 1, 2013, at 7:17 a.m.
Do you see that?
A Uh-huh.
Q Sorry, is that a yes?

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A Yes. Sorry, yes.
Q The -- and the message says, "Discrepancy will be a problem. We will need to see if we can correct for it."

A Yes.
Q Were there ever instances in tech demonstrations where there would be discrepancies between runs of samples?
A It's an extremely common thing, not just in tech demonstrations, but even clinical labs, for samples to yield different results. As a matter of fact, if I take your blood right now from the same vial, if I ran the same test twice on the same device, chances are, depending on the test, but most cases, it will be a different answer.
Q At the time, what was your understanding of the ways that it could be corrected for?
A Yeah. I can -- there is -- the word "corrected for" is a term of art. It's used quite often in set of six in mathematics and machine learning. The most common way is: If you apply a correction factor to a lab result -- and it's a common thing that happens in clinical labs when you bring a new assay on a device, you know, it's supposed to give you an expected answer, and the device -- but the

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reagents' lots change over time, and over time their value changes for a variety of reasons. And then the software automatically applies a correction factor based on the calibration that is done on the device to correct the results the -- the device is going to spit out.

So in most cases -- sorry for the long answer, but in most cases, the correction applied is either running more samples, correcting for the reference range, and a few other things.

Q If you -- if you turn -- turn to the page ending in 147227, there is two messages from (b)(6); (b)(7)(C) The first of the bottom message dated June 1, 2013, at 12:26 says, "Yes, I trust the second run in PA. Over 90 percent of the people approximately 50 years of age should test positive for mumps." And it goes on in the message above at 4:13 p.m. to say, "Greater than 95 percent of women about 50 years of age in the U.S. test positive for measles."
A I see that.
Q Was it your understanding that a normal way to correct for results included looking at the -- the sample provider's characteristics?
A Yeah. You always look at the -- the patient's characteristics. Always. For example, if

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you get a very high testosterone result and the patient is female, chances are the result has been thrown off. So you always do.

As a matter of fact, in clinical labs, the way samples are processed -- you know, the -- the devices are agnostics. They don't know whose sample it

is. Right? And they will run a sample, and then it goes to a lab information system, the LIS. In LIS is where you have these rules applied like this. For example, if the testosterone is greater than X and the patient is female, either rerun it or flag it to the director because chances are, it's wrong.

So it's a very common practice.

Q If you turn to the page ending 147225, there's a message from Ms. Holmes dated June 1st, 2013, at 3:29 p.m. It says, "Go ahead and prepare a final report. I'll review in parallel."

A Uh-huh. Yes.

Q Who had the authority to release reports for demonstrations?

A It was a team effort. This is -- if you look at this, this is dated June 1st, 2013. This is deep in the R&D mode here. So there were a lot of people who either -- even the chemists who developed the assay can make the final call saying, you know, "I have done this

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assay. The assay looks good. So I have a high confidence the assay is good."

And then the person who ran the sample could also make the call. And then somebody like (b)(6); (b)(7)(C) who would look at the patient demographics to say does it make sense or not would -- could also make the call. And, of course, Elizabeth Holmes would look at the report also. So it's an R&D phase. A lot of people could make the call.

Q If you take a look at the -- at Exhibit 241, the -- the -- the sample results.

A Yeah.

Q What format is this -- is this in? Is this in a --

A It says at the top, "tech demonstration."

Q Okay. And is this sort of the template that you were describing earlier where data can be entered?

A Yeah. This could be one example of the template. Yeah. It changed over time. But yes, this would be one. It got better looking over time.

MR. KOLHATKAR: We've got to switch videotapes. So we'll go off the record at 1:49 p.m.

THE VIDEOGRAPHER: End of Disk 2. Off record.

(A brief recess was taken.)

0200

MR. KOLHATKAR: Back on the record at 1:58 p.m.

BY MR. KOLHATKAR:

Q Just to confirm, Mr. Balwani, you didn't have any substantive conversations with the staff during the break; is that correct?

A Yes, that's correct.

Q So I wanted to compare the two reports

briefly that you have in front of you, 239 and 241.
And if you look at the third page of 239 --
A Okay.
Q -- it looks like there's Infectious Disease Panel Test 1 and Test 2.
Do you see that?
A Yes.
Q And on Test 1, it looks like mumps is negative, and on Test 2, it's positive; right?
A Sorry, where are you? Oh, test panel, Test Numbers 1 and 2.
Q Yeah.
(The witness examined the document.)
A Okay. I see that.
Q And -- and these are both listed as -- as qualitative units?
A Correct.

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Q Did you have an understanding of what that meant?
A Yes. Yes.
Q What does that mean?
A It's either positive or negative or -- or yes or no. Qualitative is that. And quantitative is where you actually get the digits.
Q The -- and if you could take a look now at the test report at 241.
If you look at the first page there, the mumps is listed as positive in qualitative.
Do you see that?
A I see that.
Q I guess for -- for -- for qualitative tests, what would be the -- as you said, if you run the same blood twice in the same machine, you might get two different results.
A Yes.
Q It's a matter of the ranges.
For the -- for the -- for a qualitative test like mumps where it's either positive or negative, what would be the situations in which you, you know, know which one of the two tests is correct and pick between positive or negative like this?
A Well, it's different for R&D than the CLIA

0202

lab. I'm assuming you're asking me about R&D.
Q Sure. Yeah.
A R&D could be, you know, a hundred different factors. It could be the confidence of the guy who ran the test, it could be the confidence of the guy who said, "You know, I used a different method," or "a different reagent," or "a different reagent lot the second time," you know. There are a lot of factors that go into, you know, in R&D, well, how would you pick the -- pick the answer.

There's also a protocol in CLIA that sometimes R&D people follow, which is: If you get two results which are different, you either pick the first one or the second one unless it's a test that, you know, like I said in this one, which is most likely, 95 percent are positive.

So -- so there are certain decision criteria that go into that. My guess is, I mean, this is my understanding, again, high-level understanding. So my guess is: That's the kind of level of thinking that would go into something like this.

Q What about in the CLIA context, if you got a sample that you ran twice and you got, you know, two different -- two different outcomes, how would that be addressed in the CLIA context?

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A Well, first of all, in CLIA, the assay would be way further along. Right? So an assay is not going to go live in CLIA unless your confidence level is not high -- not just high, but has been validated by the lab director. So there's a day-and-night difference.

I just want to point out that in -- in like a, you know, think about the iPhone 10 that Apple may be working on. Things will work differently when it's in the hands of Apple and R&D versus when it's in the hands of the consumers because it has gone through a certain process.

So the reason the processes in SOPs are different in CLIA is because of that very significant reason. In a CLIA lab, like I said, there are usually SOPs that lab directors have put in place. Now, they have a right to modify them anytime they want, but usually, they'll say, "For these assays, if you run it the first time and if it is positive, then run it again to confirm it as positive."

For certain tests, there's actually protocols defined by CDC and you have to follow those. Like HIV and some of the more -- more dangerous -- or not -- more complicated infectious diseases, the protocol is on the CDC's website. You just follow those.

And for different types of tests, the lab

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director might have a set of different rules. But then that becomes part of the SOP. The CLIA lab gets trained. If it is in the software, then it gets implemented into the software also, and then our software just automatically makes the decision on behalf of the lab director.

Q Was that generally your understanding throughout your time that Theranos had a -- had a CLIA lab?

A Yeah. I mean, that's my understanding of the -- of how things work in a CLIA lab, and I think it's reasonably accurate that the lab director will

have those policies in place.
Because this instance of, you know, you're running something once or twice, it's a common thing in a CLIA lab. The clinical lab staff may run it twice for, you know, different reasons. Sometimes, you know, sample -- just to confirm a test before they -- before they ship -- release the results. So there are a lot of different pathways of why things would run twice in the CLIA lab.
And the lab director usually, for every assay, would have those policies in place, and assay by assay in most cases.
Q And for -- in the CLIA lab context, again,
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would there -- would there ever be a reason where Ms. Holmes would have the final say on whether to correct a reference range or adjust a reference range?
A She would not have, in my opinion, the final opinion on the CLIA lab. It is possible that sometimes when you bring up tests in the CLIA lab, when you set the reference ranges, you start with a narrow number. I think the minimum is 20 for most assays. Sometimes it's actually even five.
And basically you get five patients and you run them, and you get some data. And then as you get more and more patients, it gets broader and broader and the reference range gets better and better.
So it is possible that -- theoretically, I'm talking. I don't know whether she did that or not. But theoretically that if you have set a reference range and the results seem off or is on the borderline or out, and the -- and the doctor or the patient has a reason to believe that no, your results is challenged, you know, take a look at it again, then you'll say, "You know what? This one, we don't have enough samples. Let's add more samples to see if the reference range changes."
But again, in the CLIA lab, lab directors are the ones who make that decision. Ms. Holmes could
0206
probably make a recommendation that please try to do that, and sometimes even I would make a suggestion because I knew that for assays where a sample size was -- sample population was less, you could make things better. I mean, that's what the CLIA lab does. This is why they have LDTs, the lab developed tests, for that -- one of those reasons is that reason.
Q And, I guess, how would that -- how would that adjusting the reference range fit in with the -- the SOPs that you described?
A Well, no, it would be the lab director who would do that. It's not -- the SOPs will be at the high level that if you have a reason to adjust the reference range, and again, I'm not particularly

familiar with the exact SOP, but I am familiar enough at the high level that the lab director would say, "If there's a need to modify the reference range, here's the process."

In the CLIA lab, there's always a process or well -- a well-defined document that tells you to do pretty much everything. And, you know, that's the -- that's the right approach.

Q Once -- once Theranos started modifying commercially available machines, did -- did you ever tell any recipients of -- of demonstrations that their

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tests would be run on commercially available devices?

A Well, these devices would not be commercially available, first of all. The ones that we modified that went through so many changes using our proprietary technology, they are no longer commercially available would be the first thing.

The second thing is the answer I gave you earlier, no, we would not tell anybody because of the trade secret point. Just pointing somebody that, you know, by modifying the Toyota Prius's engine, you can go 500 miles a gallon would be a big violation of a trade secret, so we would not do that.

BY MS. CHAN:

Q So if you go back to Exhibit 239. So looking back at the comparison of Tests Number 1 and Number 2, and you look at the results of -- the measles and rubella test results, you know, for Test Number 1, measles is reported at 42 and rubella is at 10, and then for Test Number 2, it says 139 for measles and 62 for rubella. Those seem like very different results.

In that kind of situation, you know, what -- what would be the procedure as -- to figure out which of those two is more likely to be the accurate result?

MR. COOPERSMITH: And just to clarify, are we talking about CLIA lab or R&D lab?

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BY MS. CHAN:

Q It is -- would it be different?

A It will be -- I was going to ask the same question. It's very different for clinical lab. Clinical lab is -- there's a clear SOP that says if you ran the test the first time, right -- let's say the first time, the result was 42, for whatever reason, you decided to rerun it, it doesn't matter what the reason is, the next time the result comes to 139. If you don't have a reason to run it the third time, always report either the first or the second. There's an SOP for that. You cannot pick in a CLIA lab, like, "Hmm, 130 is better." There's no better is the big point here.

Because if I test you twice right now, within five minutes, there are some tests which will be

significantly different. Or if you just walk around the block, your test -- some tests will be completely different. So if there is a reason to rerun a test and the results are different, there is no one that is better than the other. They're just different.

And this is why in a CLIA lab, you will have an SOP that says, you know, "Always report the first one. If the second one gives you enough information to give you confidence than the first one," now, this is

0209

my understanding and I think it is reasonable. That there's an SOP that says, "Pick the first one."

A lab director has the right to override it, of course. A lab director may even have a general supervisor override it or a CLS override it. That happens in the lab. But -- but that's the process. But there's always an SOP for that.

Q And what about in the R&D context?

A Like I said, R&D, because things are being in the research mode and the R&D mode, there is no SOP because then that's not R&D anymore. Right? And so it would depend on the chemist, on the scientist, on the guys who are doing the number crunching. It may even be -- it may depend on the software developers.

As a matter of fact, if you look at 240, all the way at the end, the last page, the first people on that e-mail is this lady, Sondia, and she was a software QA person. So even -- somebody is reaching out to her saying, "Hey, did you run the panel and how did things work out? Did everything went okay?"

So there are a lot of people who can provide input, and based on that, you have a certain confidence that you report out the test.

Q So if you look at 241, then, you know, in terms of the results for those two runs now, they've

0210

actually been changed. Instead of quantitative results, they've been changed to qualitative, so that measles is being reported at positive and rubella is being reported as positive.

A Right.

Q Why was it appropriate to change a quantitative result to a qualitative result?

A Yeah. That's a good question. The reason is: When you run an assay for the -- even a qualitative assay like HIV, for example, where you report out positive or negative -- now, there are quantitative HIV assays also. But for simplicity sake, let's say there's a qual assay, a qualitative assay. When you run it on a machine, the machine still gives you a value. The machine doesn't say positive or negative because it needs a threshold, right, to be able to say above this is positive. Below this is negative.

HCG, for example, the pregnancy test has a

threshold. Above this, chances are you are pregnant. Before that, you're not, less than that, you're not. So there are -- there are thresholds for positives and negatives, which means there is a quant value that the machine is going to give you.

Then your software, based on the rules. In this case, it was a qualitative assay or a quantitative

0211

assay, it will take the numbers, look at the threshold, and determine whether you're positive or not -- negative.

So let's assume the threshold was a hundred, for instance, and I don't know it was or not, is a hundred. If your result was 105, it will be positive or if it's less than a hundred, it's a negative. The software will automatically do that. That rule is in the software.

And as a matter of fact, I happen to know, I think I'm right, that the MMRV panel, the measles, mumps, rubella, varicella I think is the fourth one, they're all qual assays. They are reported out as qualitative values. They're not reported out as quant in general. Even the CLIA lab are all qual assays. Which is why they report it out as qual assays here -- qual assays here.

Does that make sense?

Q So did you have any concerns, though, that the machine was generating results that were so different even if it was maybe over a certain threshold?

A Not necessarily. I mean, there are two answers to that. First, like I said, this is R&D. In R&D, if things are a little off initially, that's not

0212

to worry. And these results are tech demonstrations, so you clearly tell the user "Do not use these for medical decisionmaking." They're not supposed to, which is why they're tech demonstrations.

But the other thing is: It is not an uncommon thing for the devices in the lab, even FDA-cleared devices, to spit out significantly different results on two different runs. It happens all the time in the lab.

As a matter of fact, if you draw your blood, even in the same instance, if I take two tubes from you, and let's say I ran 50 tests on this one and 50 this one, the chances of them matching all 50 of them is probably close to zero. I mean, you might as well play the Power Ball lottery. It's that low.

Q I'm wondering, considering that all three of these tests has very different results, you know, one was positive and the next one was negative, and then, you know, rubella and measles gave pretty different quantitative results, why wasn't the recommendation

just to get a redraw from the person who provided the sample?

A First of all, because it's a demonstration, the point was: We can run a test from finger stick would be the -- my first answer. The second would be:

0213

Again, I was not in this demo, but whoever was communicating with this person may have said, "Let's do a redraw" if there was suspicions.

Now, there's a common protocol also, by the way. If this was not a tech demonstration, if this were CLIA, for instance, the lab director would have said there -- actually, there's -- I'm going to mispronounce this word, I think is the unequivocal word, the --

MR. MCKAY: Unequivocal?

THE WITNESS: Equivocal. Yes. Sorry, I can never pronounce it.

THE REPORTER: What? Can you say that again.

MR. MCKAY: Unequivocal is the word he's saying.

THE WITNESS: Sorry.

And there's a term like that in the lab where you have positive and negative, but you're not sure, it's on the threshold, this is actually is an official result you report out to the doctor saying, "We don't know. Please do a redraw."

So in the CLIA lab, that -- that happens quite a bit. But in R&D, that's obviously a nonnecessity.

BY MR. KOLHATKAR:

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Q You can put those aside. Thank you.

A Okay. I was beginning to memorize these.

Q I'll hand you what has been previously marked as Exhibit 215. For the record, 215 is a document that's been previously marked as -- and is Bates-stamped TS-0902539.

THE WITNESS: Okay.

BY MR. KOLHATKAR:

Q And do you recognize Exhibit 215?

A Yes. This is an e-mail conversation between myself and several other people at Theranos, and finally, the last one is between me and Ms. Holmes.

Q The -- I want to start with the e-mail that sort of starts at the bottom of the first page and carries on to the -- the next page. It looks like an e-mail from (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

Do you see that?

A Yes.

Q I guess, what positions did all these people have as of this time in June 2013?

A Sorry, can you point it out again.

Q The one at the bottom of the page dated -- time-stamped 6:47 p.m.
A Yes, I see that.

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So (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)

Q What about (b)(6); (b)(7)(C) what was his role?
A (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)
Q Same as (b)(6); (b)(7)(C)
A Yes. (b)(6); (b)(7)(C)
Q Okay. You mean, (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)?
A Correct. Yes.
Q The -- it looks like (b)(6); (b)(7)(C) -- the first line after he says, "Hi, all," is: "For tomorrow's demo, as listed below, we'd like" -- "we'd like to have a miniLab and either a 4s or monobay with the Normandy shell uploaded, whichever works better."
A Yes.
Q Do you know what he's referring to when he says "miniLab" here in this context?
A It was a code name for one of the versions of the machine, so I'm assuming he's referring to either

0216

4.0 or 4 dot -- or some variation of that.
Q Okay. Is this, you think, a 4 series?
A Yes.
Q What's your basis for thinking it's a 4 series?
A Because those are the machines we had. I mean, if it was 3.X machines, he would call it out as 3.5 or 3.0. Basically, everything else was in the 4 series.
Q Okay. And do you know what he's referring to when he says, "monobay"?
A Yeah. That's the blade that I had mentioned to you earlier. That's what he's referring to.
Q What about "the Normandy shell uploaded," what is the Normandy shell?
A Yeah. That's a software program that I had wroten -- I had written. And the easiest way to explain that is: You know, you have an operating system, and if you -- in an operating system if you go to the command line, if you type, say, "command," it shows you a DOS window. I don't know if you've ever done that. But it's basically a way to interact with the -- some people have done it. It's a way to interact with the -- do you know what the word "DOS"

is? Yeah.
0217
Q Sorry, I'm not going to answer questions.
A Oh, sorry.
Q I don't mean to be rude. It's just --
A Oh, I'm sorry, I didn't know that.
Q I am familiar with it generally, but --
A Okay.
Q -- I'm just trying to understand what --
A Yeah, yeah, my apologies.
Q -- the shell is here.
A Basically, it's an equivalent of a command line interface to the machine. And you can go and type commands there, and the machine will do those for you.
So just like you have a user interface and can click icons and beautiful icons you can flip through this and that, or if you are a programmer who just wants to say, "Get out of my way. I'm going to talk to the machine directly," you just double-click on the Normandy shell, and it pops up a window, and you just directly -- directly type raw commands into the shell, and the machine can do things for you.
Q Okay. So the shell doesn't refer to sort of the -- the operating system for that -- that sort of nice-looking operating system, for lack of a better word?
A Well, it does have a nice UI. Just like Mac
0218
today has this app called Terminal, and it brings you up, you know, a green or black window and you can do Unix commands in it. It's like that. And actually, maybe I should take a step back.
Our TSPUs, when I came to the company, I had modified the design very significantly. I wrote a lot of the initial code. And I had pushed -- our 3.0s used to run Unix, and everything was Linux. I pushed that down and I put Windows on top of it so programmers can program everything easily. The UI is easy. We can do Bluetooth connectivity with, you know, third-party devices. We can print stuff. Everything you can do from Windows. It was a version of Windows called embedded systems, Embedded Windows (sic). And it had a command line interface to be able to talk to Windows and talk to the machine.
Q So what would be the use of having a -- that sort of capability for a TSPU for a demo?
A Again, this is 2013, but even forever when you are in the demonstration mode and you have a machine that is an R&D machine, when you install it -- especially if it is my presentation, I wanted to make sure everything is good. So the software developers will stay as long as they have to so that even after they have tested everything, they will come to the room
0219

where the demo is going to happen, and they will go to the command line and run a whole bunch of commands to make sure the machine is happy and healthy.

And shell allowed them to do everything quickly versus going through, you know, clicking. And normal people like clicking. Hyperlink is easier. Programmers like to do command line. And hence the word "shell" -- "Normandy shell." I wrote most of the codes, which is why I know.

Q The next e-mail up says -- it's from Michael, that programmer you mentioned; is that right?

A Yes.

Q And he says, "FYI, I've just finished getting the Device OS installed with the Normandy app and properly running the null protocol on Mobile Labs 4 and 8."

A Yes.

Q Do you see that?

A I do.

Q So "Device OS installed with the Normandy app," what is that in reference to?

A Device OS is the Windows 7 embedded system installed.

Q What's the "null protocol"?

A So that's another thing that I wrote. And

0220

it's -- the concept comes from software. In the world of software, there's a concept of null, which refers to nothingness, like -- like no instructions. Don't do anything. And in databases, for example, if you have a bank account and if you say somebody has $0, that it still implies that you know this person has $0, but if you don't know, you just say "null." It means I have no idea. It's undefined.

So in the software world, this is a common concept. I brought this concept to the world of medical devices. Basically, what this protocol did was -- so our device had this beautiful nine-inch iPad-like interface. Literally a tablet, touchscreen, you know. And it was cool because you could be wearing gloves and still be able to touch it, which you cannot do -- most of the devices, you can't do and -- because the machine was going to run in the lab.

A lot of the times, we would do a demonstration for people who would come visit us, and we would show them the capability of the device beyond just processing samples. Because our device had WiFi, Bluetooth. We actually also had a prototype of our device with a camera on top of it so you can do tele -- videoconferencing.

So the idea was to be able to demonstrate

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everything without having to run the blood test. So you could still do the entire process. You collect the

sample, you put the cartridge -- now, in most cases, we would not collect the sample. We'd just insert the cartridge. But when you insert the cartridge, the machine still has to initialize as if it's doing something.

And -- but if you have no protocol, it's not going to do anything. You just open the mouth, you put in the cartridge like a VHS tape, like a DVD, and -- and it will just insert the tape and it will sit on it and not do anything. But now, the screen basically gives you the power to be able to collect more information.

So one of the use cases would be -- was, for example, it will allow, you know, assays. If you're running Ebola, it's not enough to just collect the sample, you want to collect more information from the patient.

And usually what happens in the field is: The lab is not involved because then somebody else is going to collect on an app or on a piece of paper, and the information can, you know, not get to the decision maker. In our case, because we were running full-blown Windows, literally Windows 7, you could tie it to a

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Bluetooth blood pressure monitor to monitor height, you know, meters. But also on the iPad -- the -- the touchscreen, we were running these iPad-like apps. So what is your first name? What's your last name? We can even take images of the people if we wanted to. And we can ask them questions. Is there anybody else in your home that's sick? Right? So a yes, no, and basically triage the -- the -- the disease.

So there were -- and that's just one example. There were a lot of apps that we had written that we would run on the device without having to run the blood test. And the point was --

THE WITNESS: Am I going too fast?

THE REPORTER: (Nodding.)

THE WITNESS: Yeah.

The point was to demonstrate the future capability of the device when we start putting this in the field even just in Walgreens stores. Because one of the challenges in healthcare today is: The information about the patient doesn't get to the insurance companies. And by collecting blood, and blood pressure, and other biometrics as part of one electronic transaction seems like a simple thing, but in healthcare, this is a huge thing. To be able to deliver that information to the insurance company so

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they can do something about it in realtime was a big deal.

So that's what null protocol demonstrated.

BY MR. KOLHATKAR:

Q So you mentioned the -- sort of what utility the null protocol would have in demonstrations.

Was there ever an instance where you collected a sample, inserted it to a TSPU using the null protocol, but then actually tested the sample at a later point, either in that TSPU or in another device?

A Well, no, not at a later point. If we, for example, were demonstrating the capability of the device and also that "Okay. We're going to run a sample on you," the chances of those are two different demos.

Because either we are doing, you know, a broad panel of tests or whatever, you know, we were trying to demonstrate, and we would run it in the CLIA lab or in R&D, if we ran it on the machine, then you would see it, and the machine will make noises. I mean, you would be able to see that it's running on the machine.

So, no. I mean, there would be no need, if you are just demonstrating the null protocol, to be able to also run the sample. Because if you're running

0224

the sample, then you're not running null protocol anymore.

Does that make sense?

Q I think I -- I think I follow.

Did null protocol have any other name at the company? Was it called the demo app?

A Yes. I mean, actually demo app was a broader app than null protocol. Demo app would be, you know, let me collect patient information also. Right? So anything that you can do at a Walgreens store which required currently a separate computer, you could put a demo app, and there could be many different demo apps. But, yes, that that would be -- but in all likelihood, null protocol will be a subset of the demo app if you're just doing a demo at a demonstration.

Q So I guess I'm trying to understand the context of this message.

The next message up, it says, "Given ML doesn't have SITO, what are we planning on running on ML?"

And then (b)(6); (b)(7)(C) replies, "Right now, we are not planning on running anything on ML, unfortunately."

A Yes.

Q Does it appear -- does it appear as if for

0225

this demo, you're actually -- the goal is to actually run a blood sample?

A In this case, it seems like we were going to run a blood sample on one of the machines. Because if you see, I was asking them to put different machines. So if I was going to do a demo, I probably would have

picked a machine and run some blood sample.
Q Okay. So -- so what you're saying is: The null protocol here in this chain refers to samples -- the -- the TSPUs that weren't going to be used to demo the sample?
A That's right. But, however, there's also -- just because a machine can run null protocol doesn't mean you cannot do anything else with it. So if you load a null protocol in the machine, I could insert a blank cartridge, and it will know "Ah, null protocol." But if I insert a real cartridge in it, it would just run that protocol. Because the machine can run literally hundreds of thousands of protocols. There's no limitation.
Q Okay. So in other words, the null protocol wasn't something that would shut down the other functionality?
A No, it won't. Yeah. Null protocol had -- you had to invoke the null protocol by either the demo
0226
app, or these decision support apps, questionnaire apps, or whatever, you know, we call them different names. But you will particularly trigger it by, you know, picking some software function.
And then it will say -- or there were some cartridges that were mapped for null protocols. So if a cartridge has zero, zero, zero, zero, I'm just making it up, for instance, then the system would say, "Ah, that's null protocol. That means don't do anything."
Q It looks like at the end of this chain, you forward it on to Ms. Holmes; is that right?
A Yes.
Q Did you ever discuss the null protocol with Ms. Holmes?
A No. This is a deep software concept. And I don't think most in the company besides the programmers or the people who are working on it would refer to it as null protocol. Everybody --
Q But --
A Sorry.
Q Please.
A Everybody else would probably call it the demo app or "I'm not going to run the test. I will only demo the app device," something more user friendly.
0227
Q Was Ms. Holmes familiar with the process for demonstrations where you could insert a cartridge and not have a TSPU actually run the sample?
A I would say so, yes. I mean, she saw that once or twice. I don't know if she remembers it. Because a lot of times I wasn't the person in the room. I mean, before we had actually null protocol -- the reason I came -- I came up with null protocol is

because before this, anytime we had to demo, the machine had to run something, and then I had to volunteer, if nobody else did, to prick my own finger and -- and run the samples. Because without that, the machine won't proceed.

And so literally, I would -- I was like the blood bank. You know, I was giving samples for every demo. And so I said, "Well, I need another protocol so I can run it without running a sample."

Q Was the null protocol ever created because in that process of having to, you know, run actual samples in the machine, the machine would come up sometimes with error messages and the -- the sample would sort of stall in place?

A That certainly is possible. In R&D, machines will give you error messages all the time. And in this example, like before 2013, like I said, you know, if I

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ran my sample and something went wrong, the machine will stop. But that was no big deal. This is an R&D machine. I mean, even the machine catches fire, who cares? You just run another machine. I mean, technology companies' demos fail all the time, so that was not a concern for me.

Q You mentioned you had to prick yourself. I mean, did you become proficient at -- at drawing for --

A Yeah, yeah. If you want to try it out, I can do it for you.

Q In these demonstrations, would you be the person who would draw the blood from the -- from the recipient?

A No. If somebody else volunteered, then I would have somebody more professional, like a phlebotomist or at least somebody better-looking to do the blood. But usually, I did that on myself. So, yeah. I mean, when I was doing a test on myself, I didn't need a phlebotomist. I could just do it myself.

BY MS. CHAN:

Q Looking back at Exhibit 215 in your e-mail -- sorry, in (b)(6); (b)(7)(C) e-mail to you at 10:39 p.m.

A Yes.

Q He says, "We're not running" -- "We're not planning on running anything on the ML, unfortunately."

0229

And "ML" is main lab --

A Correct.

Q -- is that right?

A Yes.

Q And he goes on to say, "The general chemistry in ELISA assays are not performing adequately for a demo at the moment."

Was that consistent with your understanding that the miniLab or the 4 series TSPU wasn't running the general chemistry in ELISA or couldn't run the

general chemistry in ELISA assays as well?
A No. This is referring to -- like I said, he's -- this is a specific code name for a specific type of machine, not necessarily all 4 series devices. And again, he's talking about it's not performing adequately for a demo at the moment.

What happened was: A lot of times we'd have machines come and go. So machines would come -- let's say we had 30 machines, and somebody would think about a good modification in either software, hardware, some tweaking here and there.

And without me being informed or other people being informed, most likely, (b)(6); (b)(7)(C) would just take the machines and try to, you know, repair all of them at the same time, and now we would have no

0230

machines left to demo or do anything with. So that's what usually happens.

So when he's referring to his -- his "We're not planning on running anything on ML, unfortunately. The GC in ELISA assays are not" --

THE REPORTER: Can you slow down.

THE WITNESS: Sorry.

"The GC" --

THE REPORTER: We're not running anything on ML --

THE WITNESS: " -- unfortunately. The general chemistry in ELISA assays are not performing adequately for a demo at the moment." He's talking about just for that moment and most likely for one or two devices that he had access to.

Sorry.

BY MS. CHAN:

Q And so when you're writing back to Ms. Holmes and you're saying, "Very frustrating," you're frustrated because the one or two miniLabs are -- are not working properly?

A Yeah. It's frustrating because again, this is 2013, so this is fairly early. We were still a small company. I have always wanted a certain setup ready for me to be able to demo anytime I wanted. And

0231

the R&D guys -- our R&D guys, they would take my machines away. Sometimes they would come to my office and take my machines away.

And -- and that used to frustrate me. I actually used to literally hide machines in my office and lock my office before I went home, but people would still find a way to take them.

BY MR. KOLHATKAR:

Q Are you saying people would find their way passed your locked door or just go in when you -- when it was unlocked?

A Probably both.

Q Did you ever raise any concerns with people entering your locked office?
A No. These -- these guys were working hard. I didn't want to be any harder. I mean, they were doing the right thing. It's just that sometimes I would have preferred to keep my machines because I was coding also. It was not a concern for me, it's just that -- the frustration that we didn't have enough people, enough processes, enough devices.
And most -- like I said, most of the times, if I had a device in my office it means I'm working on it, I'm writing code. Not, like, using it, but I have the whole thing open and I'm writing code on it.

0232

Q I'm going to hand you another document that's been previously marked as Exhibit 202.
Do -- do you recognize Exhibit 202?
A Yeah. This is an e-mail from (b)(6); (b)(7)(C) to myself and Elizabeth.
Q And it -- and it looks like after (b)(6); (b)(7)(C) e-mailed, Ms. Holmes responded; is that right?
A Yes.
Q And this is in the August 2013 time frame?
A Correct. Yes.
Q What was happening with Theranos's relationship with Walgreens in the August 2013 time frame?
A I mean, it was good. We were moving along and marching for a launch at Walgreens in the fall, September, October, November time frame.
Q And so, to your understanding, when did -- when did Walgreens sort of settle on -- Theranos and Walgreens mutually agreed upon on a launch date?
A I think it happened during -- sometime during 2013. I don't remember exactly when. But it was -- in 2013, I think around March, we started doing some dry runs in Arizona, and we had decided that when we are ready, we will launch and pick a date. I don't remember exactly when and how we picked the launch

0233

date.
And actually, if I may add, even when we did quote/unquote launch in September, it was only at one store and we were not seeing patients for -- for another month or so. We were just inviting friends and family to get the processes and work there sorted.
Q So what you're saying is that the September 9th launch was sort of a soft launch?
A Yeah. We used to actually call it "soft launch."
Q And then at some point later in time, it opened up for -- more broadly for more actual patient testing?
A Correct. I think around November, we opened

more -- two more stores in Arizona, and that basically became quote/unquote the launch. Now we had three stores.

Q The --(b)(6); (b)(7)(C) e-mail to you and Ms. Holmes references a number of devices being played -- placed at -- it says, "The following devices are planned to be in the demo interview room."

What room is that? Is that -- is that that sort of mockup Walgreens space room that you described or something else?

A No. This is a small room adjacent to our

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conference room. We had a large conference room like this, and right next to the conference room, there was another room door to a small room which we usually used for interviews, but sometimes when the conference room was full, we would overflow stuff in there.

And we -- we also used that as a break room, just like you guys are giving us a break room there, so if the visitors wanted to use the small room, they can use that room.

Q And what's he -- what's he asking about what he should set up?

A Let me see. "If you have any questions" --

(Witness speaking in sotto voice.)

THE REPORTER: Can you read to yourself, please.

THE WITNESS: Oh, sorry.

(The witness examined the document.)

I think there's one question he's asking, Question Number 5. Is that what you're referring to?

BY MR. KOLHATKAR:

Q Correct.

A We had an H1N1 demo app, I think, we had loaded -- we had created that allowed us to -- the example that I gave you where you're collecting demographic data but not running anything, because

0235

you're not running H1N1 in your conference room. I think this is what he's referring to.

Q I guess, can you -- can you walk me through why it would be helpful to have so many different versions of a -- of Theranos's processing units in a room for a demonstration?

A Yeah. This -- this would be a fairly typical, normal thing because most of the times when Elizabeth and my -- myself were in a meeting, we were talking about our future vision, our strategy. So we would bring out, you know, the three or four devices that we are currently working on and -- and show them, "Look, these are the capabilities of this one. This is 4.0. It can do this, but it cannot do this. But here's 4.S. It will be able to do this. And then in the future, you can do XYZ." And that would trigger a

discussion around, you know, what else should we have in the device.

For example, this idea of the camera that I talked about, it came from one such discussion. That it would be useful if we can have a camera on the device. I initially thought the camera would be useful for the lab director to talk to somebody in the field, like one -- at some point when we have a unit in the field at Walgreens, if a phlebotomist has a question,

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they can just videoconference the lab director.

But other people who -- who visited us said, "Why don't you think about telemedicine." Because telemedicine was heating up in 2012 and '12. We were already thinking about telemedicine. But to use the camera on the device was -- as part of those discussions, this came about.

Q I'm trying to understand Number 4 here, which says that -- the sentence in -- it says, "Note that this will not be able to run the null protocol due to old pipette nozzles that fall once they initialize in the protocol."

A Yup.

Q I guess, based on your description of what the null protocol was designed to do, I'm trying to understand how a pipette nozzle could -- could fail in that --

A That's a good question. Yeah. So I'm going to go a little bit more in detail in code on this one.

What happened was: I told you -- I mentioned earlier that we had three different -- when I came to the company, everything was running using Linux, and then we had a third operating system in the device called RTOS, realtime operating system.

So by this time, we had three different

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operating systems in the device. That means three different groups of people were writing different apps. Anytime you initialized the device, each group wanted to do their own thing in the device to make sure the device is okay. Right?

So the software guy at the -- the Windows tier would, you know, make sure the cartridge is properly aligned, and they would do a few things. The tier below that, which is the embedded software system I have referred to, in the code, they had their own system check.

So when you -- before you opened the door or you closed the door, they would send a command to the whole system that's saying, "Check yourself. Make sure everything is okay." And as part of that check, the pipette would check itself.

Now, they're not supposed to do anything again. But again, this is R&D, and we were still

writing code, and I was bringing -- the seamlessness of the software still wasn't in place.

So what happened was: We would issue a reset command. Every stack would reset itself, and some of the old code that was responsible for resetting the hardware pipette would also try to do something with the hardware -- the pipette, and that's what is

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happening here.

And it would -- apparently in this case, what I read is: The old pipette -- which makes sense. That means it's the old code -- nozzles that once -- failed once they initialized in the protocol. So that's what is happening.

Q In connection with any demonstrations, did -- did you ever instruct anyone at Theranos to move a large number of its TSPUs to the CLIA lab?

A The TSPUs were always in the CLIA lab -- or for most of the times. So if we moved the TSPUs there, it probably was to demonstrate something that we were trying to get across rather than just draw pictures.

The TSPUs are really easy to move. You can put 50 of them on this table and move them around. And unlike other devices where if you move them from one room -- commercial devices, if you move them from one room to another room, you have to call the vendor and they have to calibrate things, TSPUs -- we actually got CLIA waiver on this thing. You can kick it and throw it down the stairs, and they will chug along.

So if we moved them, it was easy to move them. There was probably a purpose behind it.

Q I guess I'd understood your -- your testimony earlier to suggest that the -- that there was sort --

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that there was sort of a space within the CLIA lab that was designated for -- for TSPU use; right?

A Yes. Inside the Normandy room. Correct.

Q The Normandy room.

And the Normandy room didn't run any 4 series devices; right?

A No, it did not.

Q And, in fact, no 4 series device was ever used in the CLIA setting; right?

A Not in the CLIA setting, but I do believe 4 series devices were taken inside the Normandy lab for R&D purposes. It's not exclusive use. Like I said earlier, if you have anything -- we were doing product development in the CLIA lab too, which is why R&D guys were going there. But if you have anything in the CLIA lab that is not being used for patient samples, you just need to put a sign on it saying, "Not being used for patient samples."

So yes, they were being -- as a matter of fact, the FDA filing that we did for HSV-1 or even, I

think, for the Zika and other tests, the -- the 4.X devices would be in the CLIA lab in some cases, yes.
Q Did you ever instruct anyone to put additional 4.X devices for a Walgreens tour of the CLIA lab?

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A I don't think I gave a Walgreens -- CLIA lab tour to Walgreens. It may have been some other lab. I doubt I gave a CLIA lab tour to Walgreens. Which time frame was it?
Q I'm just asking broadly.
A Sorry, I'm not supposed to ask you questions. I don't recall the tour. As a rule, I would have not given a tour to Walgreens for the CLIA lab unless it was very early in our process where the CLIA lab was light. But even then, I don't think we took them to the CLIA lab.
Q What is BDT Capital?
A It's a -- I actually don't know what their full business is. But it's a financial -- our relationship with them was: They were a consulting company. We had hired them as financial consultants to help me and Elizabeth with thinking through a few things about the company's future.
Q At some point in time, did they also become a potential investor of Theranos?
A They had a great interest in investing, and they, you know, mentioned very large amounts. But we didn't have any interest in them investing. We didn't think they were strategic investors. But they had mentioned 600 million or more as part of a deal. They

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wanted to do some kind of structured deal, and we had no need to do that. But they had great interest in investing, but we -- we had not, we didn't have any interest.
Q So from your perspective, at any point in time you -- in 2014, you didn't have any interest in -- in receiving funds from BDT Capital?
A No, I'm sure initially or at some point when we engaged with them, we did have a conversation with -- for them being potential investors, which is why, you know, the whole conversation about -- the -- the ability to reach a decision that we don't want them as investors. But I don't think that lasted for too long.
And initially, I think right off the bat, they were talking about structured deals and financial instruments. And we were a conservative company. We didn't want to necessarily do that.
Q Did you meet with representatives from BDT in -- in the 2014 time period?
A Yes, I did. We had, like I said, engaged them as consults. They helped me a lot with my -- my

business planning tool, the model that we talked about earlier.
Q Who do you remember meeting with from BDT?

A I think the -- the principal of BDT's name is Byron Trott. I met with him two or three times. And there were two other people from his company, or maybe three, who had attended those meetings. I don't remember their names, unfortunately. But I remember meeting them. And it was their principals, all these associates who would help me with the financial model. We sat in a conference room, went through the financial model, the assumptions, and them -- them advising me.
Q I'll hand you what's been previously marked as Exhibit 203.
A Okay.
Q Do you recognize Exhibit 203?
A Yes. It's an e-mail exchange between I think Christian Holmes, and myself, and Elizabeth Holmes.
Q Do you recall making arrangements for members of the BDT team to receive a demonstration at a Walgreens?
A I personally don't recall because I was not involved with managing who is doing -- getting what demos. But I was not personally involved. I don't recall.
Q Who -- who would be managing who would be getting the demos?
A I think if somebody wanted to get a demonstration, it may have come up in the meetings, saying, "Hey, can we get a demo?"

And we would have said, "What do you want to do?"

"Oh, we want to do finger stick" or whatever they want to see.

And we'd say, "Yeah." (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) would usually be available in the conference room for any follow-up action items. And we'll say, "Okay. Work with them. They'll get it done."
Q The -- for -- for demonstrations done at the Walgreens setting, that -- that would be under the CLIA framework; right?
A Yes.
Q And if someone -- if someone wanted a -- just a demonstration of the finger stick technology, they didn't necessarily need to go to Walgreens, right, they could do that at -- at Theranos headquarters?
A Technically speaking, yes. Actually, let me qualify my first answer. It is possible for somebody to have asked for a demonstration of the process -- of the Walgreens process, like how do you check in, what does the patient go through. But it is possible that

on the back end, we would add on tests that were not in the CLIA, then it no -- no longer would be a CLIA demonstration.

So we are still demonstrating to them our workflow in Walgreens, what our setup looks like, how our rooms look like, how our patient sample collection process looks like. All of that -- most of that could be done at Theranos headquarters, but obviously not all of it. But it -- it wouldn't necessarily be CLIA. I misspoke earlier. So I just want to correct that.

Q In California, was it your understanding that you could add tests on to a -- a doctor's order and -- for -- for -- for someone trying to get a demonstration in California?

A Yeah. For demos, as long as you're not going through CLIA lab, no problems. My point I'm -- I was making, just to clarify, is: There's a distinction between the -- what you do through the lab and what you're doing at a PSC or patient service center, collection site. People can go to the patient -- collection site, and we can do clinical studies there, we can do R&D samples there. That's not an issue.

The only point I was making is: If the sample is collected for CLIA processing and it goes to CLIA, then if you're going to add on a test, the request has to come from an authorized party, like a physician. So physicians, of course, can add tests.

Q As a -- as a general rule, if a physician requests the test, would that -- would that fall under the CLIA framework?

A Yes.

Q So if you take a look at these --

A I'm sorry, unless either the physician or the patient has overridden saying, "I have a lab order. I want to do these tests, but, you know, but these are the tests I'm interested in." But those may or may not go to the physician. The -- the patient could override dropping tests also.

Q I guess, just so I understand it, a patient couldn't add tests to its doctor's order --

A For a CLIA --

Q -- for a CLIA lab run --

A Correct.

Q -- but it could drop tests for a CLIA lab run?

A Yes. Yes.

Q And the distinction you made there was: If they drop tests, it wouldn't go to the physician?

A No. That was a separate point.

Q Okay.

A If the -- in our case, for example, if

somebody wants to just see the process, how it works, then they can still bring a -- I mean, you can bring a lab order from your physician and say, "I would like to demo." And in that case, we can do all those tests, put our physician's name on it, and the results would not go to your doctor. Or if it is just a pure tech demo, then we are just using the lab order just to transcribe what tests you want to get done. But then neither our doctor or your doctor is involved. It's just a pure demo.

Make sense? Then -- but then in that case, it's not CLIA anymore.

Q So take a look at the -- the workflow [redacted] is proposing here. Actually, why don't -- why don't we start earlier in the chain.

It looks like it starts out with [redacted] asking the -- the names of -- of the people mentioned --

A Yes.

Q -- who would come -- who would visit WAG on Saturday.

Did you understand that to be the WAG patient service center?

A In Palo Alto, yes.

Q And then it looks like you follow up and you

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ask [redacted] to -- to send the list of names?

A Yes.

Q Who is [redacted]? [redacted]

[redacted]?

A [redacted]

Q [redacted] Sorry.

And then it looks like he -- he follows up with -- he starts out by saying -- [redacted] starts out by saying, "Also wanted to send along our thoughts for how to accomplish the FS in the scenario their order is prompt venous. Assumptions here from EAH are that we must not do venous draw and we cannot tell them that their order prompts venous if it does."

Do you see that?

A Yes.

Q What do you understand this to mean?

A Well, I think what [redacted] is trying to do is -- he's already spoken with Elizabeth at this point that they want the patient to only get finger stick, and it's probably because they had already spoken that they want to experience finger stick. In this case, I mean, I would have described the process differently than the way [redacted] has done here.

But the software takes care of a lot of details automatically. A lot of details that he's

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putting here are automated in the software. He didn't have to, you know, define what is happening in the

software.
But what he's saying here is -- my understanding is that if a venipuncture happens, we have already decided we are doing finger stick. Right? That basically means one of the two things happen, at least two things happen. One is: Either there's a test that triggers venipuncture happened or the combination of all those tests triggers venipuncture. That's what happened. And he's --
Q Sorry to interrupt. From the order, right, the order --
A Correct.
Q -- is the -- is the data point that -- that triggers it one way or the other?
A Correct. Yes.
So what happened -- used to happen in our case was: When you bring a lab order, we had built this beautiful system where you will scan the lab order, it goes to the Cloud, and the machine learning algorithms will do a major analysis and try to transcribe it so humans don't have to do it. And if it is not accurate, then the human can click, click, click, and override it.

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But in cases where we know that it's triggering a venipuncture, there's nothing you can do. The order goes back to the technician in the Walgreens, and Walgreens will just basically say, "Sorry, it's venipuncture." Right? It will not be able to override and say, "I'm going to drop some tests. Tell me which tests you want to drop." It was not part of the workflow at this point yet.
Q So it looks like Scenario 1 --
A Yes.
Q -- involves Use Case A. And it says, "One option, Use Case A." The bullet point below says, "Remove tests that are not yet on FS and complete transcription."
So is that basically suggesting drop some tests from the order and then proceed with the finger stick?
A Correct. And what he's trying to do is: Basically try to automate this interaction that this person would have had with the Walgreens technician. The -- the net result of all of this is: This is what he was trying to avoid, the interaction this person is going to have with the Walgreens technician.
Because if this person says, "Hey, how come you didn't do that test," Walgreens' techs usually were

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not trained, and they had no idea, by the way, what -- what was the answer. They will just say, "It's just the way it is, or I can just do venipuncture."
By default, it will do venipuncture, but if

you want to override that, somebody on the back end had to override that is what he was trying to do.
Q Okay.
A Yeah.
Q And it looks like -- he said, Use Case B as sort of another scenario that's set up in order to -- to allow the test to proceed by finger stick.
Do you see that?
A Yes. Yes, I do.
Q And it looks like the negatives, the second bullet point --
A Yes.
Q -- says, "If they notice missing tests on the receipt, they may ask the WAG tech about it. Worst case, they would make a call to CS --"
What's CS?
A Call center.
Q " -- and Anam would tell them everything is fine."
A She's the -- one of the people in the call center.

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Q "And CR will also be able to come out of the draw room once checking is complete to welcome them into the room and distract from looking at the receipt."
A Yeah, this is really stupid. I -- I wish I had read that at that point. And -- but I don't condone this. What he was trying to do was: In order to avoid the negative interaction that this guest was going to have with the Walgreens technician, create this so that the technician at least at Walgreens doesn't have that interaction.
Now, it will be impossible for this patient to not know which tests were not done. The reason is: It's in the software. When you print a receipt, the receipt shows what tests were done and what were not done because even if you send the order to the insurance company, that's the part that I think he's missing is: They will be printed on the receipt. There's no way around it. And the second thing is: When you send the results back, if something is not done, it's not there. You would be able to tell the test was not done.
I think what he's trying to do here is avoid this person having that interaction with the Walgreens technician. Because this is the only thing you can

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accomplish here. Like I said, it's impossible to hide from the patient what tests were not done or what were done.
Now, I don't think this actually happened, by the way. I didn't pay attention to this e-mail then, but I don't think this was actually ever carried out,

to the best of my knowledge.
Q How do you know?
A I would have heard about it. I mean, something like this where somebody is violating the SOPs, I was always a stickler to that. That I would -- I would like to find out if something is happening.
Q I mean, a cynical person could read this and -- and think that what (b)(6); (b)(7)(C) is trying to do here is hide the fact that Theranos does venous draws --
A Yeah, which is --
Q -- from the BDT folks here.
A Yeah, which is the stupid part because venous draws are a known fact. I mean, a lot of our investors actually did go to Walgreens, did get a venipuncture. It's a common practice that we did. Actually, you could call our call center and say, "This is my lab order. Is it going to be finger stick or venipuncture," and we will say, "It's going to be

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venipuncture."
So it's well-known common information. And in this case, this person, which are not an investor, a consult wouldn't already -- would find out that some tests were dropped and --
Q If they read their sort of blood order in detail; is that right?
A Yeah. In most of the times when you're doing a demonstration, people did read it, and if there was something is missing, people would say, "Something is missing." But this is a poor way of trying to accomplish that outcome, in my opinion, a very poor way.
Q Did you participate in this conversation that appears to be referenced between -- sort of per EAH -- assumptions here from EAH? You said earlier that you imagined there were some conversation between (b)(6); (b)(7)(C) and (b)(6); (b)(7)(C) and Ms. Holmes about this?
A I mean, this is what it alludes to, that somehow this information was requested that make sure they get -- they get to experience finger stick. But I unfortunately didn't read that e-mail back then. Like I said, this was not necessarily a very important customer for me, so I didn't necessarily pay attention. I wish I had because I would have probably responded to

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this but. But yeah. But I was not part of the conversation at that time.
Q All right. So you don't recall a conversation where Ms. Holmes gave the instruction that he alludes to here?
A Correct. No, I don't.
Q Did you ever hear Ms. Holmes give the instruction that demonstrations -- certain

demonstration should only be conducted by finger stick?
A Yeah. I did that too. I mean, a lot of times when the customer says, "I want to experience your finger stick" at Walgreens -- and in some cases, we would just create the order ourselves electronically. So we would just go and create an order saying, "Your order is ready. Just show up and you'll be able to see it." But if the patient says, "No, no, I'm going to bring my lab order," they would bring the lab order. And I would say, "If you want to do finger stick, then here's the process. These are the tests we will not be able to do." And we will still set the patient up this way.

But a lot of times people just went on their own. I mean, that's the whole point of being in Walgreens. There was a few people from PFM who also went there, the hedge fund, and -- and got a test done.

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And there was actually one guy, he sent them an e-mail saying, "I went there. It was venipuncture, but I got stuck with the needle, and -- but the entire process was really cool."

So people did that all the time.

Q Other than the PFM -- do you remember the name of the PFM person who --

A Yeah. I think his name was Brian Healy, is my -- is my recollection, but I could be wrong.

Q Do you remember any other investors or prospective investors who sort of reported getting venipuncture --

A I don't know --

Q -- from --

A -- but I -- I mean, first of all, it's in the database, so I would not know. But I know there were people who would go to Walgreens to get a lab test done.

Q I guess if -- if someone is coming, you know, just to experience the finger stick, and they're -- I'm still trying to understand if the value of the demonstration is the finger stick, what's the value in going to Walgreens?

A To see the Walgreens process. That's the point I was going to make is that it's not just finger

0256

stick. If it was just the finger stick, you can do it right there at headquarters. Not an issue. In this experience, clearly, this person wants to experience the whole Walgreens experience.

Actually, in some cases, or many cases, we used to insist that people go there because the space there was really, really nice. We had built our space the way we wanted a lab to look like, you know, with a nice couch, with flowers, and a TV, and fish floating, and calming people down with the calming Zen music.

So we -- we did want people to go and see a completely different experience. And the other obviously big value was software. Because once you go there -- if you go to Quest Diagnostics, or LabCorp, or other hospital labs, as I'm sure you already know, it takes 30 minutes to an hour or sometimes multiple hours to go through the whole process. In our case, we had brought it down to two minutes to ten minutes or twelve minutes. So if you were already in our system electronically or if you use our mobile app, we could get you in and out in two minutes. And it happened all the time.

We actually had a scenario in which we could get you in and out in 60 seconds. You could literally park your car. Your iPhone would send us a signal that

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you're here, with your permission. The phlebotomist would arrange everything. We'll put you in the front of the queue because you already made an appointment. You'll get in and get out.

So we could do that. So there was a tremendous value in software to be able to show people how good we are on the front end.

Q Do you know if people from BDT got results from the demonstration tests?

A I actually don't know.

Q I'll hand you another document that I'll mark as Exhibit 242.

MR. COOPERSMITH: At some point, maybe we could take a break, but I don't want to disturb if you're on the same topic.

MR. KOLHATKAR: Yeah. Maybe just one more document then take a break.

MR. COOPERSMITH: Of course. Yeah.

BY MR. KOLHATKAR:

Q So I'm marking as Exhibit 242 a document Bates-stamped TS-1031661.

(SEC Exhibit No. 242 was marked for identification.)

BY MR. KOLHATKAR:

Q Do you recognize Exhibit 242?

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A Actually, if you'll give me one second, I can read this real quick.

Actually, I'm not on this e-mail until the very end. But it seems like an e-mail discussion between a few product managers, and one person from the call center, and then finally towards the top, (b)(6); (b)(7)(C) sent this to me and Elizabeth.

Q And it looks when -- he sends it to you on -- is that Monday, October 13th at 8:55?

A Yes.

Q He says, "FYI, this is for the BDT individual for whom we couldn't release CMP, but somehow was

released via the app" --
A Yup.
Q -- "working through this"?
A Yes.
Q And it refers to, you know, sort of the normal process by which results would be made available through a CLS; is that correct?
A Correct.
Q "CLS," what does that refer to?
A Clinical lab scientist.
Q Is that someone working in the CLIA lab?
A Yes.
Q So does this e-mail chain suggest to you that

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someone's results were released before they were approved?
A No. What happened was: There was -- I remember this. There was a bug in the software, and the BDT guys were having a lot of trouble. As a matter of fact, if you chase this chain down further, you'll see somebody highlighted the bug, which we ultimately fixed.
What happened was: When a CLS had -- either released them or not -- or actually, had seen the results, but there was another step in which before the results were released to the iPhone user, the enduser, somebody had to provide final oversight.
And in this case, when somebody in the lab changed the status of a batch of results, even though it was not released to the physician, it got released to the patient. And that's what happened here. I remember this.
Q So I guess the -- the results were released --
A If you look at this one, there, I think, the results were tagged for a redraw.
Q Right. So this is the CLIA -- CLIA setting; right?
A Correct.

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Q And so a redraw means Theranos shouldn't report a result --
A Correct.
Q -- but somehow a result was reported to --
A Correct.
Q -- to this individual?
A Correct. And because a redraw was requested because we didn't have confidence in the results, as is the case, this SOP, that we should have not -- these results should not go out. What should go out is invalid results or whatever the language CLIA uses with a recommendation for a redraw recommended.
Q Do you know if Theranos followed up with this individual from BDT to instruct them to get a redraw?

A I think so too. Yes, I believe so.
Actually, we were thinking about even flying somebody to Chicago for a redraw if he wanted to.
Q Why would you do that?
A Because this guy is from Chicago.
Q No, I understand. But this is -- you described this BDT as sort of an advisor. I guess, why would it be so important?
A Because this is the CLIA process we were following. This was not a technology demo from what I remember. This actually went through the CLIA lab.

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And as a courtesy when you have a redraw recommended -- we didn't have a phlebotomist in the Chicago area at that time. If they came back to our PSCs, no problems. But we thought about should we even fly somebody there. No, we didn't. I don't think we did.
But that's why I remember this because it came to me -- my attention at some point. And because this was also a software bug is why it kind of stuck in my head.
BY MS. CHAN:
Q Did you ever notify this person from BDT that the results -- that you weren't confident in the results that had been released to him?
A My guess is yes. That was the normal CLIA SOP. So that should have happened. That's my expectation, is the follow on to the next -- in the e-mail, this e-mail, I know the software did get fixed because that was my responsibility, to chase down the people who released the software in production. But as part of the CLIA SOP would be that we are doing a -- requesting a redraw.
Q So you think he might have been apprised of it, but you don't know what he was told?
A I don't know for sure. I don't remember. But what I would say is: I'll be very surprised if it

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didn't happen. I would say we did correct it, I mean, on his app, he would see redraw requested, and he would be notified that there's a redraw requested. And the results -- don't pay attention to the results. They are inaccurate and a redraw is being requested.
BY MR. KOLHATKAR:
Q If he reopened the app?
A No -- well, if you reopen the app, you will not see it. But I think our normal lab protocol was: If the results went to his physician, then that would have happened also.
Q Whose responsibility would it have been to -- to request the redraw?
A I mean, CLIA lab. Technically, CLIA lab would do it. But in this case, because we had project managers involved, my guess is: Some PM probably took

it upon himself to say, "I will make sure that happens."

Q So that's -- that's sort of a related question. What were -- what were the PMs' roles in the CLIA lab space?

A Well, the CLIA lab space had a lot of people in roles where you can be assisting. You don't have to be necessarily processing samples. For example, the people who work to check you into a CLIA lab, they have

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a certain role in the CLIA lab, people checking you in at the PSC, at the patient service center. The PM's job was facilitating communication, making things move faster, making sure if the customer is somebody who was in -- in a meeting that I attended or Elizabeth attended, that they get their results correctly or in time before I speak with the customers first.

So in the CLIA lab, a lot of the samples were processed in batches, as I told you earlier, but if there's a sample that I wanted processed right away, they would also call the CLS or somebody in the lab saying, "I need this sample processed right away." I know the normal process is to wait for eight hours, but of course you can process a sample in the CLIA lab anytime you want. But the right person who was trained and authorized can come and process this sample.

So this is kind of what they did besides a thousand other things. But in the CLIA lab, this was their main role.

MR. KOLHATKAR: Why don't we go off the record at 3:08 p.m.

THE VIDEOGRAPHER: Off the record 3:08.

(A brief recess was taken.)

THE VIDEOGRAPHER: Rolling.

MR. KOLHATKAR: We're back on the record at

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3:21 p.m.

BY MR. KOLHATKAR:

Q Mr. Balwani, just to confirm, you didn't have any substantive conversations with the staff during the break; is that correct?

A That's correct.

Q I'm going to hand you a document that was previously been marked as Exhibit 205.

A Okay.

Q Do you recognize Exhibit 205?

A I do.

Q What is it?

A It's an e-mail conversation between myself, (b)(6); (b)(7)(C) and Elizabeth is CC'd on some of this communication towards the end.

Q So it looks like on the next -- on the second page, THPFM0000331113 --

A Uh-huh.

Q -- there's an e-mail from you on December 29, 2014, at 9:37 p.m. It says, "Run manually, but it needs to be accurate"?
A Yes.
Q What are you instructing (b)(6); (b)(7)(C) there?
A So -- and let me actually give you a background on this one.

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We had a test called PT and PTT that was originally available in the CLIA lab from finger stick. And we removed that test at some point because there was not enough volume, which is again a very common thing to do in a CLIA lab. They're not like iPhone apps, when you install, they can stay there forever. If you have a test in the CLIA lab, then you have to QC it, calibrate it. There's a lot of manual labor that goes on maintaining a test live, quote/unquote, in the CLIA lab.

So this test had low volume. Even though it was finger stick, we removed it because the overhead of maintaining this in the lab was too much.

So in this case, we are trying to -- I think this -- this customer may have requested a PT and PTT test. Now, we had it available in our company from finger stick. So I asked the team to resurrect it in the R&D environment and run it.

I think it has a comment here that somebody says that, you know, trying to bring it on a -- the -- the Tecan device, the T. rex that I already mentioned, will be more work. It will be easier, if it's just one sample, to do it manually. Manually basically means instead of using a robot to take -- carry out a lot of the steps, a human can do it, which is again a common

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thing in a CLIA lab. And no big deal. And R&D for sure. But it is our assay, our reagent that's being used.

So in this case, we are using our reagents, our chemist -- chemistry, our protocol to run this. Instead of running it automatically, we are running it manually, is what I'm saying.

So what I recommended here -- asked here is saying, run it manually, but it has to be accurate means make sure that -- in a CLIA lab, things are not just accurate or inaccurate. There's accuracy precision levels. So, you know, if a test in a CLIA lab requires that you have to be within 10 percent CV, coefficient of variation, that's acceptable in a CLIA lab. But if it is 15 percent, it's off. You are, like, more than, quote/unquote, accurate, according to CLIA lab standards.

So what I'm saying here is: Yes, you can run it manually. Obviously, I knew this was not in the CLIA lab because I told them to run it even though it's

not in the CLIA lab, but make sure it's accurate as in it fits into the CLIA lab CV.

Q So I guess I'm trying to understand that. So if it's -- if it's not being run in the CLIA lab, why would it be important to run it within the CLIA lab CV?

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A Because as a company, we had a lot of technology that's not in the CLIA lab that we still want to be able to demonstrate to people.

For example, there's a lot of software that we had which was not in production yet, like the mobile app that I talked about, that we used to demonstrate to people a lot of the times, and even actually installed them on people's devices before it was on the app store.

So here, what we're saying is: No, we have the capability to run this test. We just don't offer it in the CLIA lab because it no longer, you know, had the volume requirements, but we have the technology. And I think I had -- saw here somewhere mark -- somebody talked to me and said, mark this as a technology demonstration, which is correct because it's no longer being run in the CLIA lab. It's a tech demonstration. And -- and that's what we are saying.

So there's nothing wrong with showcasing or even showing off our technology if you can do something that others just cannot do.

Q So if you look at the e-mail right before the one that I was just asking about --

A Uh-huh.

Q -- it's (b)(6); (b)(7)(C) e-mail to you on December 29th,

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2014, at 7:54 p.m.?

A Uh-huh.

Q He references "A bit more complicated than originally planned for (b)(6); (b)(7)(C) "

Do you see that?

A Yes.

Q Do -- do you take that to mean that this is for a demonstration for (b)(6); (b)(7)(C) ?

A Seems like it, yes. Because like I said PT and PTT is not in CLIA. So I'm assuming you're asking where there's a demonstration of CLIA or is it for (b)(6); (b)(7)(C) or not.

Q (b)(6); (b)(7)(C)

A Yes, yes. It's from (b)(6); (b)(7)(C) Correct.

Q The -- did you explain to (b)(6); (b)(7)(C) that this was going to be a -- an R&D test as opposed to a CLIA test?

A Yes. If he got the results -- when we got the results, it would say on the top "technology demonstration."

Q I guess my question is a little different. Did you tell him at any point in time that -- that

technology demonstration meant R&D lab versus CLIA lab?
A I personally didn't. But if it is a CLIA lab report, it will say "CLIA lab report," and signed and
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sealed by the lab director. With a tech demonstration, it will say "tech demonstration" clearly on top of the report.
So he's a fairly educated guy. If he sees something at the top that says "tech demonstration," that means tech demonstration.
Q The -- it looks like earlier -- or later in the chain, this is the first page of Exhibit 205, there are -- there are some discussion about reporting CL.
Do you see that?
A Yes.
Q What is CL?
A I think it's chloride.
Q And the question from (b)(6); (b)(7)(C) on December 30, 2014, at 5:50 is: "Should we report with CL pending redraw per usual protocol or better in this to go another route?"
Do you see that?
A Yes.
Q And it looks like at the end of the day, Ms. Holmes makes the decision "Okay. Don't include on report."
Do you see that?
A Yes.
Q I guess, why was it appropriate in this
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case -- so if you want the, you want the test results to be accurate on the CLIA range --
A Right.
Q -- why is it appropriate to drop results and -- which would presumably not be following the CLIA protocol?
A Even in -- actually, I think you showed me an example earlier. Even in R&D, if we don't have confidence in something, we will drop it. Because you don't want to report wrong results to a patient period. As much as possible, you want to apply and use the protocols that the patients and the doctors are used to seeing. If you get a typical lab result, if a lab director or the person performing the test has a doubt about the test, they don't just put the result and say, "Oh, by the way, I'm not so sure about this." You just don't report it just in case somebody relies on the result incorrectly.
Because people will say, "You know what? I don't want to get a redraw done. This seems good enough." And may rely on it. So it's better and safer, anytime you have a doubt, not to report something. And that's a fairly well-understood and -- and followed protocol in the lab industry in general. And the R&D

guys, to the extent possible, should be following it.

At this time -- this is also 2014, end of 2014, so our processes have matured by this time. So even the R&D guys -- actually, I think even the report, if you look at the R&D reports, were mimicking what the CLIA lab reports did. They're not like the rough reports that we saw earlier. I think they were getting better by this time.

Q I guess I'm still trying to understand. So if you were trying to mimic the CLIA process as much as possible, why is Ms. Holmes deciding what should and should not be included on the report?

A Because this decision is not a lab director decision. This is a technology demonstration. We talked earlier who are the people who could make decisions in R&D, and R&D does not have any SOP or requirements that, you know, a person, a VP of R&D, has to make a decision. Other people made decisions.

Now, there has to be a good reason to make a decision, a good clinical reason to make a decision. As you can tell by spending a lot of time with the CLIA lab, I acquired a lot of knowledge of what the SOPs in the CLIA lab are. So, you know, I could probably make some decisions, but obviously in CLIA, I won't. But in R&D, I would say I would be able to make them. So I think it's the same thing you're seeing here.

BY MS. CHAN:

Q But even if it wasn't a requirement for the lab director to be making decisions on these technology demonstrations, why not let the -- why not have the lab director review? Because as you said, you want to make sure that the results that are being sent to these people are accurate.

A Yeah. I mean, I think that would be an additional layer. That would be just a good idea. But it was not a requirement. Honestly, we didn't think about that, to necessarily include the lab director. There are a lot of qualified people here who are working. (b)(6); (b)(7)(C) brought a phenomenal background in clinical chemistry.

So it's not like we had a lack of confidence in the people involved in making a decision. It was just adding one more person. And I think you can extend the argument by saying if you have two lab directors, maybe both of them should look at it. Right? But it was that we already had enough qualified people who I thought -- we thought were looking at these results.

And (b)(6); (b)(7)(C) ultimately did become a lab director in Arizona just two months later.

Q Why was (b)(6); (b)(7)(C) looking at this as

opposed to [redacted]? You mentioned, you know, why have two lab directors? You already had someone who was doing it. But why not have [redacted] since he is the lab director in Newark --

A Yeah.

Q -- reviewing these reports?

A Sure. One reason is because he's in Newark. He's the lab director for the CLIA lab. He had God knows more than enough work to do in the CLIA lab. So pull lab people in R&D was something that I was not fond of. That's one reason.

The other thing is: The R&D people could move faster. If something needs to be troubleshooted, they're there. They can pull up the computer or the command, the shell and this and that. All of the scripts were available to the R&D guys. We could just go walk down to the R&D and literally talk to the QC person saying, "Did the QC filler happen or not?"

So we knew the R&D landscape. [redacted] was completely in the clinical lab. He didn't even know the majority of the people in R&D, so things would have slowed down if we had added another layer on top of it.

Q What was [redacted] qualification to make decisions on these lab results?

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A Well, he's a -- he's a pretty outstanding guy. [redacted] he spent a lot of his time on clinical chemistry and bioinformatics mapping the pathways in human brains. I won't be able to describe his qualifications in detail because he did a lot of R&D work around genomics and path -- sorry, human pathway. He did bioinformatics.

Then when he came to Theranos, he spent six or seven years in clinical lab assay development. He really understood a lot of the nuances of assay development. He brought the right background. He was already leading the team of people who were doing a ton of data analysis for the CLIA lab.

So once you -- so for -- for assay development, once you develop an assay, all of the raw results have to go to somebody who can do analysis on the data to see how the assay is performing, how the R&D is working. So it requires a lot of machine learning, a lot of software, and -- and algorithm skills. [redacted] was responsible for that. They did all the data analysis. He had, I think, 10 or 12 people on his team who were churning data.

So as part of the assay systems R&D, he really got deep into the assay development process.

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And I think he's as qualified as anybody in that part of the business -- in that part of the -- the

laboratory.
And then also once he got to the point by this time that he also understood the CLIA lab SOPs pretty well and once he took the Arizona lab, you know, he just -- he -- I felt I sent the right guy for the job. It is very rare and difficult, almost impossible, to find people who have the clinical chemistry understanding and also bring the data analysis and machine learning background. It's a very unique skill set that he brought.
And my hope was: Once he has managed the Arizona lab, got more experience, he would have ultimately been qualified to be a high complexity CLIA lab director, and put him in a role where he can be responsible for all of the labs.
You know, we actually were building on a suite of applications that allowed us to apply artificial intelligence on the CLIA lab data in realtime. So if you saw a machine in Pennsylvania drift a little bit, before even the CLIA lab knew, our AI would know. Right? Nobody has applied machine learning and artificial intelligence to a clinical lab, in my knowledge, and I don't think anybody will for a

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long time. We were doing that. And (b)(6); (b)(7)(C) had just the perfect background for that.
Q So you mentioned that, you know, the right thing to do in this situation with the chloride result was just to remove it entirely from the report. Why not just, you know, remove the result, keep chloride on there, but say, "needs redraw"?
A Well, usually, when you do R&D samples, you don't put "needs redraw" as a practice. I don't know what -- what happened after this report, so obviously I don't want to guess what was communicated to Trott and what he knew. But in the R&D world, it's not odd to remove a test that you couldn't perform in some cases. So there's nothing -- there's nothing unusual about not including a test you just couldn't do in R&D.
Q Based on -- what is that based on? What is your understanding based on?
A Just talking to the R&D development people, Daniel Young. You know, just listening to these guys.
Q So --
A Because you're -- and also just general common sense that if you're trying to demonstrate to somebody that I can do 14 things -- like Chem 14 is 14 tests. And when you send the results and there are 13, then it's not Chem 14 anymore and you don't call it a

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complete metabolic panel.
So some other things are kind of obvious also that if you're expecting 14 and you report 13, then one didn't get performed.

BY MR. KOLHATKAR:
Q When you're asking for the results to be accurate, were you aware whether or not (b)(6); (b)(7)(C) was going to compare this test result with any other test result?
A I don't know. Actually, it's not easy to do that in -- in laboratories. You can't compare results and say -- people make that mistake all the time, and they will say, "My vitamin D at UCSF was 50 and at Theranos, it was 40, so UCSF must be better." The labs use different equipment, different reagent lots, different a lot of things.
So like I said earlier, it's unlikely that he can compare something and be able to reach a conclusion if necessarily our PTs are right or wrong. Which is why my emphasis was: Make sure we know for sure that we have done everything right, which means make sure you run the QC properly. Don't just take a shortcut because it's an R&D sample.
Q I guess my question was just were you aware whether or not he was planning on comparing these

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results with any others?
A I don't know. It wouldn't surprise me. I mean, there were people who used to come to our locations and compare it to other lab, you know. And doctors told us that. I think it was printed in media also. So it didn't surprise me at all. It wouldn't surprise me. I don't know.
Q You -- okay.
A Yeah. But it wouldn't surprise me.
BY MS. CHAN:
Q You said earlier that the fact that the lab report had "technology demonstration" at the top wouldn't mean that it would have been run in an R&D setting and not in the CLIA lab.
A It could have run in the CLIA lab also on some machines. But the full purpose of the report was demonstration, and in CLIA reports, you can rely on them for medical decision-making. The -- you could run some of the tests in CLIA lab equipment in the CLIA lab facility, but we are still treating them in R&D.
For example, let's say I am the phlebotomist who drew your lab test. Even if everything else happened in the CLIA lab perfectly, according to SOP, because I'm not certified to collect your sample, it would be a tech demonstration.

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Q Okay. I'm just wondering, you know, (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) when he comes in to get his -- his test done --
A Right.
Q -- why would it be obvious to him that just because his lab report says, you know, "technology demonstration" at the top that it's being done at the

R&D lab and not the CLIA lab, and therefore, some of the procedures or SOPs that would be in place at the CLIA lab wouldn't apply to his reporting?

A I don't think the issue here is: If something says "technology demonstration"; therefore, must have run in R&D. The point here is, like I said just a few minutes ago, you could have run the entire thing in the CLIA lab, but you may have violated one small SOP, for example, the guy who collected your sample, it's no longer a CLIA sample.

So the implication here is not necessarily that if it is technology demonstration; therefore, it's not a CLIA lab, it's an R&D. The point is: Do not rely on this for medical decision-making. Don't take this to your doctor because doctors will see at the top it's a tech demonstration.

Ask me the question again. Maybe I didn't answer it correctly.

Q I think you said before that you -- that (b)(6); (b)(7)(C)

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(b)(6); (b)(7)(C) must have known or these -- these VIPs or, you know, prospective investors, or investors must have known that this was being processed in the R&D lab and not the CLIA lab because the report said it was a technology demonstration. I'm just trying to understand why do you think that's obvious --

A Yeah.

Q -- to people?

MR. COOPERSMITH: Well, if you said that. I mean, the record will speak for itself.

THE WITNESS: Yeah. I actually don't know if those are my exact words, but I understand your concept. I think the point I was trying to make and the appointment I just made here is that if some -- some report says "technology demonstration," that means if -- not all of it was processed in the CLIA lab.

Now, it's not obvious to them which part was processed in the CLIA lab and which was not. It doesn't have to be. The most important thing is: This is not a report from the CLIA lab. This says "tech demonstration" at the top.

Now, that doesn't mean that somebody who engaged with (b)(6); (b)(7)(C) didn't explain that to him. I'm not suggesting that, that this was the only way we communicating it to him. I just don't know. I'm just

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responding to what was -- what is in front of us, which is a report which says "tech demonstration." And the point of that is: This is for demonstration of technology, not for CLIA lab purposes, and that's the only difference.

Now, the CLIA -- the lab may have -- sorry, the sample may have run in the CLIA lab. Everything may have checked out except for maybe one minor thing,

and that would prompt it to say tech demonstration, not CLIA.

BY MR. KOLHATKAR:

Q Did you do ever do anything for any of these technology demonstrations to explain to the -- to the people who were -- who were getting the demoes that -- that their -- that their blood was a tech demonstration as opposed to a CLIA sample?

A Yeah. I mean, in most cases when we met with people, like I said earlier, we were not demonstrating CLIA lab. So we would always start by saying we are -- "We will do a demo for you," right, or "We will show you a future XYZ," or something that we wanted to show to them. It could be a new CTN, it could be a new process, new software.

People, when they came and met with myself or Elizabeth, they didn't come here to say, see how we

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were doing in the Walgreens locations. They could just go to a Walgreens location for that. When people came and engaged with me, I mean, I actually never -- don't recall any meeting in which I was going to say, "Oh, I'm going to do exactly what CLIA lab would do on you so you can see the process." It would just be better to send them to Walgreens. So -- I'm sorry.

Q So -- so your general practice was to -- to call it a demonstration --

A Yes.

Q -- is that fair?

A Yeah.

Q But not call out as say, "By the way, this isn't going to be processed in our CLIA lab," or "isn't going to be processed pursuant to CLIA SOP"?

A Yeah. I mean, I never got an inclination from anybody -- any investor who they would -- they would be able to -- they -- they would ask or care about that detail. If it is a tech demo, it's a tech demo. We are demonstrating technology.

Q What is Madrone Partners? You can put this document aside.

A Oh, sorry.

Q Yeah.

A Actually, I think it is some investment firm.

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Actually, the name rings the bell, but I don't recall the details.

Q Do you know who (b)(6); (b)(7)(C) is?

A Yeah. (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

the investors in the company, but I don't remember many -- many details of it. I think -- I don't recall the details with him.

Q Do you know who (b)(6); (b)(7)(C) is?

A Yes, of course.

Q Who is (b)(6); (b)(7)(C)?
A He's one of the investors in the company, and, of course, he is, I think, (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)
Q Do you -- do you know how (b)(6); (b)(7)(C) invested in Theranos?
A I don't remember the name of the firm, but (b)(6); (b)(7)(C) was the person who was the liaison between us and (b)(6); (b)(7)(C) is what I remember.
Q And I guess when you recall (b)(6); (b)(7)(C) liaising with Theranos, did you have an understanding that, I guess, (b)(6); (b)(7)(C) capital would be what you'd be liaising with? That he was the source of the capital for --
A I didn't know by name that -- this person,

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but I knew that (b)(6); (b)(7)(C) was managing (b)(6); (b)(7)(C) Investments in Silicone Valley. It's what I heard from him, actually, when I met with him.
Q Do you recall an instance where (b)(6); (b)(7)(C) came in for a blood draw at a Walgreens store in Arizona?
A You know, I remember. It was obviously an important occasion because, I mean, you know, a Walmart guy going to Walgreens was special. So I do remember it for that reason. But I don't remember the exact details of that.
Q I guess -- I think I know where you're going, but can you just explain why it was special for that reason.
A Because they compete with each other, and I'm pretty sure (b)(6); (b)(7)(C) wouldn't walk into a Walgreens store if they didn't have to would be my guess.
Q Do you recall what the purpose of his visit was when he was -- when he was going into that Walgreens store in Arizona?
A If I recall, I think he wanted to see our process. But again, I don't recall the exact details of the visit because I don't think I was involved with the details of it. But I remember, I think he had gone to actually Arizona for that, not to Palo Alto, is my

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memory.
Q Do you -- do you recall if (b)(6); (b)(7)(C) or other project managers consulted you about a process to -- to make the Walgreens (b)(6); (b)(7)(C) was planning on visiting look nicer before his visit?
A I don't recall, but it wouldn't surprise me. I mean --
Q I'll hand you a document that I'm marking as Exhibit 243. For the record, Exhibit 243 is a document Bates-stamped TS-1044293.

(SEC Exhibit No. 243 was marked for identification.)

THE WITNESS: Okay.
BY MR. KOLHATKAR:
Q Do you recognize this document?
A I do.
Q What is Exhibit 243?
A It's an e-mail from (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C) to myself, and CC'd to (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)
(b)(6); (b)(7)(C) And then I forwarded the e-mail to Ms. Holmes.
Q Why did you forward this to Ms. Holmes?
A Probably just FYI for her to keep her in the loop.

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Q Was that a common occurrence that you'd pass on information to her and vice versa?
A Yes.
Q And is it fair to say were there areas of the company -- I mean, we talked a lot about your responsibilities earlier today. Was it your normal practice to keep her updated about what was going on in the -- in the areas that you managed?
A Not always. There was too much stuff that I was doing, and if I even type a one-line introduction to the e-mails, I would never get my job done. So sometimes I would just forward and hope that she reads it. I used to complain to her that she didn't read a lot of my e-mails. But -- and sometimes I would put a one-liner.
And -- but most of the times, I would send something and I'd go to her office saying, "Did you read my e-mail?"
The chances are "No."
"Please pull it up so we can talk."
So if it was that important, then I would do that.
Q I mean, did you generally keep her updated about VIP visits?
A No. You know, this concept of VIP was -- I

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don't know where it came from. But the answer is no, I didn't. If it was somebody that she cared about, then chances are, yes, but if it is somebody she didn't care about, then I won't.
Q Well, where did the concept of VIP demos come from?
A I think what happened was -- and this is my guess. I don't think I came up with this name because I don't like it, and I don't think Elizabeth either. What was VIP about these demos or meetings was the fact that I was in the room, or Elizabeth was in the room, or both of us were in the room. And a lot of times when we collected the sample, if they went to the CLIA lab, the CLIA lab would just put them in the stack and

batch process them. And the product manager sometimes would pull their chains by saying, "This is VIP because Sunny was in the room, so you better process it right away" or "Elizabeth was in the room."

So that's kind of my understanding. Because at least in the CLIA lab -- and I heard this word a lot, "This is a VIP sample," and I used to -- "What the heck is a VIP sample?" And this is how I found out. So I think it came about in that context.

Q And, I guess, what was your concern with the PMs sort of prioritizing these samples in the CLIA lab?

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A Well, it was -- no, I didn't have a concern. I just didn't like the name because I don't think a lot of these demos we were doing actually were VIPs. And the PMs were not able to make the call. They just thought because I was in the meeting and I did the demo, so it must be important. And a lot of times people would come and meet with us, and I mean, they were important, but they were not very important.

So -- so if the sample got delivered eight hours later, that was just fine. But the -- I didn't follow -- follow up, you know, chase this thing, and these guys just got into the habit of saying, "Well, if I don't deliver the results, Sunny is going to be breathing down my neck, so I better move it faster."

Q What gave you the impression that Ms. Holmes didn't like the -- the term "VIP"?

A Because we never talked about it. I mean, if it was something that was her word, then she would have used it in front of me also, but I don't recall her using it that much, if ever.

BY MS. CHAN:

Q Who did you consider important?

A You know, in a way if we are meeting with somebody, they're important. But we used to have a lot of people -- for example, Walgreens used to bring their

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guests to us so -- on a tour of California so they -- they can meet with us. And they would always take them to the Palo Alto store because it was nicer. I didn't consider them as important because I was being courteous to Walgreens by being in those demos.

So important would be, you know, people we -- who are strategic to us, people who are helping us grow the business. Some hospitals we would meet and we know that they would help us with samples in the future, for example, with our R&D, those people are important.

Q And -- and prospective investors would be important too?

A I mean, they would be important, but honestly, I wouldn't put VIP to them. (b)(6); (b)(7)(C) I would say VIP (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) for the most

part, maybe not. But I would for his stature, but not because he's an investor.

So investors were important, but at the same time, they come and they see us and they don't like us, that's just fine. I mean, you know, I was not necessarily saying for this investor, all hands on the deck. Make sure everything was perfect.

Media would be -- would be VIP because they would write us -- write about us. So if media --

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somebody from media came, I would say, "Make sure everything goes fine because this guy is going to write about us."

BY MR. KOLHATKAR:

Q The -- the message in 243 refers to the fact that a TV, bamboo tree, lamp, and desk --

A Yup.

Q -- are placed -- were placed inside of Walgreens for the visit.

Do you --

A Yes.

Q -- see that?

A Yes.

Q And it says, "WAG's corporate team is not aware this is currently in the store."

A Yes.

Q I guess was it Theranos's normal practice to have a TV, bamboo tree, lamp, and desk in Walgreens centers at this time?

A Yes. So if you had gone to our Palo Alto location, like I said, it was just beautiful. We had all of this and more. And our design included all of that stuff. And in many of these stores, we actually had this TV where, you know, you would sit and get a blood draw, and you would be looking at a TV with fish

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floating in water, kind of a calming effect. We used to also give people a bottle of water to calm them down. It also made them bleed better.

So -- but we had these trees, and music, and all this stuff. Unfortunately, half of the locations in Arizona, the rooms or the spaces that Walgreens gave us were pretty terrible. As you can see here, we couldn't even hang a TV because somebody would steal it.

So this is what he was saying, "due to loss prevention considerations." But the Walgreens guy would say, "Oh, no, no. A TV? Somebody is going to steal it." So they won't let us. But our deal with Walgreens in Arizona was: A large number of these store would be what we called gold stores, which had enough space, our TV, and we used to pay for this, all of this stuff.

So our plan was: Every store should look nice because our customers are only there for a minute

or two. Let's treat them nice. And in some stores, that was not the case. This seems like one of those, you know, we called them bad stores.

And what -- we wanted (b)(6); (b)(7)(C) to see what our experience really looks like as we grow in -- in many of the other stores. I mean, I wish I could have directed him to one of the stores which looked like the

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locations we actually were building. But this was not the case here.

Q I guess were you concerned that you were creating an experience for (b)(6); (b)(7)(C) that differed, you know, from what he'd actually experience if his last name weren't Walton?

A I mean, people treat the VIP customers better anyway. So I don't think he was being misled having -- through the impression. Like I said, if he had gone to the other stores where we actually had all this set up, then one could argue they would be misled thinking all stores are like that. But that was not the case. We were in the early states. We were -- we ideally wanted all the stores to be beautiful. And we actually offered to pay for them also. But again, Walgreens' considerations were a big roadblock in some of these stores.

But when we got an opportunity to put a TV, I mean, we would hang it there. And my guess is -- I don't know if they removed or not. If we could make something nicer and we paid for it, usually Walgreens didn't complain after it was done.

For example, in the Palo Altos store, we paid for it. We fixed the bathroom. We put nice tiles. Walgreens didn't complain. I mean, they were fine with

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us spending money and making the stores nicer.

Q You can put Exhibit 243 to the side.

So I'd like to change gears a little bit since we -- we started talking a little bit about the Walgreens relationship. I guess I just want to take us back in time from the -- sort of the gold store situation that we were talking about in 2014 a minute ago to --

A Yup.

Q -- to when Theranos first started partnering with Walgreens.

A Sure.

Q When was that and what do you recall about those initial conversations?

A I think we first met with them in March of 2010. We had a phone conversation with them initially. There was a person there called (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) And I don't know if he phoned us or we phoned him. I'm not sure how that came about. But we had a phone conversation, and he invited us to

come to Chicago soon after that.
And so Elizabeth and myself, we went to Chicago, and we met -- he had organized a meeting there and we met there. It was March of 2010, sorry.
Q And what was -- what was the -- I guess the original business model for partnering with Walgreens?
A Well, we were going to explore. Initially when we went there, you know, we said, "Look, we have this technology and the capability and the vision of, you know, doing micro volume, small volume. We think we can put, you know, some tests and some devices in your stores."
Ultimately, what became Phase 2 is what we were leading with initially. We thought that would be Phase 1, which is the on site, putting a device in Walgreens.
Q So -- so it's fair to say back in the, again, really early time frame, the -- the business plan for Walgreens was to have a distributed TSPU in the store?
A Yes.
Q Was there any discussion at that time about having a -- sort of a -- a central CLIA lab to supplement the device in the store or --
A Yeah. I mean, we wanted to be in the CLIA lab business because over time, we thought we're going to learn a lot, I mean, how the CLIA lab -- labs work. More importantly, our business model -- actually, I take that back. The CLIA lab was always part of the plan. The reason is: The way we were thinking about distributing the TSPUs back then required a CLIA lab, required a CLIA lab -- do you want to stop me or -- we have five minutes.
Q You can finish your answer.
A Okay.
-- required a CLIA lab because a CLIA lab was going to provide the oversight. Remember I talked about the protocols, talking to the Cloud and protocols coming to the device? It was going to be all part of the CLIA lab. So the CLIA lab was required even for that model.
MR. KOLHATKAR: Why don't we go off the record at 3:56 to change tapes.
THE VIDEOGRAPHER: Off the record.
(A brief recess was taken.)
THE VIDEOGRAPHER: Rolling.
MR. KOLHATKAR: We're back on the record at 4:02 p.m.
BY MR. KOLHATKAR:
Q Mr. Balwani, just to confirm, we didn't have any substantive discussions during the break; is that correct?
A That's correct.

Q Before we took a break, we were talking about the -- the Walgreens relationship. And I want to hand you a document.

So I'm handing you what's previously been marked as Exhibit 206.

A Thanks.

Q And you may not recognize the cover e-mail, but do you recognize the presentation that begins at WAG-TH-6786?

A Yeah. It looks like one of Theranos's presentations.

Q Do you recall making a presentation to Walgreens management?

A I don't recall if -- this exact presentation, but we made a lot of presentations to Walgreens, so this could be one of them.

Q And does this look like a presentation Theranos put together?

A Yeah, it looks like it.

Q Do you know -- I mean, who drafted presentations like these?

A So when I came on board, there were already presentations in place from before I joined the company with data from pharmaceutical trials and a few other things the company had done in the past. And then when I joined, I think I took over making it nicer because before that, the presentation was not very good, and we didn't have any PowerPoint specialists in the company, so unfortunately I became it initially.

But then I put the presentation in a common folder where the chemist would come in an enter the chemistry data, and Elizabeth would come in and add, you know, whatever data she had, and I would add more software data. So it became a collaborative kind of effort.

Q What was the name of the -- I guess the folder or the shared drive that it was maintained in?

A I don't remember what it was in 2010, but later on, I think 2013, it became project management commercial, something like that. It was kind of a vague name.

Q Under -- under the project management?

A Yeah. I think -- I think -- I mean, I could be wrong about the directory name, but I think there was a folder created for presentations.

Q And I guess that leads to sort of an unrelated question. How did you maintain your files when you were at Theranos? Was there a file for saving documents that you used?

A Yeah. We had a -- we encouraged everybody to store everything on the network. So everyone's default home folder was on the network. So anytime you're

saving a document on your computer, you -- you think
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you're saving it locally in your home folder, but it's on the network. So that was the same for me, same for everybody.

I also had access to my local drives. Most people didn't have access to local drives because we -- back then, we couldn't back them up because the software didn't exist. Over time, we made it better. But still because we wanted people to store everything on the network because it's easy to back up the network drive, I would say pretty much everything was on the network. Even my stuff over time was on the network.

Q And you -- you could save it on the network and configure it in a way so that only you or --

A Yeah.

Q -- so other designated people couldn't --

A Yeah.

Q --- couldn't access it; is that fair?

A Yes. We had pretty tight controls, and over time, they got even better. You know, I brought the IT background, so I put the infrastructure in place so that people who had access would have access, People who don't have access, don't have access.

Q The -- was your shared network -- was the -- was the sort of drive that you kept documents on the -- on the network drive called the 300 folder?
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A Yeah. There was one folder I had created called 300, and I pretty much started -- the initial intent of that was: All of the planning, and thinking, and news article, everything that was coming into my head, I was dumping in the folder. And I believe Elizabeth had access to 300. And -- and then -- but I'd started using it as if it was my home folder, pretty much putting everything on 300.

Q And so the -- the 300 would be the sort of head folder, and then you had subfolders?

A Yes. Yeah.

Q And other than Ms. Holmes, did anyone else have access to the 300 folder?

A IT guys, but not anybody else.

Q Did you -- are you a big handwritten note taker? Did you maintain a lot of handwritten notes while you were at Theranos?

A Not many. I'm actually not a big -- I do a lot of notes on the whiteboard, and then -- but then I image them and I'll -- even when I'm thinking by myself, I think on whiteboards, and I had literally a glass wall the length of this conference room in my office. And I would take notes, and then I'll sit on the computer and transfer -- type them in.

Q If you did happen to take notes on a pad, how
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would you -- how did you can keep notes when you were at Theranos, if you did?

A If I did, they would just be in my file somewhere, but I would say that didn't happen that often. I was not a good note taker.

Q Sorry for the direction that I went. Let's turn --

A No problem.

Q -- turn back to the -- to the presentations.

So in other words, at some point in time PowerPoints like these became a collaborative process. Do you know back in the March 2010 period sort of who would have the final authority to -- to finalize a presentation like this?

A I don't think there was -- even until the day I left there was anybody who had final authority because people just would add content. And the purpose of these was: It doesn't really matter. It doesn't have to be final, because we would go to the meeting and just kind of go through it up and down, pick up the slide that we want to talk to and jump to that slide. And then if there's something we didn't like, we'd just drag it to the end.

So -- and then we would store that on the folder and that became the latest version. And then

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somebody else would take it and kind of trade that.

Q I guess when you're presenting to, you know, executives at -- at Walgreens, who -- who would make the decision about which slides to choose from that larger deck?

A I don't think we did that. That's the point I'm making, is that if we had a -- I mean, our deck over time became 500 slides. So we didn't have to pick and choose slides. What we did was, even when we met with investors or a board, we would just take the entire deck with us, I mean, virtually speaking. And we would just present it.

In some cases, if I was meeting with a specific audience which obviously, they don't need to see other things, and let's say I'm meeting with a physician, they don't need to see hospital or insurance slides, I would put them at the bottom, or if the slide deck became too big, I would just delete them, and then I'll store this. But then next time if I want to work, I'll still go back to the mother source, the big slide deck.

And so there was no one person making a final decision. It was: Here's the latest version. Take it and show whatever slides you want to.

Q I guess who -- who -- who would make the

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final decision about what slides to show Walgreens in this time period?

A Specifically, this one, if -- when we presented this, then it would be me and Elizabeth together.
Q If you'd take a look at the page ending in 6790.
A Yes.
Q There's -- there's a few pictures here under the slide "Overview of Theranos Systems."
A Yes.
Q Do you know who authored this slide?
A Yeah. I think this existed before I joined the company. I may have made modifications to this. I may have added the database infrastructure. The software pieces, I may have added, I don't remember. But -- and obviously the iPhone icon, chances are, I added that.
Q I mean, is this sort of an accurate overview of the systems Theranos was planning on deploying at Walgreens in 2010, a system of devices, cartridges, and mobile applications supported by database infrastructure, algorithms, and applications?
A There would be more components. This was not a fully inclusive deck. It was -- like I said, most of

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the times, we're using the slide deck as a conversation starter. So there may be things that are here that were not applicable to Walgreens.
For example, the pattern recognition algorithms probably didn't have much use at Walgreens for the foreseeable future, but we had them. And then in many cases, there would be things that we would use for Walgreens that are not here. As we learned, we would add them.
Q In a slideshow like this, did you ever include a picture of a commercially available analyzer?
A Well, we've made a lot of presentations, so it really depends. But most of the time, no, we didn't, or at least I didn't.
Q Why not?
A You're not talking about modified commercial analyzers?
Q Just, like, an off -- off the shelf, you --
A Yeah.
Q -- you used unmodified.
A They were not interested. I mean, we didn't go there and say, "Oh, by the way, we have an Abbot machine in our lab." Everybody would be like, "So what?"
So nobody ever added that for that purpose.

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It was not interesting. Just like we didn't have pictures of pipettes. We did have pipettes in our lab and a lot of other equipment in the lab. Not interesting.

Q At this time Theranos hadn't invented its nanotainer, CTN; is that right?
A Yes, that's correct. We did have a small capillary tube that I mentioned earlier that we used to wick the blood off the finger, but it was not a nanotainer.
Q If you could turn to the page ending in 6792, there's a slide on validation of Theranos systems.
A Uh-huh. Yes.
Q Do you recall who wrote this slide?
A These are not my words because I did not have this background, so chances are, I didn't do it. But I don't know who actually did. I wouldn't be able to tell.
Q In 2010, I guess, do you know how Theranos systems had been validated under FDA or ICH guidelines?
A My understanding -- again, this is -- I'm -- I'm not a chemist. A lot of these things that are here are about chemistry. So my understanding was that our chemistry assays that we were developing for pharmaceutical companies followed a certain protocol,

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which was dictated by these 21 CFR compliance and ICH guidelines. It says we follow the guidelines. So that was my understanding.
But if you ask me to explain this stuff, I wouldn't be able to. I don't know what they are.
Q If you could turn to the page ending in 6814.
BY MS. CHAN:
Q Would Elizabeth Holmes have known what -- what that was talking about, the validation slides?
A Back then, she would have known more than I did because she was with the company longer at that point. This is still me in the company -- six months in the company. So at that time she would know more. I don't know if she still remembers all of this stuff or not.
Q And when you were sending out, you know, presentation material to, you know, third parties, you know, potential business partners like Walgreens, for instance, in this -- in this instance, would you -- would you raise questions if you didn't understand what was on a slide that was being sent to them?
A Not me. I mean, I would -- most of the times what we were sharing, at least at this time going back to 2010, was: "We are a small company. This is what we have done in the past." It was more like that. Not

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necessarily, "This is what we've done and this is what we are going to do with Walgreens when we launch with you." It was more introducing our company, and our capabilities, our experiences, was what -- what we were trying to get across. And in some cases, our vision, sorry.

But, no, I wouldn't -- if I didn't understand something, I would not pull the chain saying, "I don't know what this is. Somebody explain this to me." I would -- like I said, this was a very complicated structure. I know a lot more now than I did in 2012, which is why I'm thinking I can address a lot more. But back then, I knew even less. And so I would not pull the chain just because I didn't understand.

Q Why wouldn't you ask questions?

A Because I knew this is a very complicated business. Just because I don't understand something doesn't mean it's not right or this was not done. You know, there are other people in the company, the team leads, the chemists, the head chemist, the -- the R&D guys who had a lot more knowledge than I do -- I did, so I assume they must have looked at it.

BY MR. KOLHATKAR:

Q So turning to the page ending in 6814. It's a slide called "Launch of Theranos Systems at Walgreens."

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Do you see that?

A I do.

Q It says, "Theranos would like to submit a partnership with Walgreens by end of April 2010 to launch the general chemistry, influenza, and fertility tests in Q4 2010."

Were you -- was that your understanding of the company's goal at the time?

A Actually, give me one second so I can read this, if you don't mind.

Q Of course.

(The witness examined the document.)

A Yeah. That was one of the ideas that we had discussed with Walgreens.

Q I guess, was Theranos's TSPU capable of performing the general chemistry, influenza, and fertility tests in --

A The -- yeah. The influenza and fertility tests, we actually had some assays in the validation stages. So H1N1 was an influenza test. I had talked about H1N1 earlier. So that, we were capable of. I don't know what general chemistry tests we had in mind, so I don't know the answer to that.

Q Okay. So in other words, Theranos didn't have all of its general chemistry tests available on its TSPU in --

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A Yeah. And I don't think --

Q -- 2010?

A And I don't think we are saying that here, either, that we are launching all general chemistry. General chemistry has hundreds if not thousands of tests.

Q I guess, the -- you know, earlier we talked -- we talked about the fact that the 3.0 and the 3.5 could generally only run immunoassay of ELISA tests.
A Yes. Correct.
Q And are those a subtest of general chemistry tests?
A No. General chemistry actually -- again, I'm out of my league here, but my understanding of general chemistry is: There are some tests that you can -- there are some overlap between general chemistry and -- and immunoassays that you can do on general chemistry machines like Advia 1800s. So there is some overlap, so I don't know what I had in mind here -- what we had in mind here.
MR. MCKAY: Slow down. Slow down just a little bit.

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THE WITNESS: Oh, sorry.
BY MR. KOLHATKAR:
Q So I -- and I guess I hear your point that you're not saying that you're going to run all general chemistry tests at this time, but just as a factual matter, Theranos couldn't run all general chemistry tests on -- on its TSPU in April 2010?
A I don't think we could run all general chemistry tests. I don't know if we could run some. I don't know the answer to that. But I do know that -- the other thing also is: I don't know if what we meant then was: Launch all general chemistry, influenza, and fertility tests or -- did we really mean general chemistry as in the category general chemistry.
So I don't know. I don't want to guess on that one. But we were talking about panels at that point, and my understanding is: Influenza and fertility panels, we could have done.
BY MS. CHAN:
Q If you go to 6801, you'll see there that there's a list of general chemistry tests on that slide.
A Yes.
Q Could the TSPU conduct testing on all of these tests?

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A Not at that time. And actually, one more point: Here, the general chemistry actually is being used as in routine chemistry. Because if you look at the first column, it says "CBC," complete blood count. That's not a GC test, that's not a general chemistry test. That's a hematology test.
So -- so -- and thyroid panel is all immunoassays. So all of the assays here, TSH, T3, T4 --
THE REPORTER: Can you slow down.

THE WITNESS: Yes.
All the thyroid panel listed here are immunoassays, so -- which is what I was commenting earlier that I don't know if we meant general chemistry in the other slide as in the category general chemistry or general chemistry as in, you know, routine chemistry.
So here, now, this slide answers that question that we were talking about what are the routine chemistry? "General chemistry" is not the right technical name to use here.
Q Did the TSPU do testing for the complete blood count?
A Not at that time.
Q What about the complete metabolic panel?

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A Not at that time. We were obviously working on the revisions to 3.0, and we thought at that point that we would be able to -- we would put -- if we had pursued this path, we would have put -- I think I mentioned earlier that we were going to modify 3.0 and add general chemistry to 3.5, and we were working on the R&D phases at that time, even in March and April of 2013. We didn't pursue that because we didn't pursue this path with Walgreens.
Q Okay. Doesn't the slide make it look like Theranos was able to conduct that testing already at the time this was presented in March 2010?
A No. I don't read it this way. Like I said, a lot of the -- the slides here, if you read them -- I mean, for example, the slide that I saw -- go to Page Number 6812. That has individualized health system application. A picture of an iPhone, and a Blackberry, and automated health support, we didn't have any of that stuff. And Walgreens understood that because if we had it, we would have shown it to them. The software is easy to demonstration.
And when we talked about this, we said, "This is our vision that when a patient comes in, we will be able to do the test. You can even" -- and, for example, the quote here, "Don't forget workout clothes

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when we travel to Boston." And we couldn't do any of that stuff.
The -- the purpose of a lot of these slides was to show our vision of what we want to see happen. And none of these was there and didn't happen even until I left. So again, this was a slide we used to start a conversation.
So it's the same thing there, is that if we could have done all of those tests, then we wouldn't be saying, "Let's launch with those two panels," it's why wouldn't we launch with everything. But it was a conversation starter that we have learned that this is

the -- these are the panels that are most commonly ordered. And we were correct about that. That this is what we should focus on as a company and as a partnership it's offering.

BY MR. KOLHATKAR:

Q Did Theranos enter into a contract with Walgreens in 2010?

A Yes, we did.

Q Just -- I mean, I don't want to go through kind of each of the contract terms. But what was your general understanding of -- of what the agreement was between the companies at that time?

A That we would work together in deploying

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Theranos services at Walgreens locations. That we would put a TSPU at Walgreens locations, perform some tests there that we could from finger stick, and we would build all the software on the back end that we have to build in order to make consumer-facing portal apps available.

We had to build out the CLIA lab. Obviously, the CLIA lab didn't exist at that time because we couldn't launch this without the CLIA lab. CLIA lab was a prerequisite because all of the assays we were going to run were -- would have been LDTs, or lab-developed tests, which are -- which have to be validated by a CLIA lab.

So all of that work didn't exist. Walgreens knew we didn't have a CLIA lab because a CLIA lab license was publicly available, and we didn't have it. So the contract was signed so that now we can start in that direction. And we pivoted and we started focusing all of our R&D efforts from that point onward to prepare for that.

Now, we spent a lot of time in the contract negotiating, and one of the things that we -- I spent a lot of time on was not to make any commitments around timeline on when we were going to launch because we had to build a ton of infrastructure. And Walgreens too,

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but we had to do a lot of heavy lifting. And I made sure that we did not -- don't bind ourselves to any launch date, and there's none in the contract.

Q And as part of that -- entering into that contract, did Walgreens made any payments to Theranos?

A I don't think they made the payment at that time. I think they made one payment over time once we met a certain milestone. I forgot what it was. But it was -- I think they made the first payment end of 2012.

Q And so you mentioned kind of that initial contract, you didn't want to be bounded timewise --

A Actually, sorry, I just remembered, to correct myself, they for sure didn't make a commitment. It was only when we modified the contract in 2012,

after that, we had asked for the first payment.
Q And so you -- you sort of read my mind. What would -- how did the contract get amended in 2012?
A Yeah. So as I mentioned earlier, our initial thoughts were -- and keep in mind, this is 2010, April. We are still about 50 or 60 people in the company. Walgreens had come and visited us. They had seen our entire company. We had walked them through our entire building, including the shipping and handling dock. So, you know, they literally saw everything.
And after that, we started hashing out the

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details of how things will work out. Obviously, we had to open the CLIA lab, validate the assays as LDTs, put the devices in the Walgreens stores. And then we engaged counsel to make sure everything we are doing perfectly complies with regulations.
And we had advice from our counsel that what our plan of action was complies. Walgreens had hired consultants who told them it does, but it's a risky proposition. It may be that some components of this, the FDA may not like. And so we started exchanging and started having a dialogue with Walgreens. In the meantime, obviously, our entire company was focused on working in this direction that we had chosen.
And around, I think, 2011ish is when we realized that, you know, Walgreens didn't want to bear that risk because they were a big company. They were also in the media. They were in hot water because they had done something with another company in 2010 or 2011 where they started distributing something that was not FDA cleared. Not -- nothing related to us. It was some other third company. And the FDA sent them a warning letter, either to them or to the company whose product Walgreens was distributing.
So Walgreens was gun shy at that time, and they said, "We don't want to be in the media. We don't

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want to take any risks." So things kind of slowed down, but we pursued this path of TSPUs capabilities.
And in -- I think in 2012, I don't remember which month, we started exploring the possibility what if we are running everything in the one lab and there's only one CLIA lab and we just ship samples from the field.
And we started prototyping nanotainers and CTNs, and put a ton of effort in there. Pretty much, I think -- I would say the majority of our company or a large chunk of our company was working on CTN because it was a very monumental undertaking. There are companies out there who do nothing but make these Vacutainers or vessels for transferring blood. This is their entire business, multibillion-dollar companies. And for us, obviously, this was a big project. It had

to be done right.
So we started focusing on CTNs, and once we got to the point where we thought it was a good solution, a good path forward, we approached Walgreens again, saying, "What do you think about this?" Or maybe it was Walgreens who came up with the idea and we did the R&D around it. And then we met together and we said, "This seems like a good path." Obviously, it shifted a lot of what we were doing from focusing on

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TSPUs and all of our R&D who were there -- again, we are still a small company. This is 2012, so maybe we are at, I don't know, a hundred people or so. And now we started running after the CTN, the centralized lab model, and that's how it came about.

Q So --

A Sorry for the long answer.

Q No, no, it saves me from asking more obvious questions.

But the -- how was the contract with Walgreens amended in -- in 2012?

MR. COOPERSMITH: And if you're asking specific contract language, I mean, obviously, you have the contract.

MR. KOLHATKAR: No, no. Sure. I'm just trying to get directionally in terms of the business strategy of the company and -- and its relationship with Walgreens.

BY MR. KOLHATKAR:

Q Why did Theranos amend the contract in 2012?

A Well, we -- when we had this discussion, Walgreens loved the idea.

Q The idea -- this idea of shipping?

A Shipping samples.

Q Yeah.

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A The reason is: It required even a lesser investment by Walgreens because they didn't have to build out space for our TSPUs, and power, and HVAC, and all that stuff. And more importantly, this allowed us to expand faster because we were no longer bound by necessarily our production capacity, our TSPUs, and cartridges, and training people on how to use the machines, and so on and so forth.

So they -- they loved that idea. And, I mean, obviously, their goal was -- from this whole project was: Get more people in the store so they can buy more stuff. More volume, more dollars per -- per transaction.

And this was also the time where we started talking to Walgreens about the threat from Amazon and other tech companies to their core business. They knew that retail business is going to change significantly and -- as obviously, now, we are seeing it. But we

started discussing with them.
And they knew that if people started getting pharmacies at home delivered by Amazon, and I thought it was an inevitable thing. It's going to happen. It's just a matter of time. But they were tuned to that. And -- and people start -- stop coming to the store to buy, you know, liquor, and tobacco, and other things, then how would they attract people? If they had a service in the store that kind of forces you to be in the store, like a finger stick, you cannot do it remotely, at least for the foreseeable future, that this would be a really great business for them because they could continue to bring patients.
And the CTN, the shipping sample, basically means we can grow faster. And that was their main motivation. So this is how it came about.
Q And in your mind, I guess, what did -- what did the 2012 amendment accomplish to -- to achieve those business ends?
A From what I remember -- obviously, I would love to see the language. But what I remember was that we modified it so that we said we are shifting to a centralized lab model as, quote/unquote, Phase 1. And I called it Normandy, as I earlier said. And Phase 2, which was going to be put the device on site, I thought D-Day was a good name. But boring minds took over and called it Phase 1 and Phase 2.
And so the contract was: Let's go full force Phase 1, central lab model, ship samples to the centralized lab. And -- and I'm sure there were a few other things -- details that we may have changed there.
Q And did -- did the 2012 amendment, in your mind, change any commitments in terms of -- you mentioned timeline being something that was important to you in the original contract.
A Yeah. I don't recall that we still bound ourselves to any specific timeline, but I may be wrong. But I'm pretty sure if there were one, Walgreens would have been calling me every day. So my guess is: We didn't commit to a timeline.
The other thing that's important also is: We also in either contracts, a second one, didn't commit to any certain person to draw finger sticks in the contract either. So we didn't commit to those two significant things. Go ahead.
Q Why was that important to you?
A Well, we wanted to have control over our business. You know, if a doctor said to us, "I'm going to send you my patients. I love everything else about you. I love the fact that you're cheap, you're transparent, your service is great, you're convenient, you're open weekends, you're open late nights. My

patients love coming to you. I love that bamboo tree and the TV screen."

But finger stick is new and healthcare changes very slowly, sometimes a decade, you know, for them to just change simple things. We wanted to make

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sure that we don't lose their business. If a doctor loves everything else about us, we don't want to, and I explained, this example that I just gave you is an example that I used with a lot of people, a lot of investors, and certainly with Walgreens and they all understood that. Yeah, what they care about is more people coming into Walgreens. That was the most important thing.

Q And, I guess, at what point in time did -- did Theranos decide that it was sort of ready to roll out that -- that offering of the -- the store and -- and pursue that launch that we talked about, that soft launch, followed by the -- the opening of additional stores?

A It wasn't necessarily one moment when we said that today is the day we are ready for launch. It's an incremental process. You know, a -- what we were doing was a fairly, like I said, complicated Rubik's Cube kind of scenario where you have how many assays on the CLIA lab, how many are validated, how many are finger stick, how many are from serum, how many are from plasma, how many venipunctures. Are people trained in the field? Are the stores built out? How many people you have in CLIA lab. The ability to pick up samples.

So there were a ton of moving pieces. Even

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if there was a deadline saying, "Okay. Now we are ready for five stores," there was no way to be able to measure that we are ready for five stores. You know, you could only say, "I think we are ready to process a hundred samples a day" or "50 samples a day. Let's start."

And then as we learn, we will add more capabilities. We will obviously recruit. One of the things we wanted to do was get out so we could tell people what we were doing so that could help with recruiting, which it did.

So there was no one big bang moment. It was more, "Okay. We need to launch, so we have to get out." And then we learn in the trade and make products, make our service better. Not necessarily any specific product, but service.

Q I'll hand you what's previously been marked as Exhibit 63.

Do you recognize Exhibit 63?

A I do.

Q What is it?

A This is a contract amendment that we had

signed on December 31st, 2013, with Walgreens, our master purchase agreement.

Q And if you look on the page ending in 102 or

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Page 4 of the amendment --

A Yes.

Q -- there's a section entitled "Innovation Fee."

A Yes.

Q The third sentence in says, "To that end, subject to Section 7, the parties have agreed that Walgreens shall accelerate payment of the innovation fee so that 75M of the prepurchase would become immediately due."

A Yes.

Q Why did Theranos pursue this contract provision?

A Why did we pursue the acceleration of the innovation fee?

Q Correct.

A There were a lot of things that we were doing for Walgreens that we -- we thought we were delivering on and -- for example, exclusivity. And Walgreens had called us in December. They thought things were moving slow and their -- they would have lost the exclusivity. I think the original contract anticipated 12 months national exclusivity. I'm not sure. It's in the clause. And we had already launched in September and November in Arizona.

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So they thought the clock on exclusivity was ticking or -- and they would lose it in 12 months or so. And they didn't want us to go to CVS. They absolutely wanted to make sure this service and all of the features that we were building, software and all the other stuff, stays with Walgreens only.

And they didn't want -- and they knew that at some point when the exclusivity expires -- that was the whole intent that we will work -- we are free to work with anybody else. So they wanted to tie us to exclusivity more, and we said, "In order to do that, you have to make a deeper commitment," which is where this came from.

Q And what was your understanding of -- in 2013 of -- of how Theranos would earn the innovation fee payment?

A Well, there were -- this -- there's some language in the contract I obviously don't remember. But this was meant as a nonrefundable payment to us, the 75 -- a hundred -- they already -- had already paid $25 million before, which is clearly marked as nonrefundable in the contract. And then this $75 million in the contract, if you read the language, was also nonrefundable as an innovation fee payment.

So kind of that was my understanding at that point that this is -- this is what it is.

Q So what you're saying is: At the end of 2013 when this was signed, you understood that the -- the innovation fee was sort of entirely Theranos -- entirely Theranos's and not refundable to Walgreens?

A There were -- there were some minor clause -- I don't remember the language again in the contract. I would have to see it. But there were some edge cases in which it could have triggered returning bits and pieces of it. However, if I remember correctly, Theranos had the right to cancel the contract and -- and not have to return this money. There was no provisions for returning this money if we cancelled the contract.

So we had come up with a lot of language to lock this down in an ironclad way so it's not nonrefundable. Because what we were providing them at that point was exclusivity over CVS and other retailers and some other guarantees that we gave them, best price guarantee during that time period, the first announcements. Right? There were a bunch of other soft things that we had given them.

So the idea was -- yes, my understanding at that time was that this is 100 million nonrefundable for the most part. Yeah.

Q And did the $100 million, other than exclusivity, obligate Theranos in any way, in your mind, at the end of 2013? I mean, did Theranos obligate itself to provide services for Walgreens --

A Well, I think --

Q -- as part of that fee?

A -- there is language here that talks about we cannot work with CVS. We have to work with Walgreens. If we wanted to work with anybody else and we were going to launch, let's say, in a certain state, we had to go to Walgreens first and tell them, "We are launching in XYZ state." And only -- if they said no, in 30 days or 60 days or something like that, only then we could launch with others.

And there were at least three states, I remember, New York, California, Arizona, where effectively, we couldn't work with others, like CVS, particularly, which is -- was their main focus.

So -- so I don't know if I answered your question or not. But the point is that we didn't necessarily have to -- to launch a -- at a certain cadence with them, if this is what you're asking, or provide services to them, but we couldn't anywhere else -- with anybody else either.

Q I guess, did -- I mean, did you ever provide

any sort of services to Walgreens as part of this hundred-million-dollar fee is my question.
A Well, I think I answered that. By "services" is -- if you're talking about lab services, specifically the answer is: I don't remember in the contract if there was any specific language that we had to provide lab services. It -- it was a payment. This is why it was called an innovation payment. It was a payment for us providing services at Walgreens, plus these -- a lot of these soft assets that we provided to them, like exclusivity over CVS, which was the -- I mean, which was the main trigger for this amendment. They wanted to make sure that they locked us down.
Q Did you understand that the -- that part of the innovation fee could be convertible to equity at any point in time?
A There was a very narrow window that they had that -- if they had wanted to convert, which they didn't. So I think there was some part of that that technically could have been converted into equity, but I don't think they -- they pulled the trigger on that. That didn't happen, so -- and it's right here, I think.
Q Sorry, what are you looking at?
A Page Number 103, ending in 103, Page Number 5 of the contract.

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Q Okay. And is that Section 7?
A Yes. Additional Equity Rights. "The parties agree that 50 million of 75 made by Walgreens may be converted at Walgreens' option into equity on such terms as are made available to investors in Theranos prior equity financing in the first quarter of 2014." And they didn't do that.
Q Okay. And then the next sentence says, "The parties also agree that upon singing this agreement, Walgreens will receive an option to purchase up to $50 million in Theranos equity on terms made available to investors who invested in the prior equity financing."
You didn't view that as part of the innovation fee?
A No, not at all. Absolutely, that was separate. If they wanted more equity, they had to -- to give more cash.
Q And what --
A Let me tell you why. The reason is: We were absolutely focused on the fact that we had already provided them great service, which is our exclusivity, not talking to -- not working with anybody else, focusing our entire company on Walgreens. So, yeah, absolutely.
Q I guess in your view, did this

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50-million-dollar option to purchase additional equity similarly have a time limitation of the first quarter

of 2014?
A You know, I think the language seems to be not clear about that, but I don't know the answer to that. Had they come back and they said, "No, we want 50 million equity and there's no time limit on this one," you know, we would have dealt with that at that point. But in general, we were not eager to have Walgreens' equity -- give equity in general.
Q Why not?
A Well, they were our distributor, and we knew the animosity between them and CVS and -- and others. So giving equity to one basically meant the other will just not -- it will be very a difficult partner to work with. Even if you give them better terms, the fact that the other guy may make a dime from their partnership with us was a major issue for a retailer. I mean, it's a pretty brutal competition.
MR. KOLHATKAR: It sounds like you may be getting a little hoarse. Why don't we go off the record. It's 4:41.
THE WITNESS: Thank you. I appreciate that.
THE VIDEOGRAPHER: Okay. It's 4:41. We are going off the record.

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(A brief recess was taken.)
THE VIDEOGRAPHER: Rolling.
MR. KOLHATKAR: Back on the record at 4:51.
BY MR. KOLHATKAR:
Q Mr. Balwani, we didn't have any substantive discussions during the break; is that correct?
A That's correct.
BY MS. CHAN:
Q Mr. Balwani, is it your testimony today, then, that at the time that Walgreens and Theranos signed Exhibit 63 in the summer of 2013 that the 75-million-dollar innovation payment adding to that the $25 million that had already been paid, that was Theranos's to keep and was not returnable to Walgreens?
A Like I said, there were some clauses in the contract that I don't remember that could have triggered returning some of that money, but I don't remember what those clauses were. But for the most part, my understanding is that yes, that money was nonrefundable.
Q Okay. And what portion do you recall may have been refundable to Walgreens?
A I think it was not quantitatively defined, is my recollection. Yeah, that's -- I don't remember exactly what the quantitative number was. But -- but

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it could have been zero or it could have been more.
MR. COOPERSMITH: And it's obviously in the contract if you want to go over the specifics.
BY MS. CHAN:

Q Right. And so -- and earlier in your testimony before the break, you mentioned that the 75-million-dollar payment was being accelerated in exchange for greater exclusivity rights for Walgreens.

Do you remember that testimony?

A That was one of the things. There were other things here that we also had committed to as part of that. One was: If you look on Page Number 1, which is Page Number 0099 -- ending in 0099, it was that second paragraph, first line, "It is the intention of the parties to develop a mutually beneficial strategic relationship that facilitates the successful deployment where Theranos will nationally establish Walgreens as a national partner for Theranos."

So we were --

THE WITNESS: Doing okay?

THE REPORTER: Yeah.

THE WITNESS: Yeah, I was cautious.

And we were making a commitment to Walgreens on that front also. That we were a national partner with them. And they are obviously -- as you can see

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here, that they are making a commitment that they are a national partner.

BY MS. CHAN:

Q Okay. The exclusivity rights that had been negotiated, at what point -- or how long would Theranos have to perform under those rights and give --

A Uh-huh.

Q -- you know, Walgreens exclusivity before Walgreens would be satisfied that Theranos had upheld its share of the bargain?

A Yes. I think there are details here on Page Number 2, which is the page number marked 0100. There's an exclusivity section here that talks about when and how long the exclusivity will last on a market-by-market basis and also names over who. So Walgreens is willing to commit to a higher level of build-out -- do you guys see it (indicating)?

Q Where are you pointing to?

A Page Number 2, the exclusivity paragraph.

Q Okay. Oh, yes, I see that.

A Yeah. "The respective stores, in order to provide service to Theranos, the party's expectation is the majority of Theranos spaces will be gold or silver spaces with no more than 20 percent bronze spaces and a minimum 40 percent gold spaces. As such, the parties

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agree that increased exclusivity to present if a fair market value in exchange for such commitment while the parties acknowledge the need to further document --"

and then it goes in the next paragraph.

It talks about -- in the fourth line of that paragraph that "With respect to California, Arizona,

and New York, the parties agree to the following exclusivity framework: For each state listed above, for the period of 18 months commencing on the date on the 20th, Walgreens stores or other number of their parties may agree located in such state are actively collecting samples for commercial patients, Theranos shall not provide testing services or samples collected on its behalf to any of the following: Walmart, CVS, Rite Aid, Target."

And then -- and there are a couple of other things here. And then also, I think there's another section that says exclusivity will last for 18 months and then automatically renews for 12 months if Walgreens has fulfilled its commitment.

Q Okay.

A And then the next paragraph -- do you want me to continue?

Q Oh, I was going to ask you: So it sounds like there was some period of time that was set in the

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contract for which Theranos needed to give -- to give exclusivity to Walgreens and not work with other retail pharmacy partners; is that right?

A The net effect was going to be that, yes.

Q Okay. It was something at least 18 months and there was some renewal provision --

A Yes.

Q -- if all went well?

A And there were some exclusions for, I think, Safeway and then ultimately for Walmart also.

Q Okay. So -- so why would it be appropriate, then, to think that Theranos could keep the 75-million-dollar payment if Theranos still had to perform on its exclusivity obligations?

A I'm not sure if I understood the question.

Q If Theranos still had to ensure that it was being exclusive to Walgreens --

A Right.

Q -- and not work with other partners --

A Right.

Q -- why was it appropriate for Theranos to -- to believe that it could keep the $75 million? If Theranos walked away and went with CVS --

A Right.

Q -- wouldn't Theranos have to return the money

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to Walgreens?

A If the contract says so, but the contract doesn't say that.

Q Okay. So what would be Walgreens' remedy, then, if that happened?

A Well, we -- I will have to look in the contract. There's a whole remedy section under contracts if this happens and that happens, then what

happens? But I know there's a remedy section in the contract.
Q Okay. But it's your understanding that the $75 million would not be returnable to Walgreens, that would not be a remedy that they could get back?
A Again, I don't know the language, but my understanding at that point was that the -- the language, the way it was written was because the -- the thing is: We didn't have to necessarily give them exclusivity all the way through 36 months. For instance, just picking a number -- for us to have earned that money because the clock had already started ticking. We had already delivered on our exclusivity commitment to Walgreens long before we started and -- I mean, long before we signed this contract.
So exclusivity commitment -- now, from an accounting perspective, if the accountant said, GAAP

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says you can only recognize it by month by month -- I'm not an accountant. That was not my forte. And how do you recognize that on the -- on the books.
But my understanding was that the way we had structured the contract was -- we had long discussions about that. This was not something that they forgot. We had long discussions that "Look, we are doing all these things for you. We will continue to do this for you, but this hundred million dollars is not coming back to you," except for those couple of clauses that we had talked about. If we didn't succeed or we didn't deliver on some things, then it may not come to you. And that's -- the language is there in the contract. But we had very clear discussions about this. A hundred million was ours.
Now, the reason -- also, there's a reason why the innovation payment was called innovation payment. Because Walgreens didn't want to just be, you know, say, "Here's a hundred million dollars," and then somebody who -- some of the lawyers, I think, were ultraconservative told them Medicare may think of that as a kickback. That, you know, Theranos is performing services in your location and now because of that, you're getting patients.
So referring Medicare patients between two

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healthcare providers is I think there are laws against this. Again, I'm speaking out of my league here. But it was -- even this term was used intentionally to make sure that hey, this is not anything like that. This is actually an innovation payment in exchange for all of these things that you're providing us.
Q And it was also your understanding that if Theranos decided not to go out and roll out with Walgreens that also Walgreens wouldn't be able to get back that 75-million-dollar payment?

A I mean, the way -- again, the way we read the contract, at least at this point, because we were delivering to Walgreens, my -- my understanding was: Yes, we had already done the heavy lifting, the contract was already signed in 2012, the amendment, and at this point, we have mostly delivered and will continue to deliver. But if Walgreens changed its mind and stopped rolling out with us and we had to go over to CVS, the money is non -- nonrefundable to you. Absolutely, that was my understanding.

BY MR. KOLHATKAR:

Q But what if -- what if Theranos changed its mind and decided it -- it wasn't worth it to keep working with Walgreens in -- in, say, January 2014?

A Well, we were stuck. We couldn't just work

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with anybody else.

Q Right. So I'm saying, if Theranos just decided it's not worth it, the -- the Walgreens relationship isn't worth it. We're not going to stick to this exclusivity provision. We're going to go contract with Rite Aid or something --

A Well, you're talking about what happens if we breached the contract.

Q Right.

A Well, I don't know. Again, I'm not a lawyer, so that would be out of my league to say what happens when you breach the contract. Obviously, when you sign a contract -- at least my understanding of this was: You don't anticipate breaching the contract when you're signing the contract.

I mean, there's remedy provision -- provisions there, and I think my understanding was: The worst that would happen is: If we don't work with them, we can't work with anybody else either, at least CVS. Which is -- would have been still a good outcome for Walgreens, that as long as we didn't work with CVS. This is why the whole thing was structured this way.

MR. COOPERSMITH: I just want to say for the record, and maybe this is coming, but we're talking about specific terms of a contract as to whether

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something is going to be refundable or not refundable. And the contract exists. We could look at it. We don't need to have speculation about whether it's refundable or not. I mean, we can look at it with reference to this specific language.

So that seems to me a better way. But obviously, you control the record, it's your examination. So -- so go ahead. But I just want to make sure our position is clear that we could go to the contract and then look at the chapter and verse to make sure we're all clear on what it says and what it doesn't say.

MR. KOLHATKAR: Sure, sure. And I don't want to get into a long discussion about contract interpretation.

BY MR. KOLHATKAR:

Q I'm just trying to get a sense of what your understanding of the contract said and -- and what it meant to you at the time.

A Yeah. That was my understanding.

Q Did --

A Again saying -- having said that, I'm -- I will also add that I'm speaking from memory. I'm sure there are specifics there that if I see them, it may refresh my memory and things. I may be misremembering

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things.

Q Did Theranos seek the acceleration of the innovation fee because it was running out of money at the end of 2013?

A No, that was not the key reason. We would have, you know, raised the money. We would have -- money -- I mean, plus I was there. I would have -- just like I bridged the loan to the company before, I could have done that.

Q What were Theranos's discussions around its cash position at the end of 2013?

A At this point we wanted to broaden our partnerships. We wanted to start thinking about working with CVS and others, and Walgreens knew that that was always the top of our mind. That we didn't want to be just exclusive with Walgreens.

And so a lot of this was, you know, done by then in -- just a month before -- or actually, even a couple of weeks before we started negotiating this amendment, the Walgreens CEO and their executive team had invited Elizabeth Holmes and myself to a dinner, executive dinner, in Arizona, and -- I think it was November, but I may be off by a few months. It was cold. It was November.

And in the executive meeting, we were the

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guests of honor, and his -- the CEO and his entire direct reports were there, most of them were there. And he went around the table and he asked pointedly every single person "Tell me how you're going to make sure that Theranos is going to be the most successful project that we have done in the company," or something like that.

So these guys were already thinking that we need to make sure that we own this thing and we run with it and we accelerate this thing. They requested this meeting. We didn't go there. We didn't ask for that.

So it was their work that brought about these discussions, that triggered it. And they wanted to

make sure that we get locked on with Walgreens and not work with anybody else.

Q So you're saying that they proposed accelerating the payment of the innovation fee?

A No. They proposed -- Walgreens is not going to accelerate payment to you. They proposed the amendment. They proposed increased exclusivity. They -- we were complaining about building out stores because we were not specific enough on what the store is going to look, and they saw how our Palo Alto looked like and this is kind of what we wanted everywhere.

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So they said, "Yeah, we will do it," but they found an opportunity to lock us down further. And they said, "Well, we want more exclusivity. We especially want to make sure you don't work with CVS." So that triggered it.

Q So once you had this amendment in place and you -- you were working on the Walgreens rollout, on the Theranos team, sort of who led the -- I guess, you know, the oversight of the Walgreens project?

A I was involved quite a bit, especially through 2014, and I think over time, my involvement with the rollout of the project decreased. I had hired a general manager in Arizona. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) And we built a team under her, who was an operations person. She was basically making sure that trains are running on time, the phlebotomists are being managed, the couriers are picking up the samples. We also had a lab in Arizona at one point, and she was also managing the administration side of the lab also.

Q I guess, who -- who were your primary points of contact on the Walgreens side at the sort of late 2013 or late 2014 time period?

A There were -- there was no one person. It was a broad team. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) was one of my primary contacts. There was

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another person, his name was (b)(6); (b)(7)(C) He was, I think, (b)(6); (b)(7)(C) I forgot his title. He was (b)(6); (b)(7)(C) at that time. And he was put in charge of this project from Walgreens' side, so he became my point of contact.

He had another person reporting into him. (b)(6); (b)(7)(C) He also got in touch with me around the operational details, but he was also engaging with my team in Arizona. But he was an ops guy, operations stuff.

(b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

(b)(6); (b)(7)(C) So he was a, you know, close associate. I used to talk to him.

And there was another guy they brought, and (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C) I forgot the title. I would talk to him. He would be on the calls often.

So there were quite a few people who were my -- my point of contact. And obviously, (b)(6); (b)(7)(C) were close to (b)(6); (b)(7)(C) You know, we loved working with him. So we were a pretty close, like, family with these guys at that time.

Q And, I guess, is it fair to say that Walgreens and Theranos in this time period were in

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pretty constant communication about the specifics of the rollout in Arizona?

A I don't know about constant communication about every aspect because there were a lot of things -- there were a ton of details. I mean, this was our entire business. So chances are, not everything. But to the extent possible, people were talking at the operation level, and I was talking to the executives quite often. Yes.

Q And, I guess, what did you -- what metrics were important to Walgreens from your perspective?

A Well, a number of people coming to the store. If more people come, the more Walgreens makes money. So certainly more people coming to the store. And obviously -- excuse me -- the quality of service was important to both of us because Walgreens technicians were interfacing with the patients. They were checking them in.

And in 2014, under the current model, this contract, Walgreens technicians were performing finger sticks. We had spent a lot of time training them. We had created training curriculums. So that was one of the things we were following also that what percentage of customers we were performing a finger stick on. And then the turnaround time of patients samples.

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So there were a few matrices (sic) related to the service being performed in the store.

Q And was -- was the percentage of blood draws that were taken on finger stick verse venous important to Walgreens from your perspective at this time?

A From 2013 and '14, yes, it was important. We usually talked about that, so I assumed it was important.

Q You described the -- the number of people coming into the stores. Was that commonly referred to as patients per day or patients per month?

A Yes.

Q I guess, would "patients" be --

A They were all terms we used. But, yes, we used to call them patients. But at some point, I think we changed the terminology. We said we should -- we should call them guests like Target does. That's a better name than patient. They may not be sick, so why

call them patients?
So then we changed it to guests. But unfortunately, the old patients per day kind of stuck. And at least in the software side of the world, once you code something -- and actually, were calling them patients in the code, so it stuck for a while.
Q I'm going to hand you another document that's
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been marked as Exhibit 173.
Do you recognize Exhibit 173?
A I don't recall it, but it seems like a Walgreens deck.
Q Do you -- I mean, does the format look like PowerPoint decks that you had received from Walgreens from time to time?
A It looks like a deck prepared by Walgreens, yes.
Q And what -- what was the purpose of these decks?
A It -- it was -- it was different, I think, most of the times. But this one has a title saying "Executive Steering Committee Meeting," so I guess this was a presentation that some people at Walgreens -- and I forgot, I didn't notice the names -- were making to somebody else at Walgreens.
Q And, I guess, what was the Executive Steering Committee?
A You know, I didn't understand Walgreens' naming conventions. I think it was people who were responsible for managing a project or steering a project to success, but --
Q If you turn to the page ending 48212 --
A Yes.
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Q -- it's sort of a type of org chart that -- that describes the Executive Steering Committee, Operating Committee, and then some other information below that.
A Yes.
Q Do you see that?
A I do.
Q And do you see that you're listed as a member of the Executive Steering Committee?
A I do.
Q Did you understand that you were part of sort of the steering committee?
A No. I don't -- this -- this was very nice of Walgreens to put my name in there. And I may have attended a meeting. I actually don't even remember attending a steering committee meeting because I don't recognize some of these names.
But -- yeah, I don't -- I didn't pay attention to that. I think it may be -- I may be an honorary member because I don't think I was going to

Chicago and doing these meetings with these guys.
BY MS. CHAN:
Q Did you receive this presentation in May of 2014?
A It seems like it. I mean, it has my --

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e-mail of my -- I just saw my assistant's e-mail here. It has my e-mail, actually, (b)(6); (b)(7)(C)
Q That's the (b)(6); (b)(7)(C) ?
A Yes.
Q That's your e-mail address?
A Yes. That's my e-mail, yeah.
BY MR. KOLHATKAR:
Q Do you -- do you -- do you recall reviewing it on or about March 14, 2014?
A I don't. If they had asked me to look at something over the phone, I may have looked at it, but otherwise -- it may have been that because, as you just pointed out, I was on the steering committee that they sent it to me as an FYI, or maybe I participated over the phone. I don't remember. But I didn't pay attention.
Q If you look at the page ending 48215, there's a section on venous draws.
A Yes.
Q It says, "Originally estimated that by the end of February 2014 would be below 20 percent of draws and below 10 percent by end of August."
A Yes.
Q Who was providing projections of -- or estimates of venous draw percentages to Walgreens?

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A Yeah. So, first of all, if you'll notice, I think this is still 2014, so we are early, and end of February, I think we were in three or four stores. So if they were given any estimates on projections on what we were targeting -- I don't think these are projections. This is what I was -- we were targeting because we were also learning and modifying a lot of things in our store.
So it probably would have come from me. At this level, I don't think anybody else would have given them these projections, so chances are they came from me.
Q And do you see that the -- it says, "Current projections: Below 20 percent by the end of August, 90 percent confidence level. Below 10 percent by the end of October, 95 percent" --
A Yes --
Q -- "confidence level"?
A -- I do see that.
Q Again, who from Theranos would be providing those confidence levels?
A Well, I don't know the confidence level, but

the projections on what our targets are for certain timelines probably came from me in conversations with Walgreens around what we were planning on doing in those stores.

But I would not -- because a lot of what we were doing depended on Walgreens also. Because they were the ones who were executing. They were the ones who were providing us the technicians who could do the finger sticks. Many times, they didn't have enough people to do finger sticks, so we had to jump in and perform the testing.

So this probably was a collaborative effort between me and Walgreens, but primarily, I would have been the person providing this.

Q In March of two -- or sorry, May of 2013, did you --

MS. CHAN: 2014.

BY MR. KOLHATKAR:

Q Sorry, 2014, did you have a high degree of confidence that Theranos would have less than 10 percent of its test venued at Walgreens on venipuncture by the end of October?

A I mean, if I -- if I said this, then I must have had the confidence. The reason was: If you look at how we started performing our services at Walgreens, our contract called for Walgreens' techs performing the services. So only finger stick. And of course, urine. Like you said, that's easy. Walgreens' techs were going to do finger stick. We had put our phlebotomists in those stores to train them and make sure they performed those services correctly.

And then our plan was: By May or June, our phlebotomists would leave the store, and they would go on and train the next batch of Walgreens technicians. At that point, only Walgreens' tech would be doing the finger stick, and they could only perform tests that were done -- that were being done by finger stick.

Now, as we launched, we started to listen to the market and learn about if that's the right strategy. One of the things that we learned was, like I think I mentioned earlier, that physicians wanted us to do -- provide a broader menu including venipuncture. Physicians generally didn't care about finger stick or venipuncture. And since we had the phlebotomists in the store anyway, and since Walgreens' technicians were not quite trained yet, we added more tests and we started doing venipuncture.

So one of the discussion points we were having at Walgreens' was: "Hey, look, there's a value add to having a broader menu, which includes venipuncture because physicians like it, patients certainly like it because of the pricing and they save

a lot of money." So we decided that around May, June,
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or as we moved our technicians out from the stores, we would put them in the Walgreens 24-hour stores.

So Walgreens' retail pharmacies have two types of stores. One is just a typical Walgreens store, but then they have a 24-hour pharmacy, which is open 24 hours. And they are -- in almost every state, they have those 24-hour pharmacies. And they also -- because they're 24-hour pharmacies, they're bigger, they have more space. They actually have also a dedicated room.

So it was easier for us to actually put our phlebotomists there full-time. Maybe also at -- also a Walgreens' technician. The reason was: Now when a patient comes to our store, if we cannot do finger -- that -- that lab order from finger stick, we can redirect them to a 24-hour store so we can do venipuncture on them.

So some Walgreens stores would have a vena -- the 24-hours stores would have a phlebotomist provided by Theranos doing venipuncture. At all of their stores, we were going to do finger stick. Makes sense? Of course you don't have to answer it.

But that's the -- but the point was: As we moved towards that model, as it was anticipated in the contract, and obviously, we would have modified the
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contract to reflect that -- that either Theranos's phlebotomists, or even at some point Walgreens wanted to hire phlebotomists for 24-hour stores --

MR. MCKAY: Slow down a little.

THE WITNESS: -- by default, the -- most of the tests that were being performed would have been finger stick in the non24-hour stores and only the 24-hour stores would do venipuncture, and that would have given us these finger stick percentages.

So long answer, but that's the kind of background.

Q Just if I could summarize that answer, what you're saying is: Your thought was, these below 10 percent would be specific to those --

A 24-hour stores.

Q -- 24-hour stores?

A Correct. It was not just the thought, it was a very serious detailed discussion with Walgreens that that was an excellent plan. Because the choice was: Either you do that or you have a narrower menu, which is finger stick only, and -- and then you lose some customers.

But that was the thought that Walgreens liked for a different reason because they thought if all you do is finger stick, and Walgreens' technician across
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the country can do this, it can scale faster. Because, you know, it's easier to do finger stick.

And they had done something similar with -- with shots, like flu shots and other shots, so they thought it was an easier model to scale across the nation.

Q If you look at the bottom of the slide, it says, "Why a high number of venous draws so far?"

A Uh-huh.

Q And there's two bullet points provided. "Learning process around ordering patterns" and "Ordering patterns are different than anticipated and Theranos is adding new cartridges rapidly to address these patterns."

Do you see that?

A Yes, I do.

Q In other words, Theranos's validation of assays on finger stick technology was sort of not identified here as -- as a reason; right?

A Yeah, because that was not the limiting factor here.

Q Why were these the only limiting factors?

A Because by May, like I said earlier, we had learned from the market that what people cared about was price transparency, low prices, convenience, quick

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turnaround time. Those attributes were actually gaining more traction than finger stick. A lot of patients actually didn't care about patient -- finger stick. That's -- the learning -- the ordering patterns, this is what we were learning. The reason --

Q I mean -- I'm sorry to interrupt, but I guess this -- this looks like, you know, this is specifically related to a reason for the high number of venous draws.

A Yes. Of the -- yeah, go ahead.

Q So -- so can you explain, I guess, why these are the -- the two reasons for the percentage of venous draws?

A Yeah. Unfortunately, it has a little bit more detailed answer.

Even if a -- a doctor orders a whole bunch of test that can be done from finger stick easily, if you order more than a certain threshold, they trigger a venipuncture. Right? Makes sense? Sorry. It does.

And -- and what happens is: As we learned more and more, we wanted to go -- and one option was to -- for us to go and optimize our assays to reduce the volume requirements for the assays which are causing the threshold triggers.

And this is what it means by -- even on the

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general chemistry or the most routinely ordered test, the reason why we still triggered a venipuncture is

because people just ordered more tests. And what we had anticipated, that some tests will not be ordered with others, was being proven wrong. Also, primarily, because we had a broader menu available.

So the combination of those two meant doctors are ordering more tests in some cases, which just directly triggered venipuncture, and in many cases, doctors are ordering tests that we could have done from finger stick, but they were triggering venipuncture because there was more of them.

Actually, if I may take just a -- one minute and explain one more thing, if that's okay.

Q Sure.

A This is one thing that has been difficult to understand for most people because they think you have finger stick, you have venipuncture. What percentage do you do finger stick and what percentage do you do venipuncture? And the simplest way I used to explain to people was using this example. And if that's okay, I would like to share that with you.

Q Go ahead.

A Yeah. Let's assume a doctor sends you ten patients, and those ten patients have the identical ten

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tests. Right? Nine of those tests, we can do from finger stick, one we cannot. It requires venipuncture. Okay?

And these ten patients came -- and assume the doctor has told us "Fulfill the whole order. Don't remove anything." Now, nine out of those ten tests, we could have done from finger stick, but because of that one test, it triggers venipuncture.

Let's say there's another group of ten patients, they also have ten tests -- different doctor, different patients. They have ten tests. All of those, we can do from finger stick, but if you put all ten of them together, it becomes too much blood from finger sticks. It triggers a venipuncture. Right? So in those cases, assuming again the doctor says, "Do all of them or I'm going to send them somewhere else," it triggers a venipuncture.

The third one is: In our software, we used to keep track of people who are good bleeders and who are not. And good bleeders is people who can bleed easily from fingers. Even when you give them water, some people just have really tiny fingers, and people who have different fingers, they just didn't bleed very well.

So we would capture that information in

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our -- in our software so that next time when the patient came, we just wouldn't even try a finger stick unless they asked for it. We would just default the venipuncture because the patient experience was being

negative.
So let's assume ten of those people showed up also, and the software prompted all ten of them be venipunctured. Now, let's assume there's another, a fourth group, and this is the last group that had ten patients. We could do all ten of them from finger stick, but the doctor has said, you know, the example I gave you earlier that "This finger stick is new. I love you for everything else, but not finger stick yet." Let's assume this is that doctor.
Now, again, we could have done all those ten tests from finger stick, but the doctor has instructed us to do venipuncture, and the software will automatically default venipuncture.
So in this case, we had 40 patients, 400 tests. Only ten of those we couldn't do from venipuncture, 390, 97.5 percent, we can do from finger stick. That's just one example of ordering patterns, how it impacted our finger stick versus venipuncture decisions.
So even though, technically speaking, if you

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asked me what percentage of tests you can do from finger stick, in that example, let's assume that's the whole world, I would say 97.5 percent. But if you stood outside the door of the Walgreens and talked to those 40 patients, every one of them got a venipuncture.
Q I guess, at this point in time -- so I -- so I understand that, you know, you felt that venipuncture versus finger stick was maybe not the most relevant measure of success given the feedback you were getting from -- from -- from doctors.
A Right.
Q Did Walgreens continue to track finger stick versus the venipuncture as a metric to the value that Theranos was offering?
A Yes, they did.
Q I guess, was that a point of frustration to you, then, given -- given this other information that you had?
A Not -- not necessarily. In 2014 -- first of all, Walgreens had raw data around finger stick percentages. They always knew anytime a patient came in, when you checked them in, the person doing the check-in is a Walgreens technician. So they, of course, know how many percentages they are getting --

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of finger sticks that they are getting. So they already know.
In 2014, I was still working with them because our contract and business model was what I explained to you earlier, which is: Non24-hour stores, Walgreens technicians doing finger sticks, and then

24-hour stores, venipuncture and finger sticks, both.
So, no, 2014 all the way through Septemberish, August, not a point of frustration. But around that time -- sorry. Do you want --
Q Yeah.
A Around that time frame, we started discussing the model shift that it may make sense, more sense for us to take over more and more of performing the service, put our phlebotomists, and -- and we started shifting.
Now, even after --
Q Sorry, just can you clarify what time frame you're talking about that --
A Yes.
Q -- that it started shifting.
A I think it was around August, September, we had early -- September, these early conversations.
Q Of 2014?
A Yeah, 2014. Sorry. Yes, good point.

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And then October 2014, the conversations got deeper, and there were changes -- monumental changes happening at Walgreens. Their management was changing. And I can get into that if you want.
And -- but the finger sticks were still important to them and us because it was a differentiating factor. But that's -- that's what it was.
And in 2015 -- after 2015, January, the equation shifted because then they effectively became the landlord and we became the tenants. And then that was a different -- a different world for us.
Q I want to turn to another slide in this deck. It's ending in Page 48220.
And do you see this diagnostic testing timeline? Are you able to read that all or --
A I can try.
Q You know, I can mark as a -- as another exhibit a blown-up version of this slide.
A Oh, you have a bigger one?
Q Yeah. I'll mark it as -- I'll mark it as 244.
A Thank you.
(SEC Exhibit No. 244 was marked for identification.)

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BY MR. KOLHATKAR:
Q Do you recognize review -- reviewing timelines like these from -- from Walgreens?
A No, I don't recall. Not often. I don't -- if -- if they sent me this one, this is probably the only time, or a couple of times more, but not often.
Q It looks like in -- you know, there's -- it says, "Pilot ten stores in Arizona, May 14." And then

it looks like it's still got pilot stores, 11 stores by August 21. And then it looks like Q1 '15 and Q2 '15, it's market selection and store selection. And then in, looks like, Q4 2015, 500 stores.

Do you see that?

A Where is the 500 stores?

Q Under --

A Oh, yeah.

Q -- scale, 500 stores.

A Yes, I see that.

Q And then -- and then there's another market selection and store select --

A Yeah.

Q -- selection and scale to a thousand stores by Q4 fiscal year '14?

A Yes, I see that.

Q And was it your understanding in May 2014

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that Walgreens only planned to open 500 stores by the end of fiscal 2015?

A No, that was not.

Q What was your understanding about the number of stores Walgreens was planning on?

A We had -- we had different meetings and we had different numbers. I recall -- and these are -- these are fiscal years, as you pointed out, so you're talking about Q2 fiscal year 2015 would be around January of 2015. Actually, even sooner. August, September, October, November, December, January, February. So in the winter of 2015.

We had another meeting, I think, in summer -- I don't know when -- when is this slide is from? What's the date for this?

Q It looks like to me --

A May.

Q -- from the May slide.

A Yeah. I think we had another meeting that I had participated in in July or August with Walgreens that had 2,000 stores that we had discussed and committed that we are going to push hard to roll out to by fiscal 2016. So these numbers changed.

The other thing also is: As I learned, the Walgreens -- this is for an internal audience. This is

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not for us. And Walgreens guys were very cautious not to overcommit themselves to the CEO and executive committee on what they were going to do. They wanted to under-promise and over-deliver. So -- so that was their mindset also.

Q I guess, what -- what gave you the impression that they wanted to under-promise to their executive committee and --

A They used to tell me all the time.

Q Who at Walgreens?

A [redacted] This would come up constantly. Like, "Don't" -- and when you're in front of the executives -- because, you know, I'm an entrepreneur, I get excited about technology, so I used to talk to them, and I used to say, "Yeah, we have these possibilities of doing these cool things."

And they would say, "No, no, don't -- don't mention those things in front of our executives because then they'll push us to move faster."

And so this was a constant, like, not once or twice, constant at Walgreens, always under-promised to the executives.

Q You can put -- you can put that aside and you can put --

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MS. CHAN: I have a couple of questions.

BY MS. CHAN:

Q So in your earlier testimony, I think you mentioned that one of the metrics that Walgreens was focused on was patients per store per day.

A Yes.

Q Do you remember that?

A Yes.

Q What was your understanding as to what Walgreens wanted to see that number get to be?

A Well, that's a good question. I think, again, what they had promised the executives is, what I had heard from them was a 10- to 15-patient number is what they -- they -- they talked about. But between us what we used to talk about is, you know, blowing past that number, you know.

So we -- we knew from our firsthand experience observing traffic at Quest Diagnostics and LabCorp that those guys get, on average, 80, a hundred plus, sometimes 200, 250 patients per day. So we knew that the potential was very significant in terms of the upside. But that was me -- my conversation with them.

Q And who did you discuss the goal of getting to 10 to 15 patients per store per day with?

A That was not my goal. I didn't discuss with

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them. They shared with me that this is what they're telling the senior executives is their goal. I didn't see their -- I didn't see their model. They didn't -- they didn't share that with me.

Q Who shared that with you?

A [redacted] There was a guy, he was an accountant. [redacted] His name was [redacted] [redacted] There was -- then [redacted] [redacted] I mean, it was a common theme. I used to spend a lot of time with these guys. Like I said, we were close like family.

But they used to say, "We are telling everybody 10 to 15. When you get in front of the executives, do not mention a number higher than that because we will under-promise and over-deliver."

Q And what was your understanding in the 2014 time frame as to the number of patients per store per day that you were seeing?

A In what time frame?

Q In 2014.

A Which time frame?

Q Did it -- did it change from --

A I don't recall.

Q Do you have an understanding as to what it

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was in 2014?

A I think it depended on the stores. There were some stores we were seeing receive 10, 15, 20, and some stores we were seeing five or even less per day on average.

We learned later, unfortunately too late for us, that a lot of these stores that were assigned Theranos -- to Theranos were the -- what Walgreens used to call underperforming stores. These are the stores that were not performing for them as pharmacy and other products they sell in Walgreens.

So they used to measure the metrics, and they put us in those stores thinking somehow we will sprinkle magic dust and make them high-performing stores.

So what happened was: When a certain store doesn't get enough Medicare patients, we -- we also don't get it by -- by default. So -- but it was later. But that's the --

Q Who -- who told you that you were being placed in underperforming stores?

A We got a spreadsheet from Walgreens that had data on every single store Walgreens owned across the country, the entire country. Sales broken down by the front end, the pharmacy, growth revenue numbers,

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ranking in a given geography. I had the entire spreadsheet for literally all eighty-eight -- 8,800 stores, a ton of data.

Q When did you receive that?

A I don't remember the date. I think it was maybe 2014ish, mid-2014 probably.

Q Who did you receive it from?

A I personally didn't receive it. The person who received it was (b)(6); (b)(7)(C) , and then he forwarded it to me. Because it was -- we were -- actually, it was a follow-up -- follow-on, I think, to the comment that I made earlier that June -- July or August time frame, we were talking about, you know, 2,000 stores and we started thinking about where we

want to be, what geographies.
And in that -- that meeting, I told Walgreens, "Look, you know, you guys, you really need -- the next 200 stores you give us, you've got to give us good stores so we can go and succeed and show that this is a great idea. Because you have given us the toughest market in the nation, Arizona, and the toughest -- the worst stores in the nation -- in your geography. And you need to step up and give us good stores and good geography, good states like New York and California so we can hit home runs."

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Q And did you understand, when you had these discussions with the Walgreens executives, that, you know, 10 to 15 patients per store per day was the goal and that there would be trouble convincing management -- higher management to roll out Theranos services in Walgreens stores if you weren't able to meet that goal?

A No. That's completely not my understanding, and that would also be wrong. Because as you saw in the contract, Walgreens made a hundred-million-dollar commitment to us for a national rollout, and if we went to them and said, "Look, we want to launch in Illinois," and they said, "No, we are not committed," then we would have launched with CVS. The amendment shows that very clearly. So -- you have -- you have a question, it seems like.

Q I don't think anyone wants to interrupt your answer.

A Okay.

Q So go ahead.

A Oh, yeah. So -- no. So it was very clear to us that if they said no, great. We are going to work with CVS or somebody else is the first answer.

The second thing is: It is just simple math. If you look at a hundred million dollars and how they

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were going to make any profit, let alone break even, it meant a very large number of stores with a large number patients coming in.

So these guys were all in -- all in. As (b)(6); (b)(7)(C) told us at the dinner that I talked about in Arizona, that this company is all in. We -- we are going to make this successful.

Q So you're saying because Walgreens had already paid Theranos a hundred million dollars, and as we talked about earlier, that was not returnable to Walgreens, they already made that commitment, so it wouldn't have made sense that Walgreens would want to slow down the expansion of the stores because they wouldn't be able to make that hundred million dollars back?

A Well, that's -- that's one reason. What

I'm -- there, I'm saying it's just simple logic and math that tells you that's the case. However, there's also the contract where they're saying they're a national partner and the enormous number of conversations that we had with (b)(6); (b)(7)(C) where they said, "We are all in. We want to roll this nationally," there -- there were constant dialogues just all over the place.

The reason I was talking about a hundred

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million dollars is: Walgreens has -- had done a fair market value analysis on the services Walgreens was providing as part of Theranos services and -- under this contract. Which means, you know, they had a technician who was going to do the finger stick. Somebody had to check in the patient. The IT guys have to install the terminal. All of that stuff. They did a fair market analysis. And they told me it was -- $9.65 was their cost of services. That meant only $0.35. And if they were getting 10 bucks from us as part of the service, $0.35 was their profit.

So in order to even break even on the hundred million dollars innovation payment, you know, you can do the simple math, but my math is: We had to be not only in 1,600 stores, but much more -- many stores. And 10 patients at 1,600 stores would take them years to even break even. And assuming they're not making -- making any interest on that investment.

So I can do the simple math for you if you want, but it would be -- they -- they needed a large volume to be able to recover that investment.

Q But why continue rolling out with new stores if Walgreens wasn't breaking even, as you say, wasn't making money because the patient traffic in stores wasn't meeting the 10 to 15 patients?

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A You're talking about in Arizona or in general --

Q In general.

A -- as a -- conceptually?

Q Yes.

A Yeah. So it's highly likely that if, for instance, we didn't succeed, and let's say we went -- went to California and New York, right, we opened a hundred stores or whatever. Right? Let's assume we only went to California, and Walgreens is not -- we are not being successful, then we go to them saying, "Go to the next state." They may say, "No, we don't want to." Fine. We would go work with somebody else like CVS.

At that point Walgreens may not grow with us. I don't think there was a commitment from them that we're guaranteeing you 2,000 stores, so --

BY MR. KOLHATKAR:

Q What was the patients per day number that

mattered from Theranos's perspective? I mean, it wouldn't make sense from Theranos's perspective to offer services, you know, to a thousand stores if you're only seeing two patients per day; right?

A Yeah. Yeah. I mean, we had modeled that in -- in the financial model to see what the break-even would be, and those -- there were a lot of different

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assumptions as to how many -- how much money we were spending on the stores. Was it in the current model or the new model because the economics were changing between us and Walgreens.

So there were a lot of factors that -- that's the whole purpose of the model. That can you just modulate some -- one and the other, and you'll see where the break-even happens, at what volume per store per day per patients.

Also the requisitions, the revenue per requisition, or per patient. Right? And revenue --

Q Sorry -- and sorry. I've just -- seen that term a couple of places. Did you always understand revenue per requisition to mean revenue per patient?

A No. Requisition is different from patient.

Q Can you explain the difference.

A Yes. A patient can bring two requisitions. Let's say a doctor gave you a req., and you didn't go to the lab because you didn't want to, and then some other doctor said, "Get this test done." Now you have two requisitions. Right? And you bring them to a Walgreens store. Those are two requisitions. They may be different tests, they may have similar tests, but they're two requisitions even to one patient.

Q I guess was it common for a patient to bring

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in requisitions from multiple doctors?

A I don't know if it was common, but it did happen. I don't know how common. I didn't track that. But yes, absolutely, it happened.

Q And how would that be tracked in the -- in the patient per day metrics that -- that you were tracking with Walgreens? Would they be tracked as one patient or two?

A It would be tracked as one patient. That information didn't split that into requisitions. Because we were providing patients per day, not requisitions.

Q In that situation, would you pay Walgreens just one 10-dollar fee?

A Yes. Correct.

BY MS. CHAN:

Q Just looking back at the Exhibit 173. Sorry, if you --

A No worries.

Q -- can grab that back.

So if you'd just turn to the page with Bates ending 214.
A Yes.
Q You'll see there is an average patients per store per day. As of February 7th, 2014, it's .8.

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A Yes.
Q Do you see that?
A Yes.
Q And as of May 1st, 2013, it's 3.1?
A Yes.
Q Was that consistent with your understanding in May of 2014 as to the average patients per store per day that you were seeing in stores --
A Yeah.
Q -- for these days?
A If they're here, then chances are, they're right. Because Walgreens had full visibility into this data because obviously, they were checking people in. So I would guess they are right.
Q Okay. And then with respect to the venous draw percentages, as of February 7, 2014, it was 43 percent, and then May 1st, 2014, it's 39 percent.
Was that also consistent with your understanding of percentage of venous draws that were being performed at that time?
A Yeah, venous draws. This is not finger stick, yeah. So that seems reasonably consistent, yeah.
Q Okay. Did either of these numbers change significantly in 2014?

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A I think they -- they used to fluctuate over time. They did change, yes.
Q Okay. Did the percentage of venous draws ever go above 50 percent?
A I don't remember top of my head, but at some point, they did, yes.
Q When?
A I don't recall the top of my head, but --
Q And how do you know that?
A Because I just have a vague memory that our finger sticks and venipuncture fluctuated, and 50 percent, they -- you know, at some point they dropped. So I know for sure they went down. I just don't remember when.
Actually, you know, you asked me in 2014. The answer to that is: I am not sure about 2014, but I have a memory that it did go down below 50 percent.
Q That venous draws went below --
A Sorry, venous draws went up.
Q Venous draws went --
A Above 50 -- 50 percent.
Q Or do you mean finger --

A No. This one has venous draws here. So it says 43 percent. That's -- actually, when you asked me that question, this is why I did a double-take here.

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The venous draw percentage went up above 50 percent. That means finger sticks fell -- went down below 50 percent.

THE REPORTER: 15 or 50?

THE WITNESS: 5-0.

BY MR. KOLHATKAR:

Q What -- do you -- and you said you don't think that happened in 2014 or --

A No, no, no. I'm saying I don't remember if it happened in 2014 or not. I know it happened during this time. I just don't know when it happened.

BY MS. CHAN:

Q And do you know if the -- the average patients per store per day ever changed in 2014? Did it go up?

A I wouldn't be able to recall that because as we got to 40 stores -- because the 10 or 20 stores were new, so I don't remember what was the patient volume initially in new stores. But I don't know if they -- it changed or not.

BY MR. KOLHATKAR:

Q I'm going to hand you a document I'll mark as Exhibit 245.

(SEC Exhibit No. 245 was marked for identification.)

0378

BY MR. KOLHATKAR:

Q And just for the record, Exhibit 245 is a multipage document Bates-stamped TS-1052342.

It's -- it's a long document. I don't need you to review the whole thing, but generally, do you recognize what Exhibit 245 is?

A Yes. It seems like an e-mail from (b)(6); (b)(7)(C) to me, and Elizabeth, and a bunch of other people.

Q And do you recall reviewing this e-mail on or around May 14, 2014?

A I don't recall exactly, but it has my name on it, so I probably looked at it.

Q If you just look on the first page of 245, the e-mail from (b)(6); (b)(7)(C) And it's sent to WAG Daily Report.

A Uh-huh. Yes.

Q What is WAG Daily Report?

A In Microsoft Exchange, you can create aliases and put a whole bunch of people under that alias. It's like Twitter. So -- and then when you send an e-mail to that alias, it goes to everybody who is on that distribution list. It's called a distribution list, actually.

Q Do you know who was on this distribution

list?
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A It changed over time. I mean, I don't recall exactly, but it seems likes I certainly was.
Q Does it look like from the response that Ms. Holmes was? It looks like she's responding, asking for some additional information to be put on these reports.
Do you see that?
A Yeah. So she either was on it or somehow she got the e-mail and she responded to it.
Q Did -- did Ms. Holmes keep track of -- of this venous versus finger stick percentage that customers were experiencing at Walgreens?
A No.
Q How do you know?
A We didn't have many conversations about it. We had a few. And anytime she needed the number or detail, she would always reach out to me saying, "Can you give me an update of what's going on." And I would give her an update and I would explain to her what in detail was going on. But it was not a frequent occurrence, which led me to believe she's not tracking it.
BY MS. CHAN:
Q Was Ms. Holmes ever -- was she ever aware that Walgreens thought it was important to reduce the venous draw percentage?
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A At what -- what time?
Q In 2014.
A I don't know if I communicated that to her or not. I mean, she knew in general that before summer of -- like I mentioned earlier, that our model was that we will, you know, scale with Walgreens only around finger stick tests.
So in that regard at that point, it was important, but I was not -- actually, not briefing her on the operational details or even had Walgreens conversations because that would double the time that I had to spend on the same project, so I was not doing that that often.
Q And do you know if she was aware of the fact that Walgreens thought that patients per store per day, that metric, was important to them?
A It was important to everybody in general because that's what's -- that was our business. But again specifically if Walgreens had asked me if it was important or not, I don't know. And the reason for that is: A lot of the reasons why we were not seeing the patients per day was because of Walgreens' execution. So they couldn't complain to us too much about patients per day because they were the roadblock on many of those reasons why we were at a low -- low
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patient count.
Q So are you saying that she wouldn't have been aware that that was important to Walgreens?
A She may have been aware it was important to Walgreens, but then she was also aware because I told her that these are the reasons why we are slow, and those reasons were Walgreens.
So it is possible. And the reason why we didn't talk too much about this topic was: She assumed that at some point, Walgreens was going to get their act together and fix these issues so we could scale it. But that would be my guess. I didn't talk to her about that.
BY MR. KOLHATKAR:
Q You can put that document aside.
In 2014, were you generally familiar with something that's called the Walgreens' Well Experience?
A I recall the name, yes.
Q What was your understanding of Walgreens' Well Experience in 2014?
A Walgreens had started this project where they were going to try to make Walgreens stores better, look better for patients' experience. And so they were doing construction in a lot of stores.
And so, for example, (b)(6); (b)(7)(C)

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(b)(6); (b)(7)(C) had a vision of turning Walgreens into a healthcare company away from their current business, which is, you know, alcohol, tobacco, and candies, and sugar, and this and that. And he really wanted Walgreens to be -- just like Starbucks is the third location between home and office, let's say he wanted Walgreens to be the third location between your doctor and your home. So people could come there.
So he was building these Well Experience format stores where they could provide more healthcare services. And as -- part of that would have been a space dedicated to Theranos -- as we scaled the gold and silver locations was part of that.
Q And was it your understanding that Theranos would be part of all Well Experience stores, or just that in the process of building out the Well Experience stores, some would be selected for -- for Theranos Wellness Centers?
A It won't -- my understanding at that time was: It wasn't necessarily all because we didn't have to be in all stores in a geography to begin with. I mean, they have 8,000 stores. We didn't think we had to be in 8,000 stores. And if you go to New York Times Square, they had like, seven Duane Reades. If you're in just one, you can see the others. Right? So we

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didn't have to be at all seven Duane Reades.
So I would -- I would say not all 2,000, but

in general, those stores were picked to be a Well Experience store for a reason. Because they were either more profitable, they had a better clientele. So the assumption was: Those reasons are good enough reasons for whatever other services Walgreens intended to offer. They were thinking about growing their clinic business, the healthcare clinic.

Walgreens had a -- I don't know if you know, Walgreens had an urgent care clinic business. They had about 400, 500 locations. And CVS now has about 1,500. So CVS ran with that business and Walgreens, I think, slowly shut it down because they didn't succeed.

But that -- those stores were meant for healthcare services, and my expectation and understanding was from many conversations with Walgreens that those were the gold and silver, quote/unquote, locations.

Q I'm going to hand you a document that's previously been marked as Exhibit 176.

And again, without reviewing the whole thing, do you generally recognize this document?

A Yes, I do.

Q What is it?

0384

A This is a meeting minutes from a meeting that we had had with Walgreens. I cannot tell where we had it, but seems like a meeting minutes.

Q And was it -- what were these partnership meetings?

A Where?

Q What were they?

A They changed over time depending on the participants. I would attend when I could. When I -- when I did, then the subject would -- matter would be more strategic also, not just operational details. But there were many that I didn't attend, and then in that case, they would be mostly operational in nature.

Q And did you receive this document on or around August 11, 2013?

A Yeah, it seems like it. That's the -- my name is on the e-mail, I think. Yes, it is there.

Q And was it your general practice to review these minutes after these meetings?

A No.

Q Did anyone at Theranos take a look at these after the meetings?

A I never asked anybody, but I wouldn't be surprised if (b)(6); (b)(7)(C) who basically ran these meetings for me when I was in Arizona, would

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review them to make sure they're accurate and include some of our grievances.

Q If you take a look at the last page of the document. It's Bates stamp ending in 54644. Looks

like -- and this is all under the heading -- sorry. If you look at the page before, it's all under the heading Plan For Fiscal Year '15.

A Yes. Right.

Q There's a bullet point that says, "Initial goal for Fiscal Year '15 Sept-Aug was 500 stores. Need to redefine this goal."

A Correct.

Q And then there's -- there's sort of a chart down below where it shows Well Experience stores in 2015 and Theranos stores in 2015.

A Actually, sorry for interrupting you. The next line is also important here. It says, "Initial goal for Fiscal '15 was 500," and that's the slide that you showed me earlier, and this is probably the memory that I have. She says, "Need to redefine this goal. Nationwide 2,000 to 2,500 stores" is -- is -- is her comment. So that was my understanding from the meeting.

Q And what is the 25 to 35 MSAs?

A Metropolitan service areas.

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Q So you were at this meeting. Your recollection from this meeting in August 2014 was that Walgreens wanted to define up the -- its target for expansion in -- in Fiscal Year 2015?

A Yeah. Actually, the -- another key reason for that was the -- around the same time frame, (b)(6); (b)(7)(C) had visited us I think July or August time frame. I may have mentioned that earlier. And he actually wanted to see if we could be in 4,000 stores.

Q In 2015?

A Yes. And -- because they said, "We have experience rolling services out." They -- he used to talk very proudly about their vaccination services, about how they train people and within, I don't know how many, a year or so, they would roll this thing out nationwide.

So they thought they could do it. They had enough training skills. And if we committed to that, we can do it. And I said, "You know, I don't think we will be ready before because there's a lot of work we have to do." And we were also familiar with the performance of Walgreens' technicians, which was not ideal. So we didn't want to pursue that.

Q So as of August 2014 or mid-August 2014, what was your view of the number of stores you felt

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comfortable with projecting for the next year?

A I wouldn't remember, but it would be in one of the models that I have. So if I -- you know, I probably had a model that was time-stamped around the September, August time frame, and I probably would have included the number there.

BY MS. CHAN:
Q Did you say [redacted] or --
A [redacted]
Q Yeah.
A [redacted] Yeah.
Q Oh, [redacted]
A And --
Q --[redacted]
A Yeah. And he had visited us with [redacted] [redacted] So they had visited us to have the conversation.
BY MR. KOLHATKAR:
Q And it's your memory that they communicated at the time that they wanted to expand beyond 2,000 stores?
A Yes. He actually, I think, may even had used a bigger number than 4,000. But that's too big for my brain, so I remember 4,000. But yes, he mentioned can we roll it out nationally, like 4,000 stores, and be in

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every 24-hour store. He told me they have 1,600 24-hour pharmacies. So he said, "That's easy. You can do that because we already have staff."
BY MS. CHAN:
Q And when was that meeting?
A I think it was the same time, around July, August. I may be off by a month or so, but summer of 2014, about this time frame.
Q When did [redacted] leave the company?
A I believe October of 2014.
Q And so you were -- in terms of your main contact at Walgreens, was -- was it still [redacted] during this time frame?
A He was not our main contact. I mean, we -- like I mentioned, there were a bunch of other people. He was a busy guy, so he couldn't serve as a main contact. He was one of the main contacts. But during this time, [redacted] had direct access to [redacted] [redacted] so he was a contact. But there were other people we could talk to. And obviously, we could have reached out to him if we wanted, but I wouldn't say he was the main contact.
BY MR. KOLHATKAR:
Q Around the time that you heard this desire to expand, and -- and your memory thinks that this

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partnership meeting involved expanding to -- to a higher goal for a Theranos rollout, did -- did [redacted] [redacted] ever express concerns to you about expansion beyond Arizona?
A No. No. Because [redacted] was a champion of rolling it out as fast. And he used to say, "If you think 40 is difficult, wait until we are in 5,000" or "4,000" or -- a big number, like nationwide. So no,

he -- Walgreens prided themselves at being an execution machine. We just needed to get our stuff ready. Walgreens can roll it out over night. I mean, I'm paraphrasing here, but they had very high confidence.

MR. KOLHATKAR: Okay. Go ahead.

BY MS. CHAN:

Q So if you're looking back at, you know, the page with Bates number ending 54644, there's this table that's under the bullet point that we were just talking about --

A Right.

Q -- that's got 2015, 2016, 2017. And it's got Well Experience of 2,000 for 2015, 2,000 for 2016, and a 2,500 for 2017?

A Right.

Q Then it's got Theranos underneath?

A Yes.

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Q And 200 for 2015.

A Right.

Q 800 for 2016 and eight -- 800 for 2017.

What was your understanding as to what this table was portraying?

A Yeah. If you go back to the discussion we had about the gold and silver stores, the gold stores are marked as Theranos-only places dedicated to Theranos with an attached bathroom. The silver spaces were developing stores. They -- these -- some stores in some cases had an attached bathroom. I would say most cases, it didn't, but it was possible to build a bathroom. We needed a bathroom for lab services. Sorry, I should have made that clear.

So Well Experience is what was, in my memory, constituted as silver stores. And I think they had sent me a few e-mails which explained what a gold and silver would look like and which would confirm this. But gold was a dedicated Theranos space like you see here.

Q So your understanding is that these numbers represent the number of gold-level stores that Theranos would be rolling out in?

A These would be Theranos-only stores. Now, I don't know if they meant that these are rolling out or

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they're building out. I cannot tell.

But the -- the point I was making earlier was that when we met in this meeting and I remembered the 2,000 number was: We talked about in this meeting that we need to roll out because this is an order from the executives that we need to roll out faster. Like I said, (b)(6); (b)(7)(C) visited us with (b)(6); (b)(7)(C) and talked about even bigger numbers.

So I didn't read this document then, but in looking at it now, it's consistent with the

conversation we had. That when it says "Theranos," those are gold spaces. That means Theranos-only spaces because Well Experience, we were sharing with other services.

Now, they were not really performing other services, so it was kind of exclusive to us, but Well Experience was mostly a shared space. In some cases, it was a small room, in some cases you could actually see -- some of the Well Experience stores, I think in San Francisco, where they have a sliding door. And you do all the patient check-in. All the patients wait outside the door, and then one at a time, you take the patient in and perform the service. And we actually had some Well Experience stores in Arizona that we were using already.

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MR. KOLHATKAR: Mr. Balwani, we're almost out of time on the tape, and I promised at 6:00 to end for the day. So I think those are all the questions we have for you today. And we appreciate your time today and we look forward to resuming tomorrow. So thank you for your time.

We're off the record at 5:59 p.m.

THE VIDEOGRAPHER: Off the record 5:59.

(Whereupon, at 5:59 p.m., the examination was concluded.)

* * * * *

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PROOFREADER'S CERTIFICATE

In The Matter of: THERANOS, INC.
Witness: Ramesh "Sunny" Balwani
File Number: SF-04030-A
Date: Wednesday, August 9, 2017
Location: San Francisco, CA

This is to certify that I, (b)(6); (b)(7)(C) (the undersigned), do hereby swear and affirm that the attached proceedings before the U.S. Securities and Exchange Commission were held according to the record and that this is the original, complete, true and

accurate transcript that has been compared to the reporting or recording accomplished at the hearing.

_____ _____

(Proofreader's Name) (Date)

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UNITED STATES SECURITIES AND EXCHANGE COMMISSION

In the Matter of:)
) File No. SF-04030-A
THERANOS, INC.)

WITNESS: Ramesh "Sunny" Balwani
PAGES: 395 through 768
PLACE: Securities and Exchange Commission
44 Montgomery Street
Suite 2800
San Francisco, CA
DATE: Thursday, August 10, 2017

The above-entitled matter came on for hearing, pursuant to notice, at 9:05 a.m.

Diversified Reporting Services, Inc.
(202) 467-9200

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C O N T E N T S

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C O N T E N T S (CONT.)

EXHIBITS:	DESCRIPTION	IDENTIFIED
254	E-mails Bates THPFM0000677241 through 677245	675
255	E-mails Bates THPFM0003870572	697
256	Copy of one version of slide deck Bates TS315637 through TS0315903	697
257	E-mails Bates THPFM0000868711	732
258	E-mails Bates THPFM0000868708	732
259	E-mails Bates THPFM0000878985	732
260	Document	764

0400

P R O C E E D I N G S

Whereupon,

RAMESH "SUNNY" BALWANI

was called as a witness and, having been previously duly sworn, was examined and testified further as follows:

THE VIDEOGRAPHER: Rolling.

MR. KOLHATKAR: We are on the record at 9:05 a.m. This is the second day of Mr. Balwani's testimony.

MR. KOLHATKAR: Mr. Balwani, do you understand that you're still under oath?

THE WITNESS: I do.

MR. KOLHATKAR: Just for the sake of the record, would counsel enter their appearances again.

MR. COOPERSMITH: Yes. Jeff Coopersmith from Davis Wright Tremaine, representing Mr. Balwani. With me again are John McKay, Kelly Gorton, and Jim Topinka, also for the -- for Mr. Balwani.

EXAMINATION

BY MR. KOLHATKAR:

Q And, Mr. Balwani, since we adjourned your testimony yesterday evening to -- to this morning, you haven't had any substantive conversations with the SEC staff; is that correct?

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A That's correct.

Q So when we -- when we left off yesterday, we were talking about the -- Theranos's relationship with Walgreens. And I want to sort of continue on that

topic a little more --
A Sure.
Q -- at this point if that's okay.
I'll hand you a document that's been previously marked as Exhibit 179.
THE WITNESS: (Witness reviewing document.)
Okay.
BY MR. KOLHATKAR:
Q Do you recognize Exhibit 179?
A I do.
Q What is it?
A It's an e-mail from [redacted] to myself and [redacted] at Walgreens.
Q And do you see the sentence that begins "Two areas which must be focused on are patients per day with a four-plus experience"?
A Yes.
Q "And venous percentage in the 10 percent range"?

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A Yes.
Q What is a four-plus experience?
A We used to have an app, it was a survey app, where when the patients were leaving our store, we would ask them "How was your experience?" And we would give them the app. And on the app, they would tell us how things are going. So they would get to rate the checkout and check-in process, the finger stick process, finding the location process on the scale from 1 to 5.
And so this -- this was an iPad app, and we had, I think, tens of thousands of people who used the app rated our service. And so that's what it was.
Q Was it your understanding here what he's telling you is that -- that the companies need to focus on improving the patient experience and the venous draw percentage?
A That's what he's saying here.
Q And did you understand -- the -- the next line down says, "We need to have a documented detailed plan on both or it will be difficult for me to convince expansion beyond AZ."
Do you see that?
A I see that.
Q In August 2014, did [redacted] communicate

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to you that it would be challenging to expand Theranos services beyond Arizona?
A No, he did not. It was also not [redacted] call. [redacted]
[redacted]

Q Did he ever express concerns about convincing more senior management to expand beyond Arizona?
A This is what he's saying in this e-mail, but like I said, if there were any concerns about expanding beyond Arizona, they would have been discussed at my level with his senior executives. So the CFO at that time, CEO at that time, and a lot of other people.
More importantly, this is also at the same time, maybe a day or two before or after, the document that we got from Walgreens that you showed me yesterday that showed, you know, a plan for 500 has to be revised to 2,000 or whatever stores.
So he's -- I don't know what he means by that, but this was not his call whether Walgreens is going to expand beyond 40 stores or not.
Q Did he ever, in the -- in August, or September, or October of 2014, did [redacted] ever provide you with the impression that Walgreens was not going to roll out to additional stores beyond the 41

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that -- that were currently open?
A No. Let me actually give you more information there. In the month of September of 2014, Walgreens' world shifted very significantly. In -- I think it was September or October, in that time frame, Walgreens discovered a 1.1 billion accounting error, and the entire company went in a panic mode.
They -- at that -- in October, we had conversations where he said, "Look, every project is being reevaluated because we need to dig ourselves out of this billion-dollar error. We need to save costs. I won't even be able to travel for our meetings anymore. We have to" -- "need to do travels on tele" -- "videoconferencing."
So in October, things changed. In October, we started talking about, "Look, if you are not going to build out the gold stores, Theranos can do it in good faith." And we started negotiating with them and started the process of saying, "Look, we can take over a lot more responsibility that you originally had anticipated you will be doing, but we need to modify the terms of the contract."
So that conversation started in October, but it was not in August.
Q And so -- and is that the conversation that

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ultimately led to a discussion of a rental model in the Walgreens?
A Correct.
Q And when in October do you think that began?
A I don't remember the exact date, but I think it was around early or mid-October. But I believe that in November, again we met with the Walgreens executives. I explained to them, "Look, we can take

over more responsibility. That's not a problem. We just want to grow faster."

And they said, "We love that idea." They didn't want to spend money on build-outs.

And then I think in early December, either the Walgreens executive visited us or maybe around November, I got an e-mail from his boss, the senior executive, who were the decision -- decision-makers, not (b)(6); (b)(7)(C) that they had spoken with (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) And I believe he said he had spoken to (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) And he may also have said that he also spoke with (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)

So he sent an e-mail saying, "I've discussed this model. Great model. We should" -- "we should move forward on that."

Q And, I guess, what would the -- you -- you said this -- remind me of the time frame you were discussing for that.

A Yeah. October would have been after the accounting error was discovered. He -- (b)(6); (b)(7)(C) said, "We won't be able to make investments, but we love this business. We want to grow with you. But we won't be able to make the kind of investments that we had anticipated we will do because of this accounting error."

So I said, "That's okay. We can take more responsibility. We will have to change the economics, of course."

But -- and they said, "You know, we want your service in our stores. We love your service in our stores."

As a matter of fact -- that was in October, sorry, to answer your question.

Q And then you had a meeting with -- with the senior executives, you said, in November?

A I think it was in November. And I believe in early December, their top brass has -- had visited us. I may be off by a month or so, but about that time frame.

Q I'm just trying to get your best memory.

A Yeah.

Q The -- so this move for the rental model, was that -- was that something that was going to -- that would require more up-front costs for Theranos; is that right?

A Well, we were negotiating that. It may have required some up-front costs, but it could have also been because we were going to pay rent to Walgreens. One of the points we were discussing was: Walgreens

was still going to build it out, but we would include that in the rent and we were going to lease the space for eight or ten years.

So that part was not confirmed or decided. We were still negotiating that piece.

Q And was the rental model -- were the discussions around the -- that rental model also going to include a change in the per-patient fee?

A Given to Walgreens, yes.

Q And what would -- what would -- what would the change be?

A You know, I think it was either $4 per patient or $6 per patient. I don't remember the exact number. Either it was $6 per square foot rent and $4 per patient or it was $4 square -- per square foot, $6.

0408

But it was some combination of those two.

So we were going to give them a lease like a landlord, but then there were still some services Walgreens' technicians -- Walgreens' staff still needed to provide. And that $4 or $6 was the fair market value of those services.

Q So was it your understanding that Theranos didn't roll out to more than 41 Walgreens store because of this shift in management at Walgreens?

A It was -- it was -- I think it was -- at that time we thought it was a slow-down because, yes, there was a monumental shift happening at Walgreens, but -- and we also, quite honestly, thought this was a great opportunity to negotiate the contract because if we had more control over our spaces, we could maintain our branding. One of the things that we were unhappy about was the patient experience.

And this gave us the best of both worlds. We would still be at Walgreens. We would still be able to take advantage of all the reasons why we went to Walgreens. But now we have our own space, our own brand, our own patients. So it was a good trade-off for us.

BY MS. CHAN:

Q You mentioned there was a conversation with

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(b)(6); (b)(7)(C) --

A Yes.

Q -- that you had?

Who -- who was (b)(6); (b)(7)(C) at the time?

A I think that e-mail came to me from (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) or it may have been from (b)(6); (b)(7)(C) -- (b)(6); (b)(7)(C) sorry. (b)(6); (b)(7)(C)

Q (b)(6); (b)(7)(C) ?

A Yeah. (b)(6); (b)(7)(C) His name is (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) So it may have been one of those two people, but I think the

e-mail was November or December of 2014. I'm pretty sure it was those months, Q3 -- Q4 of 2014.

BY MR. KOLHATKAR:

Q So -- so throughout this time period, you know, while you were discussing the Walgreens relationship with senior executives, with more of the operational folks, were -- were you also keeping track of the -- the venous draw percentages that -- that Theranos and Walgreens were discussing?

A I must have been. I mean, that was one of the regular things that I would -- I would track, yes.

Q And do you recall Theranos improving significantly in terms of the percentage of offering in

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finger stick versus venous in that time frame?

A Do you mean the tests, or the visits, or either?

Q The -- well, for --

A Yeah.

Q -- for -- for the patients.

A Yeah. So no, I don't think the number of percentages in -- for finger stick improved significantly, or may -- it may even have gone down. But like I said yesterday that at that point, once we knew we were taking over as the landlord, our focus on chasing an arrangement that we knew we were replacing got downgraded, which would have been add more finger sticks to our menu. Because we had learned now that finger stick is a great differentiator. And it was still in the future, so we were not shying away from it, but other things were more important at that point.

For example, if you were going to work with Walgreens in this new capacity, there was this new workload, a new project that was going to be on our shoulders, which was construction and planning about the stores, and finding locations, and so on and so forth. So there was more work coming our way.

So yes, I was still tracking finger sticks, but that equation was changing, our relationship was

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changing with Walgreens.

BY MS. CHAN:

Q And would all of that -- you know, the construction that you were just mentioning and being able to roll out, would that have slowed down the pace, then, of Theranos's roll out of services in Walgreens stores?

A You know, if -- in the short term, it may have had impacted. I don't know. When we met with the Walgreens executives I think in December and again in January, this was a very important project for them. They didn't want to lose it because they were -- the reason we met with them and they all came -- except for [(b)(6); (b)(7)(C)] [(b)(6); (b)(7)(C)] came, [(b)(6); (b)(7)(C)]

(b)(6); (b)(7)(C) came. (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)

(b)(6); (b)(7)(C) came to discuss this arrangement. And they made a commitment saying, "Look, don't think of this as our disinterest in what you guys are doing. We still love what you're doing and we still want the exclusivity. We still don't want you to go to CVS. It's just that we cannot make those commitments in construction. So your idea of you

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spending the money, we love that idea. So we are fully committed and we will get the contract done within 30 days."

So yes, there was a risk that it may have had slowed things down, and unfortunately obviously, in reality, it did, but, you know, it was not -- it may have been the short term, but I think -- I thought in the long term, we would have more control over how fast we could grow, longer term.

Q And this meeting that took place, was that in December of 2014?

A I think it was in December of 2014 or early January of 2015. I remember it was cold weather for the Bay Area and it was around Christmastime. So it may have been -- the reason I remember it being around that time was: Because this was very important for them, and for these guys, in their peak holiday season, which is busy season for Walgreens, for all five to find time at the same time, or six, to come visit us in Palo Alto instead of asking us to come was a big gesture, big, big deal.

Actually, if I may add a few more things, it was that even all the way through summer of 2015, even now things were absolutely slowing down, the overall long-term plan at Walgreens was still not changing

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it's -- maybe a part evidence of that was: Two of the participants who were in that meeting who were actually my counterparts at Walgreens, (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) had spoken to me about joining Theranos, to work for me directly. And they had offered to come and help me build the operations organization and scale this business, as we scaled with Walgreens, other retailers.

And (b)(6); (b)(7)(C) actually sent me a long e-mail with his resume attached. So they wanted to come work for me and be the point people rolling this project out.

BY MR. KOLHATKAR:

Q So I guess in October 2014, did you have -- did you have an expectation that Walgreens was going to open any more stores within the year?

A I had a strong understanding that absolutely, they will. They slowed down. We were modifying the arrangements, but I had absolutely no reason to believe that the overall project is not going to get rolled out.

Q My -- my -- my question is specifically did you think in October of 2014 that -- that Walgreens was going to open more Theranos Wellness Centers in 2014?

A I don't remember. Our expectation was -- and

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actually -- I actually think we were planning to -- we had given them a list of additional stores we wanted to open. But like I said, in September there was a change to it. So I don't remember if they -- if that list went to them, we e-mailed them what the stores we wanted -- I actually think we did. We had a conversation with them. We gave them the list of stores that we wanted to open, and we were talking about those stores.

But no, I did not get an inclination from them that they were not going to open any stores.

Q I guess, how would the process work when -- when Walgreens would open a Theranos location? I mean, so, you know, you went from 11 to 41; right?

A Right.

Q How would -- how would Theranos be informed about potential stores and how -- how would the site selection process work in that time frame?

A Well, the first 40 stores, Walgreens picked, as I shared with you yesterday. But we wanted to make sure the next -- that doesn't happen with the next set of stores.

So we -- based on the data that we had and based in the -- based on the data that we got from Walgreens -- I shared with you the spreadsheet they

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sent us. I forgot what time frame -- but we had enough data from Walgreens that told us which stores in Arizona are good.

So our team started compiling the stores that we thought we wanted to be in. There were some contracts with Medicaid we were going to lose if we did not have statewide coverage. So I believe we actually picked stores that we wanted to be in, in Tucson, Flagstaff, and a few other places in Arizona so we can have the statewide footprint so we can bid for Medicaid.

So it may have been -- I actually don't remember exactly, but I would say it may have been that we took a more aggressive approach on what the next stores that we wanted to be.

Q Did Walgreens ever -- in October 2014, did anyone at Walgreens express an affirmative commitment that they would open additional Theranos stores in

2014?
A I mean, I -- I don't think anybody said explicitly, but my understanding was: Because we had the contract in place and our deal was that we are growing nationally, then, yes, my expectation was: They we will grow. Nobody explicitly told me "Yes, in the month of November, we're opening five," or "In the

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month of December, we're opening five." That month-by-month plan, we had not laid out. But my expectation was: We will continue to grow and we're going to continue to grow nationally.
Q Okay. So just -- so just so I understand your answer there, no one at Walgreens explicitly told you that specific stores would roll out -- let me rephrase that.
In October of 2014, no one -- no one from Walgreens gave you sort of a month-by-month rollout plan for the rest of the year; is that --
A That's correct.
Q -- fair?
A Or that's my recollection.
BY MS. CHAN:
Q When was the last store opened out of the 41 stores?
A I think it was end of August.
Q End of August 2014?
A Yes.
Q Would September 2014, would that surprise you if that was when the 41st store --
A Yeah, it's possible. I may be off by a week or two. Yeah. Yeah.
Q Okay.

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BY MR. KOLHATKAR:
Q I'm going to hand you a document that's been previously marked as Exhibit 221. Sorry, it's large.
I'm not going to ask you to review this entire document, Mr. Balwani, but I'll just represent to you that Exhibit 221 is a document that represents text messages between -- or messages between yourself and Ms. Holmes --
A Uh-huh.
Q -- produced by Theranos from her -- from her Theranos-issued phone.
A Uh-huh. Yes, sorry. Didn't mean to say "uh-huh."
Q And if you turn to the page ending in 1036392.
A Okay. I have it.
Q I mean, just -- I mean, do you understand the general format of what this spreadsheet represents? It's got a date and time, the content of the message, and the -- the recipients, and to/from information?

A Yes, I see that.
Q If you -- if you look about the fifth line down, do you see an SMS message from sunnybalwani mac.com to Elizabeth Holmes saying, "We can't scale with WAG"?

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A Page 392?
Q 292.
A Oh, sorry.
Okay. I see that.
Q And do you see it's dated November 19, 2014?
A I do.
Q And did you send Ms. Holmes this message?
A Yes. That's my -- my e-mail address.
Q And you go on to say, "They are terrible and we need SWY and CVS"; is that right?
A Yes. That's Safeway and CVS.
Q And if you look a little further down, there's a message from you time-stamped 5:09:5.57?
A I see that.
Q It says, "They told" -- "They told" -- I guess it looks like "our team in WAG meeting that they don't intend to open more PSCs until July because we missed their IT integration deadline"?
A I see that.
Q Do you recall that meeting?
A I don't recall that meeting, but it seems like that's my text message.
Q Did you have a belief in -- in November 2014 that -- that Walgreens wasn't going to expand until July?

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A No, I did not.
Q Why not?
A First of all -- there are many reasons here. First of all, this one points to a team meeting where some IT guy said they cannot do IT integration. Walgreens' IT, in my opinion, was like dealing with the Soviet Union. If it didn't -- if something didn't make part of their five-year plan, you had to wait for the next five years to -- for that to happen.
So just because somebody from IT said something is not possible, I had dealt with Walgreens' IT for -- since 2010. They couldn't even install a printer, but we still were -- managed -- able to launch. When we launched in the 41 Walgreens stores, they couldn't give us Internet connectivity and we put our own DSR routers in Walgreens store.
So somebody from IT saying something cannot be done from Walgreens' IT literally meant absolutely nothing.
Q Why did you say, "We can't scale with WAG"?
A Because I had a lot of frustrations with WAG that I used to communicate to WAG all the time. I

mean, in my meetings. I sent a long e-mail in 2015 to their CEOs -- to their president and others. So their quality was not good because we were constantly

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fighting a battle in making sure that people get trained.

So I had frustrations with Walgreens, and this is what -- what I was expressing in this text message.

Q I guess, how did your frustrations relate to Theranos's ability to scale?

A I don't think we had issues that were -- on our side on inability to scale. We could have scaled to more stores, but --

Q I mean, you know, to me, it looks like you're telling -- this message could -- could be read to say that you don't believe that you can scale with Walgreens. Is that -- is that a fair reading of that?

A No. I mean, this is a text message. If an important business decision like that was going to be communicated to (b)(6); (b)(7)(C) their company and the board, I would have taken a more formal approach. This is just me expressing my frustration after probably having interfaced with Walgreens' IT guys, which I really didn't like interfacing with.

BY MS. CHAN:

Q So if you didn't believe that they actually didn't want to scale with you guys and wouldn't be opening any more patient service centers until July,

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why did you even write this to Elizabeth?

A No, I was informing her that somebody from Walgreens' IT made the stupid comment of our team. Now, it demoralized our team. So it was worth sharing with Elizabeth so that if she interfaced with Walgreens (b)(6); (b)(7)(C) she could remember this data point so she can talk to them about it. So it was worth sharing our frustrations.

And I often used to bubble my frustrations with Walgreens to Elizabeth because she used to talk to (b)(6); (b)(7)(C) and she would say -- they would ask her how things are going. And she would tell them, you know, we need better chairs. Our check-in process is not good. So there are other things we were communicating.

I mean, this was, you know, a big change for these guys to work with an independent company like us, so we always had frustrations with them.

Q So earlier, you said that you didn't recall this meeting. Are you recalling that meeting now?

A No, no, I don't recall -- I don't think I even attended this meeting. What I'm saying is: In general, the IT guys at -- at Walgreens, what they said something can or cannot be done, I ignored it.

Q Okay. But do you remember somebody telling you from Walgreens that they would not be opening any more patient service centers --

A No.

Q -- until July?

A No.

Q So you don't remember this text message at all?

A No, I don't. I'm just reading it out and saying like I said when I started out, that my assumptions or my -- my experience with Walgreens technicians was that -- the IT guys was: If they said something, I basically ignored it.

BY MR. KOLHATKAR:

Q I guess if you're ignoring it, why -- why are you raising it to (b)(6); (b)(7)(C) ?

A Because it's -- like I said, it is important for her to know what our frustrations in the field. We were a small company. This was not IBM where I cannot share this with (b)(6); (b)(7)(C) . This was an important partnership. Anytime she spoke with (b)(6); (b)(7)(C) Walgreens and (b)(6); (b)(7)(C) others, which she used to, I wanted her to have this data so that if they say, "Can you do this for us," she could ask, "Then can you please ask your IT to move faster."

And that happened all the time. So this was not the only instance when I said, "Hey, you know what? The bathroom space that Walgreens had promised us is terrible. So the next time when you talk to them, can you mention that to them."

So this is a routine thing, and she used to escalate these things to (b)(6); (b)(7)(C) often.

Q And just so -- just so I'm clear, your best recollection is that the statement here, "We can't scale with WAG," doesn't mean that in your mind, Theranos was going to have -- was going to have difficulty scaling with WAG?

A Not at all. Not even remotely. Not even close.

BY MS. WINKLER:

Q So if you don't remember this meeting that this message was talking about, how did you know that it was an IT person that told you this?

A I think it says here, right here, "the IT integration deadline."

Q Where does it say that an IT person told you that?

A Well, one of the IT guys or somebody on behalf of IT would say that. But typically the corporate guys are not going to be able to make a

commitment or a comment on behalf of IT.
But like I said, also, I dealt with Walgreens' IT since 2010. And, I mean, I knew people in Walgreens' IT, I knew their systems, what code they wrote. And like I said, literally getting them to even install a printer in the stores was going to be part of the next five-year phase.
BY MS. CHAN:
Q So you're guessing that it's an IT person who made that comment to you at a meeting?
A Yeah, but I'm -- I'm confident this is a good guess that it's an IT person or a corporate person speaking on behalf of IT, which would happen.
BY MR. KOLHATKAR:
Q If you -- you could turn to the page ending in 6354.
A Okay.
Q Do you see the message chain starting at -- on April 9, 2015, from you to Ms. Holmes? "If contract terms and we don't have 1,000 stores, what happens to 50M remaining innovation payment?"
Do you see that?
A Where are you?
Q At the top of 6354, about the --
A Yes, yes, I do.

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Q What are you asking there? Do you -- do you remember having this -- this exchange with Ms. Holmes?
A No, I don't, but I can read it and see if I can recall something or understand something.
Q Sure. Why don't you just read this page, and then we can go through it.
A (Witness reviewing document.) Okay.
Q Okay. So going back to my initial question, that line, "The contract terms and we don't have 1,000 stores, what happens to 50M remaining innovation payment," what are you asking Ms. Holmes there?
A I think I'm discussing with her the -- something about the -- we were negotiating the contract back and forth with Walgreens at this point, so it's probably something from that that I'm discussing with her. I don't recall exactly what was the context here.
Q Yesterday, we were talking about -- we talked at some length about the -- the innovation payment; is that right?
A Correct.
Q And you -- and you recall generally saying that it was your general view, subject to minor exceptions, that the innovation payment was -- was Theranos's to keep?
A That's right.

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Q What are you referring to when you're talking about the 50 million remaining innovation payment

there?
A Right. So we were at this point trying to incent Walgreens to build out faster. This is -- again notice this is April of 2015. So we were trying to incent Walgreens to build out faster. As a matter of fact, we put incentives for Walgreens to move faster at this point in our draft contract. And as part of that -- and this is the discussion that I referred to earlier, which is: Who is going to pay for the construction?

We had the 100 million dollars that we thought -- or 50 -- I forgot what was the budget. But we said, we can invest that in construction or have Walgreens invest that in construction and use that money towards growing within Walgreens.

Q So, sorry, this is a discussion around using part of the innovation payment for the --

A Yes, that -- that was ours that we were going to either invest directly in the stores constructing them or we would provide this as a sweetener, some money of that, to Walgreens to move faster, build out the stores, and if they hit a certain milestone then we will give them cash incentives.

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Q I guess, what does that have to do with contract terms?

A Because we were negotiating the contract.

Q "Terms" meaning -- you think that means the terms of the contract and not termination?

A Yeah, I think it means if the contract terminates.

Q Okay.

A Right.

Q So I guess what does -- what does the issue of termination have to do with building out more stores?

A I mean, I don't recall. I'll have to read the contract to see what terms were -- we were discussing. I mean, if I had the draft, I would be able to probably recall.

Q You see Ms. Holmes responds to you at -- at 2054:40, "Scale now if need."

A Yeah.

Q And you respond, "So force build 1,000 stores? I don't think that's intelligent."

A Yes.

Q What did you understand her to be suggesting?

A "Scale now" means -- and I'm guessing here again. If I see the contract, I will be able to fill a

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lot more gaps, but I don't remember that. And this is back and forth that I was doing with Walgreens was that build 8,000 stores ASAP right now and give them incentive to do that.

Q If you look a little further down the chain, it looks -- at -- at 2115 and 17 seconds, it looks like you say to her, "I will say we keep 25 no matter what."
Do you see that?
A Yes.
Q What are you suggesting there? I mean, are you talking about keeping $25 million of the innovation payment no matter what?
A Like I said, if I see the contract, I would be able to tell, but it's hard to guess what I meant here.
Q I guess you were -- you were familiar with the -- with the innovation payment at this point in time?
A Of course, yes.
Q And you previously testified that by the -- at the time Walgreens paid that innovation fee, it was your understanding that Theranos would get to keep it?
A Absolutely. It's also, like I said, documented in the contract pretty well.
Q So I'm trying to understand what about the
0429
innovation payment you're -- you're negotiating --
A We --
Q -- here in 2015?
A We were not negotiating an innovation payment. We were using this term internally between us, how to use money to incent Walgreens. We were just using this term to define, you know, either 50 or 60 -- we -- we had decided that the money that we got from Walgreens, we would invest in the build-out. And this is what the discussion was with Walgreens also. When the executive visited us, we said, "Look, we will pay for the build-out. We have the money."
And so we are using that as a -- as a reference point probably at this point. But again, if I see the contract, I would be able to see if this language -- I doubt we used this language in the contract. I'm pretty sure we didn't.
Q If you look at the -- your message at 2115:44, "But if natural terms, then we return 25."
Do you see that?
A Yes.
Q I guess, in that contract negotiation you were discussing, what -- what -- what would be returned to Walgreens?
A I'd like -- I don't remember. If I see the
0430
contract, I would be able to -- I'm sure you have a draft of that. I can see if the --
BY MS. CHAN:
Q What about the contract will refresh your recollection about this exchange?
A It will show me what we were negotiating with

Walgreens and what were we referring to, which payments, what 25s.

BY MR. KOLHATKAR:

Q I guess, is it -- what payment would there be to return to Walgreens at this point in time?

A It would probably be in the contract, in the draft. If I see this, it would refresh my memory. I would be able to give you a better answer. But I don't know what we were negotiating at Walgreens, what were the specifics.

BY MS. CHAN:

Q So you think there was a payment other than the innovation fee payment that you're talking about returning to Walgreens?

A No, I didn't say that. We are -- this is 2015. The contract that I'm -- we were referring to of -- with the -- from -- about the innovation payment was 2012 and the amendment in 2013. That was clear, the innovation payment was us -- was ours.

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Now we are talking about renegotiating the contract and see if we can incent them to build out more stores on -- the way we wanted to. And we were open to using, you know, 50 million, 60 million, a hundred million, or more if it took, to be able to build out stores and accelerate the expansion the way we wanted it.

Now, we may be labeling -- again, if I see the contract, I can probably tell you what we were talking about, but we may be thinking in our heads that "Look, we have this $100 million. We can use that for construction or for other purposes to build our business."

So if I see the contract, I would be able to give you more details.

BY MR. KOLHATKAR:

Q But, I guess, to the best of your memory, this returning 25 doesn't refer to returning $25 million of the innovation payment?

A There's no other money that we had from Walgreens. The innovation payment was ours to keep. We may be using this term internally to describe a concept that we are investing something -- 25 million in Walgreens, so it may be returning that. But again, if I see the contract, I'll be able to respond more

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accurately.

But at this point even here, I had no doubt in my mind that the $100 million innovation payment was ours per the contract.

Q At some point in time, did Theranos stop using its nanotainers in its retail offering through Walgreens?

A Yes.

Q When was that?
A It was around September of 2015, maybe end of August, early September.
Q Why did Theranos make that decision?
A Well, it was a complicated decision. We had an audit from -- by FDA staff in August of 2015 and it started and concluded in three weeks. And as part of the audit, we were having discussions. The FDA staff looked at one of the two -- we were using two different types of CTNs in the field at that time. One was lithium heparin. The other -- other one was EDTA. They have two different types.
Q And lithium heparin, was there an abbreviation used internally?
A Li hep.
Q Li hep.
A Yeah. And that was the -- they were -- they

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were different chemically and then the design was different.

And the FDA had asserted at that time in the audit that the lithium heparin CTN was a Class 2 device. During that audit, we reached out to FDA and said, "You know, you have not told us to stop using these CTNs. If you want us to, we will be happy to do it."

And they said, "No, that's your decision. We cannot tell you that."

You know, FDA sends you a warning letter usually when they want you to do something.

Q I guess, were you part of those FDA discussions?
A In 2015, I was involved with those discussions, yes.
Q Did you receive that communication from FDA saying that -- that they weren't --
A I was on the call along with Elizabeth Holmes and our general counsel with (b)(6); (b)(7)(C) from the FDA side, who is the head of OV -- OIV, I think. Wrong acronym maybe.
Q Do you remember when that call took place?
A Yeah. It was the end of August while the audit was ongoing.

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And we had called (b)(6); (b)(7)(C) We said, "We don't understand. The audit was supposed to be" -- "You know, we don't understand what's the purpose of the audit. Just tell us what you" -- "what you want us to provide so we can provide them."

Because the audit was slightly unusual. Instead of the inspector from the field, there were two people from the DC office also, and they were kind of going back and forth between the field inspector and the DC guys where to focus on.

So we just called (b)(6); (b)(7)(C) because we had a pretty good relationship with the FDA in the DC office. And we said, "If you want" -- "if you have issues with the CTN, please tell us. We have always worked with you and we will do whatever the FDA tells us to do, and we will make any short-term decision we have to do."

And -- and we had submitted the CTN to the FDA for clearance early on in 2014. In December of 2014, (b)(6); (b)(7)(C) had a call with Elizabeth Holmes that --

Q I guess, were you on this call with --

A No, I was not, sorry.

Q Okay. So I --

A Oh, sorry.

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Q We can a talk about the FDA in a little bit more detail in a minute.

A Sure.

Q I guess my -- my question was sort of, you know, when did Theranos stop using the --

A Yeah.

Q -- the CTN at -- at Walgreens and why?

A That was the answer. So when we talked to the FDA, he said, "I mean, that's your decision." At that point, we said, "Look, we already have a lot of data. We are close to submission." And we as a team and a few members from the board said, you know, "Let's just stop using CTNs, submit all the data, even for the CTNs that are not Class 2 devices," which is what we don't have to submit to the FDA, "and then get all of them cleared, and we'll start using them."

So we made the decision to stop using CTNs at that time.

Q Who on the board did you have that discussion with?

A I think it was general counsel and (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)

Q Okay. Was he on the board at that time?

A Yes.

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Q The -- did you communicate the decision to stop using the CTN to Walgreens?

A No, I didn't.

Q Did anyone from Theranos?

A No.

Q Was that an internal company decision not to communicate that to Walgreens?

A Yes.

Q Why did you reach that decision?

A First of all -- this is, again, September of 2015. We were in the landlord/lessee model. We were already executing that in the field. I had to stop

providing them, to the best of my knowledge, the finger stick percentages. We stopped even discussing that for the most part. And I didn't think there was a need for them to know. We were the lab. We were making all the right decisions for -- for our business.

Q If you turn to the page ending in 6476. And this is a -- this is a chain dated October 20 -- 16, 2015.

Do you see that?

A Yes.

Q And do you understand that to be after the time the Wall Street Journal started reporting negatively about Theranos?

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A Yes.

Q And if you -- if you just read kind of the -- the chain starting at "Okay, WAG freaking out. Lack of transparency." If you could read just kind of through the rest of the page, and then let me know when you've had a chance to review it.

A Uh-huh. (Witness reviewing document.)

Okay.

Q Do you see -- do you see the suggestion from Ms. Holmes there, "Then let's show them that this is literally" -- you understand this discussion to be Walgreens freaking out about --

A Yes.

Q -- not knowing about the discontinuation of the CTN use?

A Yes.

Q How did you know that Walgreens was freaking out?

A I think I had a call with either (b)(6); (b)(7)(C) or somebody from Walgreens that they said, "We read about this thing, and you should have told us."

And I said, "You know, I don't think we have to."

But I think I had a brief conversation with (b)(6); (b)(7)(C)

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Q I guess just talk about your relationship with Nim for a second. I mean, would you call him a friend as well as a colleague?

A No. I mean, I would say colleague. I mean, he applied for a job and -- at Theranos, so I wouldn't -- if he was a friend, I would have probably talked to him more about it. But I wouldn't call him a friend.

Q I guess, did you communicate on friendly terms generally?

A I was on friendly terms with a lot of people at work, but I wouldn't say he was my friend.

Q Okay. I guess -- I mean, did he generally give you the impression that he was trying to support

the Theranos relationship at Walgreens?
A I wouldn't say that. I think he generally gave me the impression that he wanted this project to succeed for Walgreens.
Q What's the distinction in your mind?
A Supporting -- doing a favorable impression of Theranos means that he was trying to present us in a -- in some kind of light, and I don't believe that was the case. Yeah.
Q Okay. But he -- he wanted the -- he wanted Walgreens to have a successful rollout of Theranos

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services?
A Yes. That would be my impression.
Q Okay. And so it would be natural for him to be concerned with -- by the Wall Street Journal reporting; is that --
A Yes.
Q -- is that fair?
A Yes.
Q And Ms. Holmes suggesting here -- I guess, what is Ms. Holmes suggesting here? That --
A Which line are you looking at?
Q I'm looking at the line that says, at 1931 and 12 seconds, "Then let's show them that this was literally" -- "that this literally is still up in air, so we literally just decided since the discussions" -- "this discussion is getting aired out in press."
You say. "Okay." You say, "However, issue is: We didn't tell them in advance about switching."
And then she says, "We'll have to present well that we hadn't decided to"?
A Right.
Q And you say, "Bad idea. At this point they know, so need to be transparent."
What did you understand Ms. Holmes to be suggesting here?

0440

A I'd have to read this carefully to put it in context. (Witness reviewing document.)
I don't -- at this point, I don't know what she means by "this discussion" -- "since the discussion is getting aired out in the air" -- or sorry, "we literally just decided." So I don't know what she means by that. But if I were to guess, in my previous comment, I said, "I actually even thought about it, but I got too busy to chat."
So again, it wasn't -- if it were important, I would have called them. But it was more an FYI. That "Hey, by the way, we are going to do that." But I didn't execute on that. Like I said here, I got -- I am busy with that. And I actually don't remember what she meant -- means by that.
Q What are you saying is a bad idea?

A That's what I'm trying to remember here. Yeah, I don't recall exactly what the context was there.
Q I mean, generally, do you recall what -- what -- what suggestion she's making that you think is a bad idea?
A I wouldn't be able to guess by looking at just these three lines.
Q I'm asking you to look at three lines in the
0441
context of, you know, your extensive experience at Theranos.
Do you have an understanding based on that experience and -- and reviewing this document what she's suggesting here?
A I don't. I don't. Because we were having a lot of discussions, so I don't know which specific point she was referring to.
BY MS. CHAN:
Q This seems to me like she's saying we should just tell them that we just decided to stop using the nanotainer. Do you not share that view?
A No, because Walgreens would know when we stopped using the nanotainer because like I said, they had access to the raw data. They were seeing patients. They were checking in the patients. Every time a patient walked in, they always went to the Walgreens who was using the app to check them in.
So Walgreens technician -- if -- Walgreens would absolutely have access to the data on when the -- the CTNs were stopped -- stopped using them.
Q Okay. Then why are you saying that you got busy and so you never told them? If they already knew, why would there be a need to tell them?
A Just as a courtesy.
0442
BY MR. KOLHATKAR:
Q I guess, would there be any reason for Walgreens to freak out about a lack of courtesy at this time?
A You know, Walgreens was worried about the -- the media and the negative article. So people were asking them questions that they could answer -- couldn't answer, and that was the key issue here is that you should have told us what you're doing because when people ask us and we can't answer, we look like fools. So that was the point -- the reason why they were unhappy.
Q I want to turn to Theranos's relationship with Safeway.
A Should I put this away (indicating)?
Q You can put it on this (indicating). Yeah, why don't we -- there's a rubber band. Why don't we --
A I'll just put it -- yeah. Oh, okay.

Q Thank you.
At some point in time, did you become aware that Safeway was considering writing down its investment with Theranos?
A I -- I don't recall that.
Q I'm handing you what's previously been marked as Exhibit 126.

0443

A Okay.
Q Do you recognize Exhibit 126?
A I do.
Q What is it?
A It's an e-mail exchange between myself and (b)(6); (b)(7)(C) at Safeway.
Q And was he your primary contact at Safeway for -- for Safeway issues?
A Yes.
Q And, you know, we talked a little bit yesterday about Ms. Holmes' relationship with -- with (b)(6); (b)(7)(C) is that right? Was (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) sort of the person you -- you dealt with more after (b)(6); (b)(7)(C) left?
A Yes.
Q I want to turn to the third paragraph of your e-mail dated February 18, 2014. You say, "I would also like to emphasize that if Safeway" -- or "SWY" --
A Yes.
Q -- "chooses to write off the note, as communicated to your CFO, there must not be a mention of Theranos."
Do you see that?
A I do.

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Q Does that refresh your recollection about a discussion with Safeway about writing down their note?
A It does.
Q What do you recall about those discussions?
A I had a meeting with Safeway I think a week before this e-mail or around this time frame. The other person mentioned here, his name is (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) -- he's CC'd here in the e-mail from (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) Safeway at that time. They had invited me to meet with them in the headquarters in Pleasanton.
And they had said, "You know, we have not" -- "we have a need for" -- "there's an audit happening at Safeway, and we need to be able to show that this $30 million that we gave to Theranos, you still have it and you have the ability to repay it. And if you don't do that, then we will have to write it off. And that's" -- "we don't want to do that. It's going to be negative for us, and" -- "and we will have to also say we are writing it off because of Theranos, and it will

be negative for you."
I said, "No, you cannot do that. If you choose to do that, you cannot mention our name and put some negative attention on us."
So that -- that was the discussion.

0445

Q And in early 2014, I guess, did -- did Theranos have the ability to repay the $30 million to Safeway?
A I believe so, yes.
Q With what funds?
A I think we had -- I don't remember exactly how much cash we had, but I think we had funds available at that time. We had 29 or $30 million cash already. We had raised some capital in December or January of 2014. Actually, PFM had invested as part of that. And we had the payment from Walgreens.
Q The -- why was it important to you that there not be any publicity around Safeway's decision to -- if they had decided to write down the note, why Theranos couldn't be mentioned?
A Because we had not announced to anybody that we had a contract with Safeway. It was not known in the public yet. And any contract that we were going to announce -- any announcement we were going to make with Safeway we wanted to be a positive announcement.
This was also one of the reasons why we were going back and forth with Safeway around where the pilot is going to be, at which location, because we didn't want any negative spin on why Safeway cancelled this model.

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Q So, I guess, putting this in the context of the Safeway relationship at this time frame, did you understand that Safeway required a pilot before it would roll out to additional Safeway stores in early 2014?
A Not -- no, not necessarily. Even though it was in the contract, our last discussions with (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) which were pretty clear is that he's -- he wanted to move on to the national rollout. And that was the point we were making with Safeway several times that we are past pilot, and we are moving to a national rollout.
And as a matter of fact, there was a milestone payment for which we sent the invoice to Safeway because we had an e-mail interchange with (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) And I remember that. Elizabeth Holmes had sent that e-mail to (b)(6); (b)(7)(C) That "You had already kind of announced to everybody that you are launching a new service in your stores, and that's us, and we are going to do a national launch."
And (b)(6); (b)(7)(C) said, "Yes. We are going all the way."

Q Okay. But after (b)(6); (b)(7)(C) left, did -- did other people at Safeway agree with that?
A I don't -- I don't think so.

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Q Why not?
A Well, other people at Safeway were trying to forget a lot of things that we had agreed with with (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) while (b)(6); (b)(7)(C) was in the room and they wanted to go back to the contract. And we were pointing out to him that a lot of things that we had agreed on in the contract, as we had agreed on, immediately after we signed the contract, will need to be modified.
And we pointed out to him that, for example, the first payment they had made to us of $25 million was already something that was -- reflected that the contract had changed -- the terms of the contract had changed.
Q At any point in 2014, did anyone from Safeway communicate plans to open over a hundred Safeway locations for Theranos in 2015?
A Not explicitly. But throughout 2014, several times, I was negotiating with (b)(6); (b)(7)(C) about, you know, launching our service. We were negotiating the contract. We were going back and forth. But no, I don't recall explicitly if anybody did.
Q And in 2014, did you have expectations that Theranos would open more than a hundred Safeway locations in early 2015?
A I don't recall. I'll have to see the model

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to see what I had -- what's modeling.
Q I guess any assumptions you had would be reflected in the model?
A Yes, I would say so.
Q In 2014, were the -- were the two companies discussing the use of a rental model at Safeway stores?
A I believe so. I -- I forget the time frame, but I think it was 2014.
Q What would the -- what would that rental model have meant for -- for -- for Theranos?
A It meant we could take over the Safeway locations that the -- they had built out about 900-plus stores for us. They sold out -- actually, close to a thousand. They spun off some Safeway stores, so I think the final number was about 800 or 850 by this time because they were getting rid of stores as part of their merger with Albertsons.
So what that meant was: We would be able to rent or lease that space that was built out for us at Safeway stores and use it and provide our services any way we wanted to. And pay them rent, obviously, in -- in exchange.
Q And what were the terms of those -- that rent, if you recall?

A We were negotiating. I mean, we were going
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back and forth about what the terms would be.
Q In 2014, did anyone at Theranos threaten to terminate the contract with Safeway?
A (b)(6); (b)(7)(C) and I had a good relationship, so we used to kind of play that button on each other sometimes, and say, "Look, if you don't want to work, we should terminate." And we both knew we were not going to terminate because they had made a big investment in this, we had made a good investment in this. So we're not planning on terminating. But as part of the negotiations, we used to put pressure on each other.
Q Did you tell the board that you were considering term inating the relationship with Safeway?

A No. We had a discussion with the board that Safeway is not going as fast as we wanted to. There were a few members on the board who knew members on the board at Safeway. (b)(6); (b)(7)(C) was one of them. And he said, "I can call somebody and get them moving faster."
And we said, "Yeah, please do."
And so we were trying to triangulate that problem from different angles, but our intent was: We are working with Safeway as best as we can.
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Q I guess, did you communicate to (b)(6); (b)(7)(C) that you had this sort of relationship with (b)(6); (b)(7)(C) where you could, you know, play the termination card, so to speak?
A Yes. Yeah. We knew that Safeway guys are extremely tough negotiators, very tough. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) And he actually, I think, testified in his testimony (b)(6); (b)(7)(C)

Q What testimony are you referring to?
A (b)(6); (b)(7)(C)
Q The -- did you review (b)(6); (b)(7)(C) -- were you there for his --
A No, I heard that headline.
Q Okay. And again, I'm not going to inquire about what -- you know --
A Yeah, thanks.
Q -- what was communicated to you through counsel.
The -- did you -- I guess, did you speak to (b)(6); (b)(7)(C)?
A No.
0451

Q Separate and aside from the pilot, I guess, specifically, was Safeway still looking for some sort of proof of concept from Theranos in 2014?

A There were some people at Safeway -- they had a new ownership like Walgreens, unfortunately, who, you know, wanted to review what this technology was going to be and what is Theranos. They didn't know about us. And we didn't want to reopen the entire thing -- an entire dialogue with them again, at least with new parties. We wanted to focus on people who had the background because we were not going to engage in another 12 months of contract negotiations with a new group. So yeah.

Q Did -- I guess, did -- did Theranos propose any solutions to sort of complete that proof of concept or --

A Yeah. We said, "If you really want to do proof of concept as a gesture of goodwill, we can pick a place remote and do a proof of concept there." We actually signed a contract in Wyoming, Blue Cross Blue Shield of Wyoming, in anticipation that we will do a pilot if we need to be in Wyoming with Safeway.

And they had 11 locations that would have been away from the public eye. Quietly we could have done a pilot. And if things didn't work out, if they

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want to cancel at that point, fine.

But they wanted to do a pilot in Bay Area right here in San Francisco, and we said, "No." To us -- this is what we talked to [b)(6); (b)(7)(C)] about that this is a national launch. This is what we were preparing for. So no, we are not doing a small pilot in California. That was the disagreement.

Q And in your mind when you were thinking the national launch with Safeway, were you thinking about using that mix of TSPU, commercially modified -- modified commercially available analyzers, and unmodified analyzers?

A At Safeway, the services we were providing?

Q The blood collected at Safeway would be tested on sort of those three categories of machines?

A It would be a central lab -- centralized lab model, which is why Safeway recognized that and gave us the first payment when we got our CLIA license.

So, yes, it was going to be -- now, with the rental model, we could have done anything. We could have chosen not to offer finger sticks if we didn't want to because they were a landlord. And they're doing that with Quest Diagnostics in some stores. So with the rent model, we owned everything.

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Q Did you ever communicate to Safeway that -- that Theranos was using commercially available

technology in its -- in its central labs?
A Yes.
Q Why?
A We had -- 2010, two thousand -- 2011 when we opened our CLIA, all we were doing was venipuncture, and we told them we run them on FDA-clear devices in 2010 and 2011. And as a matter of fact, I think some of our reports may have even included the name of some of our devices initially.
Q Well, I guess, when discussing the -- the national rollout and the -- or the Wyoming pilot, was there any discussion of using commercially available machines?
A Yes. We communicated, like I said, to [redacted] explicitly we are using those machines now and we will continue to use them for any venipuncture or anything we wanted to use.
Q So you mentioned earlier that generally, Theranos didn't disclose what machines it was using because it was a trade secret; right?
A No, no, no. What was trade secret was the modified machines, how we had modified commercially available machines and made them do things that people

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thought was impossible. That was a trade secret. To Walgreens, what I had said was: We didn't want Walgreens to even find out which vendors we do business with because Walgreens would write down those notes and they will go to them at some point if they want to build a lab.
So from Walgreens, we kept it as a trade secret. Also from other people we -- that we didn't trust, we kept it as a trade secret. Steve Burd was not one of them. [redacted] and we didn't worry that under [redacted] Walgreens is going to violate a confidentiality. So --
MR. MCKAY: You mean Safeway?
THE WITNESS: Sorry, Safeway. Yeah. Sorry. Thank you.
So, yeah, [redacted] knew that we were using commercial analyzers. Now, I don't think he ever dug into, like, what machines. Which vendor? Tell me the names, you know. That was not his interest.
BY MR. KOLHATKAR:
Q I guess I'm trying to just understand that. So because you had more trust in [redacted] that you felt more capable about disclosing more of the technology?
A No, not technology, just about -- you're

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asking me did they know we were using commercial -- the machines that we were using. The answer to that is yes. We were using them and we will continue to use them.

Q I guess, what about (b)(6); (b)(7)(C) character, moral character, in -- in your mind, made it okay to -- to explain that to him?

A Well, he was -- in my observation was -- he was not trying to copy what we were doing. He was trying to lock us down for even 10, 20 years. The contracts that he was proposing was mutually beneficial 20-year contracts.

Q Did other people share -- at Theranos share that view of trusting Safeway a little more than -- than -- than Walgreens?

A Trusting (b)(6); (b)(7)(C) more than Walgreens, yes.

Q Who shared that view?

A Mr. Holmes -- Ms. Holmes, I'm sure.

Q And what's your basis for that understanding?

A Just our interactions with (b)(6); (b)(7)(C)

Q I guess, can you recall a conversation with Ms. Holmes where she sort of expressed that sentiment to you?

A No. I mean, nothing specific. It was more

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of, you know, the impression we had of (b)(6); (b)(7)(C) that he's somebody that he's not going to violate our confidentiality.

BY MS. CHAN:

Q Did you ever disclose to Safeway that you were modifying commercially available machines at -- at Walgreens?

A No, we would never do that. Not at Walgreens in our lab. We would not --

Q In your lab, but for the Walgreens rollout?

A No. For the same reasons, that was a trade secret. We would not do that. And we didn't share that with (b)(6); (b)(7)(C) also for the same reason.

Q So what was the status of the Theranos/Safeway relationship in late 2014?

A I don't recall exactly, but like I said, 2014 and even parts of 2014, we were going back and forth in negotiating the terms of the lease agreement. And I think we were stuck on a couple of point -- key points or two or three key points that we were negotiating back and forth.

Q Were there any discussions in late 2014 about rolling out Theranos services in Safeway stores, about actually doing the work to roll out in stores?

A You know, the -- the work we had to do at

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Safeway was not different from Walgreens work. It was identical workflow, same apps, same software. Safeway actually was easier because they had connectivity they were going to provide us. They were -- their IT was better.

So there was nothing unique to Safeway that

we had to do. Obviously, print new lab order forms so people know to go to Safeway versus Walgreens. But there was nothing -- nothing really different for Safeway that we had to do.

Q So my question was: Were there any discussions with Safeway in late 2014 about actually rolling out, printing out lab order forms, getting the rooms ready to open in Safeway stores?

A So the lab order form, no. The rooms were basically ready because they were designed for the national launch, so there was nothing again in the rooms that we had to change. Literally even the TVs that we talked about, the bamboo trees were already there. We had to pick them. Safeway had paid for them. Even the chairs that we had wanted the way we wanted. There were also pictures of entrepreneurs or inventors on the walls. The bathroom was built.

And their bathroom are clean. We designed them. Everything was done. There was nothing that we

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needed to do in the Safeway locations. We just needed to move in. It was at -- all the locations were ready to move in.

Q So were there any discussions for Theranos to move into those stores --

A We were --

Q -- in 2014?

A No. We were negotiating the contract, and as soon as the -- the terms of the lease agreed upon -- were agreed upon, we would have started.

MR. KOLHATKAR: Why don't we take a break. Go off the record at 10:09 a.m.

THE VIDEOGRAPHER: Off the record.

(A brief recess was taken.)

THE VIDEOGRAPHER: Rolling.

MR. KOLHATKAR: We're back on the record at 10:22 a.m.

BY MR. KOLHATKAR:

Q Mr. Balwani, just to confirm, you didn't have any substantive discussions with the staff during the break; is that correct?

A That's correct.

Q I'll hand you a document which has been previously marked as Exhibit 119.

THE WITNESS: Yes.

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BY MR. KOLHATKAR:

Q Do you recognize Exhibit 119?

A I do.

Q What is it?

A It's an e-mail conversation. An e-mail from (b)(6); (b)(7)(C) from Safeway to Elizabeth on June 6, 2014, and then from (b)(6); (b)(7)(C) to Elizabeth again and CC'ing two or three other people that I -- I recognize (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C) but I don't recognize the other two.
Q And it looks like he's asking for a follow-up -- a response to his e-mail from -- from June.
Do you see that?
A I do.
Q Do you know if Theranos had had any discussions between -- with Safeway from that June to August time period?
A I don't recall, but like I said, in 2014, we were talking to them on and off. So I don't remember which month we started and when it stopped. Nothing by -- specifically by month.
Q Okay. And the -- again, it looks like from his e-mail, the -- from the original June e-mail, it sort of discusses that point you addressed that (b)(6); (b)(7)(C) would mention, which is the -- they wanted to

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return to the contract as written; is that -- is that a fair --
A Where are you reading?
Q I'm sorry, so if you look at the fourth paragraph of this message where he says -- the third sentence, "The contract speaks --
A Yes.
Q -- "for itself. It has not been amended or terminated."
A Yes.
Q Is that sort of in line with what you described earlier that they wanted to return to a contract that, I guess in your mind, had been updated by the conversation with (b)(6); (b)(7)(C) ?
A Conversations and also by the actions that we had taken since then.
Q So what were those actions?
A Well, they had given us a 25-million-dollar payment when we had signed up as a centralized lab. The contract as written originally was similar to what we had anticipated we would do at Walgreens Phase 1. And it -- it calls out for us putting our TSPUs on site, and providing cartridges, and so on and so forth.
But immediately after signing the contract --

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actually, (b)(6); (b)(7)(C) sent me an e-mail or message. I recall him saying, "Okay. Now the contract is signed. Let's start negotiating. There's much left here that we need to hash out and discuss more details."
And I think around 2011 or 2012 was the time frame where we -- 2011 was when we got the CLIA lab license, actually, and by then, we had already spent more than enough time. The centralized lab model is better -- it's a better model to scale around. And that's why they gave us the 25-million-dollar payment.

Because the contract asked for completely different milestones for us until we have earned the 25-million-dollar payment.

Q At any point in 2015, did -- did [redacted] -- sorry, let me rephrase that.

You note this message still refers to -- to discussion of a pilot.

Do you see that?

A I do.

Q The second paragraph?

A Yes.

Q At any point in 2014, did -- did Safeway express to you that it was willing to forego the pilot?

A Yes. [redacted] did.

Q In 2014?

A 2013, sorry.

Q Yeah. So in 2014, did they --

A No, I don't recall, no.

Q I'm just going to --

A Sorry.

Q -- let me get my question out --

A Yeah.

Q -- for -- just for the record.

In 2014, did anyone from Safeway express to you their willingness to forego the pilot?

A No. However, in 2014, we were also negotiating the contract. So the pilot would have become obsolete had we signed the lease model. So the two things going -- were going in parallel.

Q And when did -- did Safeway and Theranos sign an amended agreement?

A No, we did not.

Q Okay. At some point, did Theranos terminate its relationship with Safeway?

A Not while I was in the company. I think it happened after I left, if it -- if it happened.

Q You have no firsthand knowledge --

A Correct.

Q -- of termination; is that fair?

A That's fair.

BY MS. CHAN:

Q Do you recall having any discussions with Safeway after this August 1st, 2014, e-mail?

A I don't recall, but like I said, in 2014, I was engaged in a dialogue with [redacted] and many times we spent long times on the phone, in person. So I was engaged with him, but I don't recall which month.

BY MR. KOLHATKAR: Q. I want to turn -- you can -- you can put that document aside. Thank you.

I want to turn to Theranos's relationships with the Department of Defense. We talked about that a

little bit yesterday. And is it fair to say that -- I think your testimony was that you weren't the closest at Theranos to -- to those relationships; is that right?
A That's correct. I think -- I would say, actually, I barely spent any time on those.
Q Did you have some understanding of how much money Theranos received from the Department of Defense?
A If it happened before I joined, the answer is: No, I didn't necessarily look at where the money came from prior -- prior to I joined. But after I joined, I don't think it was a significant amount.
Q And what do you mean by you don't think it
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was a significant amount?
A I don't know, maybe less than a million. But even that, I'm guessing. But anything more than a million I would have known.
Q Okay. So in your words -- in your mind, you didn't think of the DOD as -- as providing a significant amount of funds to Theranos after the time you joined the company?
A Significant amount of revenue to the company. Correct.
Q Do you know if they provided funds to Theranos beyond what would be considered revenue?
A I would not know. I was -- like I said, I was not involved with the DOD significantly.
Q At any point in time, did you become aware that the -- that the DOD was reluctant to test Theranos's device absent FDA approval?
A So I think that's a very broad statement. The question is: Who at the DOD because they are obviously such a huge department. I recall one meeting that I had -- I was -- I had attended with one guy from one unit from -- I think Fort Detrick or -- actually, maybe -- I may be getting that one wrong. I don't remember where he came from, but he was a lab director from the DOD. It was one of the DOD departments. And
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he had visited us and he had made that comment.
Q Do you recall maybe ballpark when that was?
A I don't recall.
Q Even generally by year?
A I would guess maybe 2012 or 2013ish.
Q Did you ever represent to any investors that Theranos had placed a TSPU on an Apache helicopter?
A No.
Q Did you ever represent to any investors or potential investors that Theranos had placed a TSPU on the battlefield in Afghanistan?
A No.
Q Would either of those -- would either of those have been true statements?

A To the best of my knowledge, I mean, we shipped some units -- some units in the military. I think they went to Africa. If any of them happened to be Afghanistan, I would know. But I knew -- I know that one -- or a few units went to Africa. But to the best of my knowledge, I don't recall Afghanistan.
Q So just to answer my question, to the best of your knowledge, that wouldn't have been a true statement?
A To the best of my knowledge, that would not be true.

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BY MS. CHAN:
Q Do you ever recall representing to investors or potential investors that Theranos had placed a TSPU on a medevac helicopter?
A No. To the best of my knowledge, neither I or nobody I heard say that.
Q And had Theranos deployed a device on a medevac helicopter by 2014?
A If it happened, I wouldn't know -- I didn't know.
BY MR. KOLHATKAR:
Q Did you ever hear Ms. Holmes discuss the possibility of using a Theranos device on a medevac helicopter?
A Yes. We used to talk about different applications of TSPUs for the future. So including we used to assess what modifications we'll have to make to put a TSPU in a place like Afghanistan and Africa where there's no connectivity. From the software side, I was involved in how would we use cellular connectivity instead of WiFi or Bluetooth and conditions like this.
And we did spend a lot of time thinking about the modifications. We actually also had done a demonstration for NASA, and we had actually spent a little time thinking about how we would put something

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like this in space because the laws of gravity don't work.
So we had spent some time on those too. So we did have internal discussions, and with other visitors, we used to say, "Is it possible to do something like this?" And we used to talk about a lot of different possibilities.
Q Do you recall any investors or potential investors that talked specifically about the -- the potential military applications?
A I don't recall any specific investor. I mean, we didn't used to talk too much about the DOD work with investors because we were not doing much, and at least for the foreseeable future, we didn't have any plans for that. It was not even part of the model. So we didn't spend much time on that.

Q So is it fair to say, in your mind, that towards the end of 2014, work for the DOD was not something that was part of the business model in the foreseeable future?

A It was not a significant part. If we were going to continue doing some projects for the DOD, which I think we were doing one or two projects, but I was -- like I said, I was not involved with those, it would have not been a significant part of the business

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which is why I was not modeling it in the -- in the model.

Q I guess, did you have concerns with Theranos spending, you know, its limited resources on the project with the DOD?

A I mean, every project is a -- is a concern for me. Anytime somebody says, "I'm working on some project," and you have 80-plus PhDs, hundreds of smart people -- people love projects. And I used to go around killing projects and telling people to focus on what we had in front of us.

So any project was a concern for me, but DOD, I would say I think the work we were doing was one of those missions for the company that we do want -- want to -- if we had more resources, we would have spent more time and resources even if there was no income. But we didn't want to not do that.

Q Why was Theranos pursuing a relationship with the DOD?

A Well, we had made a decision that -- first of all, we had unique applications of what we could have done for the soldiers in the field, and there were a lot of applications that we had envisioned that when we put TSPUs in a battlefield -- a lot of our soldiers die, you know, in the first hour or two hours of the --

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of the time when they get wounded in the field, and there's no way to do a blood test. We were told that soldiers were actually taking blood and putting them on a screwdriver and spinning it manually to centrifuge them in the field. There's no power. There's no connectivity. So we wanted to do something for that. It was part of our mission that we would contribute towards the work that the military is doing. We were -- we were very passionate about that.

And we had also made a commitment, like we did with the Medicare and Medicaid, that we will charge the lowest price to the government, to the taxpayers. And our mission was -- and we used to talk about this internally. We may have even mentioned that to a couple of investors, I don't recall, that when we do the work for the military, most likely it's going to be a nonprofit. We are not going to try to make money off of them. We will cover our costs, of course. But we

hadn't gotten that far. It was just a discussion.
Q You mentioned the centrifuge point. Did -- did any of the TSPU 4.X models have an internal centrifuge?
A All of them.
Q And what about the 3 series?
A I think a prototype of the 3 series had a

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centrifuge also, yes.
Q So none of the -- none of the TSPUs -- none of the Theranos -- sorry, let me rephrase that.
None of the TSPUs used for commercial testing had centrifuge capability; is that correct?
A It was not required in those use cases. Correct. But we could have put a centrifuge, if there was a use case. Like I said, we had a prototype, but none of the commercial ones currently were using centrifuges in the device. Your answer is -- your question is correct.
BY MS. CHAN:
Q Did you tell Dignity Health or anyone at Dignity Health at the time that they were considering to invest in Theranos that 75 percent of Theranos's revenues came from the DOD?
A No, we would not do that.
Q And what -- besides deploying Theranos's devices to Africa, are you aware of any other deployments of Theranos's TSPUs to any other part of the military?
A Like I said, I was not engaged with the military. There were always, you know, interest, and some devices would go to the military for them to run it themselves, which is why when we sent this to

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Africa, I recall -- the reason I remember that is: I think we got a letter from the team that evaluated the device who recommended it to the -- some authority in the DOD that of all the promising technology they had seen, Theranos was number one on their list.
And so this is why I remember it. But there were other projects like this that could have been ongoing. I spent close to zero time on that.
Q So you don't know of any others?
A There was one that we were doing for long term. It was a long-term clinical trial that we were doing for burn patients. Whenever soldiers get burned, there are certain markers that we could have identified faster. And I think we had developed all those assays and we had provided all that -- a bunch of devices to the burn unit, I think it was Fort Detrick. But there was some burn unit that was doing research for burned soldiers.
And again, we were doing that below cost or cost, is my recollection. Because like I said, it was

part of the mission. We were not going to make money from the military.
Q Do you know how much Theranos made from the burn study?
A I don't recall. It was a long project, so it
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was started before I joined the company.
Q So besides the burn patients and the units that went to Africa, are you aware of any other Theranos TSPUs that were deployed by the DOD?
A I mean, nothing comes to my mind. It is possible. Like I said, things are happening. And if I see a document, it may refresh my memory, but nothing specifically comes to mind.
BY MR. KOLHATKAR:
Q I want to turn to Theranos's relationships with pharmaceutical companies. I think you mentioned yesterday most of Theranos's work for pharmaceutical companies took place before you joined the company; is that -- is that right?
A That's correct.
Q Do you know how much money Theranos earned from that work?
A I don't recall. Because like I said, I didn't pay attention to the revenue prior to '09 when I joined. I knew there was one contract we had with Celgene. I think it was for 3 or $5 million. Again, I didn't spend much time on that. It was a long time ago in 2009, so I don't remember the particulars.
Q And I guess, in the 2013 time period, was Theranos doing any work for -- for pharmaceutical
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companies?
A Not that I recall.
Q How about 2014?
A Not sure. Not really, no.
Q In 2014, was Theranos planning on doing any work for pharmaceutical companies?
A Yes. We had plans for that.
Q What plans?
A We had long discussions with Walgreens about doing clinical trials at our PSCs, our locations. That was part of our project plan. And in the 2010 contract and I believe in the 2012 contract, we had called out us working together to do clinical trials.
And my understanding was that Walgreens' -- actually, (b)(6); (b)(7)(C) and a few other individuals had told us that they actually had built a team at Walgreens that was calling on pharmaceutical companies and starting -- starting to build the business. And, you know, as soon as we start -- we are ready, we could start on the clinical trials business.
The second piece was: We already had these relationships in place that the company had, and now

that we had a much more potent solution, a more powerful platform, our plan was to reengage with those customers that we basically had neglected because of

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the work we were doing for Walgreens because that was kind of an all-or-nothing effort for the company.

Q So just on that first point, the Walgreens team you mentioned that was focused on pharmaceutical work, did any of Theranos employees have any contact with that Walgreens team?

A I believe there were a couple of meetings that I had with (b)(6); (b)(7)(C) . I forget other people. But he used to bring people from a lot of other different teams to introduce me to them. And I've met a couple of people from the team. I don't recall the names, but if I hear the names, I'll -- I'll be able to tell.

Q Did he ever describe which pharmaceutical companies he was targeting?

A He may have mentioned some names. I don't recall which ones. Walgreens actually used to make a point of talking their partnership with Theranos as a key benefit to the pharmaceutical companies when they were negotiating contracts. (b)(6); (b)(7)(C) told me that. That it was part of the package of working with Walgreens.

And same thing with hospitals. They were negotiating a lot of contracts with hospitals to be part of their ACO, Accountable Care Organizations,

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deals, and they always mentioned Theranos, and a lot of those people wanted to come visit us. Yesterday when I mentioned that not all of my meetings were VIPs, some of them were just meeting people because Walgreens used to bring them, that was part of that -- that effort.

But they did -- they -- they mentioned a couple of names to me, I just don't recall which ones.

Q How would Theranos have to change its offering in a Walgreens store to -- to account for a pharmaceutical trial?

A Well, there are multiple things we could have done. First of all, fundamentally, we didn't have to change anything because when the clinical trial patients come, they usually ask for a lot of these tests we're offering, plus specialty and esoteric tests. Those speciality and esoteric tests, many of them we could have brought on commercial analyzers and also on finger stick as we needed. We had already done that in the past. That was kind of the pharmaceutical business we had -- all the projects we had.

So we had a bunch of assays that were used for pharmaceuticals. Now, every clinical trial, my understanding, again, I'm speaking from my understanding, with pharmaceutical companies, when

they're developing a new drug, requires a new marker --
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a new -- assay for a new marker, because they're a novel. You develop those assays, you use them three, six, nine months, twelve months, and then most likely, nobody uses them because they're specific to that drug from that pharmaceutical company.

So -- and we had expertise in that. We obviously knew how to develop those assays, especially immunoassays. We were good at that.

Q So was part of the strategy then, that Theranos would -- would develop the assays that these pharmaceutical companies would use?

A Over time, yes.

Q Did Theranos do any work to develop any assays for pharmaceutical companies in 2013?

A No, we hadn't started.

Q Same in 2014?

A Correct.

Q The -- the second point you made about Theranos had existing relationships with pharmaceutical companies, do you remember which companies those were?

A There were a few meetings that I attended, so I remember those. There was a meeting that I attended with GSK, GlaxoSmithKline. There was one meeting I attended -- one or two with Celgene. I may have attended a couple of other meetings, but those are the
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ones I had attended personally.

Sanofi-Aventis, I had attended a couple of meetings in Europe. I had gone to Europe to do those meetings. But I think I mentioned yesterday in most of those meetings or all of those meetings, I was a fly on the wall because that was early on in my process at Theranos, and I was just learning and being there as an additional executive.

So -- but I don't remember the rest. I mean, the company had done work with others. I think we had a project with -- did I mention Centocor? There was a project we had done with Centocor. And that was a very positive project. They gave us a beautiful letter showing how good our technology was.

Q So you mentioned those meetings with GSK, Celgene, and Sanofi. Do you think those were all sort of early on in your tenure with the company?

A That's correct. I think 2009 or 2010.

BY MS. CHAN:

Q Did you have any meetings with them in 2013 or 2014?

A I personally did not.

Q Do you know if anyone at Theranos did?

A Not that I knew of.

Q Did -- were you aware of any meetings taking
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place between Theranos and any pharmaceutical companies in 2013 or 2014?
A Not that I was -- I was a part of. Elizabeth or somebody else was doing that. Again, just like the DOD, if I was not engaged with that part of the business, then I wouldn't necessarily remember on that.
Q And so who was responsible for the pharmaceutical services business at Theranos?
A Well, I mean, it depending on -- depended on how you look at it. Initially when we were engaged with pharmaceutical companies, there was a direct model where we were going to work with them on clinical trials. We used to put our TSPUs on the site, ship them cartridges. They used to run everything, or their doctors or the nurses, whoever. And so that was one model. That happened before I joined the company, and I think, like I mentioned, there were a couple of projects that were ongoing.

The other model that I was talking about, the clinical trials at Walgreens, I would have been responsible for that. But that, again, is not, like a special service necessarily to pharmaceutical companies. It's more a joint clinical trial where Walgreens would be the location. Walgreens wanted the pharmacists to play a bigger role. They thought

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pharmacists was a very underutilized resource they had, and they wanted to bring the pharmacists out. And they thought what we were providing in laboratory services and diagnostic services and with the pharmacists was the killer combo.

So there was not much work that we had to do -- I had to do to be differentiated for pharmaceutical services. The contracts could have been signed by us, Walgreens, and the pharma guys, or maybe just Walgreens and the pharma guys, and we would just provide services.
Q So I understood your answer to be that you would have been responsible for any of the clinical trials work that you were discussing with Walgreens. What about the other work that you might start up again with the pharmaceutical companies, who would have been responsible for that?
A We probably would have hired some other person to lead that.
Q Okay. And then historically, who was responsible for the pharmaceutical --
A Well, historically --
Q -- company relationships --
A Sorry.
Q Sorry. Who was responsible for the

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pharmaceutical company relationships?
A Like I said, historically, all the work was

done before I joined the company. Elizabeth was the CEO of the company at that time, and I think there were 40 or 45 people. So she must have been involved would be my guess.

And there were other people -- like I said, it was a small company. So my guess is (b)(6); (b)(7)(C) was a point of contact with the technical people, and there were a few other people in those days, I don't remember the names, that were involved with the -- with the work.

Q Okay. But Elizabeth would have been overseeing the relationship?

A She would be part of that. We actually had another guy. I forgot his name. He's a -- he was a French guy. And we hired him from GSK because he was a VP who used to work for GSK. And when he saw our product and he saw, you know, he used it. He was the customer. And then after some time, he said, "I want to be part of what you guys are doing."

And he was a VP-level guy. So he came and he oversaw our relationship. But I forgot -- he was early on. I forgot the guy's name.

Q Okay. And he left Theranos sometime before 2013?

A Yes.

BY MR. KOLHATKAR:

Q I'm going to hand you what I'll mark as Exhibit 246. For the record, 246 is a document Bates-stamped TS-000496 through TS-000546. I'll represent to you that the company -- that Theranos has provided this as the -- as part of the materials that were provided to (b)(6); (b)(7)(C)

A Okay.

(SEC Exhibit No. 246 was marked for identification.)

BY MR. KOLHATKAR:

Q Have you seen Exhibit 246 before?

A Probably not as compiled here, but there's some content here that I may have seen.

Q So I understand that the 246 is comprised of a couple of different -- a couple of different things.

So have you seen like -- why don't we start with the cover page. Have you seen the cover page before, just the exemplary pharmaceutical reports from -- exemplary reports from -- sorry, let me rephrase that and slow down.

Do you see the cover page? It says "Exemplary Reports From Pharmaceutical Partners"?

A I do.

Q Do you recognize this?

A No, I don't.

Q The -- the second page, it looks like a

document that has the Biothera and Theranos logos?
A Yes, I do see that.
Q Do you recognize that document?
A I don't.
Q If you turn to the page ending in 530, there's a document that has the Schering-Plough and Theranos logos.
Do you see that?
A I do.
Q Do you recognize that document?
A I don't.
Q Turn -- and those are the two in there -- in this one.
You don't recognize either of these two documents?
A I don't.
Q Did you review them during your time at Theranos?
A Like I said, I may have seen bits and pieces of this in other places, but I don't recall reviewing the way it is here.

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Q And it looks like I missed one. If you could turn to TS-524, there's a document with the GSK and Theranos logos on it.
Do you see that?
A I do.
Q Do you recognize this document?
A I don't.
Q Do you have any understanding of -- of who drafted the reports that appear in Exhibit 246?
A I wouldn't be able to tell. If I -- actually, I never saw -- I don't recall -- I don't recall seeing them, so maybe I shouldn't even guess. But no, I don't.
Q Did you ever hear anyone at Theranos describe drafting these reports?
A No, I don't.
BY MS. CHAN:
Q Did you ever send reports that was portraying work that Theranos did with pharmaceutical partners to potential investors or investors of Theranos?
A I wouldn't specifically recall if this or something like this was sent to an investor or more than one investor, but it wouldn't surprise me because sometimes you will engage in a dialogue and somebody will say, "Oh, that's interesting. Send me more

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content" or "literature" or "something to read," and we would send them something on that.
So it wouldn't surprise me. But I don't recall me sending this, at least. Or if I did, somebody gave it to me and I just attached it and sent it out.

Q Were there occasions when you would -- you know, somebody would just give you documents and you would just attach it to an e-mail and send it to potential investors?

A I don't recall. I was just saying that if something like this that I don't remember and is not my expertise, if I did send it to somebody, then it would be like that. But I don't recall me doing that. It's possible. Yeah.

Q I'm trying to understand what your practice --

A Sure.

Q -- is usually.

So if you were sending materials to potential investors, would you, in practice, review them prior to sending them out?

A No, not necessarily. If it is something that I didn't understand, it's like me trying to focus on Chinese letters. You know, I recognize some of them,

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but looking at them harder doesn't help me. So if it's something I didn't recognize, I would just assume if somebody would send it to me, there's a reason behind it, and I would send it out.

Q Do you recall instances in which you didn't review materials before sending them to investors or potential investors?

A I don't recall but, you know, in an e-mail that I reviewed it or not. If I look at something, maybe it will refresh my memory, but I don't recall.

Q Why wouldn't you review them prior to sending them out?

A The reason is: Almost every case the investors we were dealing with were -- we viewed them as strategic partners. So it was more of information exchange, not necessarily because of these two reports, this may change investment -- an investment decision. It was, you know, either somebody's curiosity or somebody wanted to think about, you know, in their business, how this -- Theranos is going to impact their business.

So it was more of a strategic partnership dialogue rather than an investment dialogue. And at least the investment meetings that I attended, I would say many of the meetings, 90 percent of the discussion

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was around how the two companies could work together. Most of these guys that we met with in '14, '15 were either entrepreneurs or business leaders. So our discussions were more around the impact, how we work together.

And as part of that, they would say -- if somebody said, "Send me the document. I would like to read that more," then we would just send it to them as

an informational exchange. So I didn't have to read all of that.
Q Okay. So you thought that the people that you were sending materials to wouldn't be relying on the materials to make their investment decisions, so it wasn't -- it wasn't worth it to just review it prior to sending it to them?
A I didn't think about that that way. I was thinking literally like there's a business partner here on the other side and they have asked me for information, and we are exchanging information. So that's kind of how I was thinking.
Q Why wouldn't it be important, though, to send sort of accurate information out to them?
A Well, if it was -- if I knew it was inaccurate, of course I would not send it out to them. So my assumption was that whoever, the scientist or

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whoever, compiled the information is making sure it's accurate. I mean, I -- I had no reason to believe that there were people working around me who were dishonest or working on inaccurate stuff.
So if somebody sent me something, I would absolutely assume it's accurate, correct, and I would likely rely on it from -- within my team. I've never -- I don't recall any instance where I looked at something and I said, "That's false. That's inaccurate. Don't ever send me these things." I mean, I would have a different conversation with that individual.
BY MR. KOLHATKAR:
Q You can put Exhibit 246 to the side.
Did Theranos ever have a contract with CVS?
A We were negotiating a contract with CVS, but we didn't sign it.
Q Why not?
A We were working on it. We were in the last stages of signing a couple of -- there were two points that I think -- I remember one or two points that we were trying to nail down and negotiate, but we were pretty close to signing it.
Q When were you pretty close to signing a contract with CVS?

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A And I may be getting the time not right, but I would say end of '14 or '15 time frame is the partnership between -- the dialogues between us was very strong. We had both strong interests to work together. And so I would say, like, '14, '15 time frame.
Q Did you ever represent to any investors that -- that you had a contract with CVS?
A No.
Q Did you ever hear Elizabeth Holmes say that

to any investors?
A No.
Q We have talked about the financial model a little bit. And did you ever include a rollout in CVS as part of your financial model?
A In some cases, I may have -- you know, I had -- in different models, I used to have different names based on -- sometimes I would say "Walgreens/Safeway" or I would say "Walgreens/Safeway/CVS/ --" In some models, I did use these names interchangeably. That we would deploy with somebody at some point, we just didn't know which partner yet. And then at some point, I just said "other."
Because again, we didn't know what the
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cadence would be with which partner and how fast we would deploy. So Walgreens was kind of in the public and -- it was in the public domain, and we had a good idea what we were doing with them, but with others, I would just say "other."
Q And would -- would you share that -- that sort of "other" category with investors or potential investors?
A Well, it was in the model, so they would see it. Yes.
Q Did you ever -- when presenting the model to investors or potential investors, did you ever represent that the model was based only on contracts signed and in place?
A We had some projections in the model or some assumptions in the model that were based on the contracts that we had signed. So I think I had put a comment in there. I was in one of the meetings where somebody had said -- looked at the balance sheet and said it was one of the investors. I forgot which one. It may have been BDT, but I forgot again. That -- they were advising me on how to improve the model.
And I said, "You know, I don't know how to recognize the value of our soft assets. We have a ton of IP and patents, and also the fact that we have these
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contracts. When I look at other companies, they always have some intangible line item there. So how does that work?"
And he said, "Well, we need to figure out how to value all those things," and I had a discussion with the board around that too, "but let's put a comment here that tells people that we do have these contracts so they know and they remember."
So that's kind of where it came from. So I think I put a comment in the balance sheet section on the model somewhere.
Q I guess my question is just more generally,

you know, when presenting the -- the model's revenue projections, did you ever explain that this -- that the model's revenue projections were based on contracts -- it was based only on contracts that Theranos had in place?

A I think there was a note in the financial model. I don't think -- again, I would say, you know, I don't think of that as -- as a financial projection, but I would say in the financial model, I did have a note that said, "These numbers assume that the only" -- "only the contracts signed. We don't have to sign new contracts in order to hit these numbers."

Q What's the difference between a model and a

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projection?

A Well, I think we talked about that. I don't know what a -- projections are, but I know what a model is. I shared that with you yesterday. That a financial model is where I'm still compiling a lot of information. I have all the assumptions right here. I'm using that as a financial tool. And you can just modify the numbers to see the impact of, you know, changes in assumptions, changes in the rollout schedule, changes in whatever assumptions one wants to make to see what's the impact on the business.

So I was using that as more -- to me, a model is more like a planning tool rather than a financial statement, I would say.

Q So you have no understanding of what a projection is?

A I think projection is a -- is a fairly -- clearly technically defined financial term, which is why I don't like use it -- I don't like using it. I used to usually just say "financial model" because to me, that was more explicit that it is a model.

Q You have an MBA; correct?

A Yes. Unfortunately, I do.

Q Did you learn about financial modeling in -- while you were getting your MBA?

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A I probably did. I don't recall. I did take classes in finance, but not my strongest subject.

Q In any of your coursework, did you gain an understanding of what a projection was for a company?

A I probably did, but like I said, I don't remember what exactly it was, which is why I didn't want to use that term and used "model" instead.

Q Do -- do you recall ever using the term "projection" when referring to the Excel spreadsheet that you called the model?

A I may have -- when -- when I was creating the model, either me or somebody may have put "projections" in the title in one of the spreadsheet tabs. But the overall Excel spreadsheet, the content, I was referring

to that as the model.
So yes, the word "projections" may show up in the spreadsheets, but I was not focusing on those. I was focusing on -- more on the assumptions and the numbers.
Q Sure. My question was: Did you ever call the model a set of projections?
A I don't think I ever did. And if I did, it was probably to somebody who already knew the purpose of what the model was, and I may have used it interchangeably once in a while. But in general, I
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would make -- make sure that it's -- it's a model.
BY MS. CHAN:
Q Who was working with you on the financial model?
A Well, the model actually had a long history. I created the first version of that working with, I believe, Safeway first and then Walgreens separately. And then as we started evaluating the business -- because obviously in 2010, we didn't know much about the business, the lab testing and -- and other details.
So [b)(6); (b)(7)(C)]at Safeway actually spent a lot of time educating us on the lab industry, and then so did Walgreens. When we had met both of the companies, they knew a lot about the lab industry. They clearly was -- were looking at it.
And Walgreens actually had told us during those early modeling exercises that they had spoken with dozens of companies. They also had partnered with LabCorp at one point. So they had been interested in this market. So they had a lot of data. So the early models came from my work with Walgreens and Safeway.
Around 2010, I started -- and 2011, I started doing my own research to educate myself on the industry. Some of assumptions in the model, as you probably noticed, came from the CDC's website. For
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example, how many EMR visits in the U.S. and how many ICU beds. So I got that data from there.
And -- and over time, it was raw data coming from the field as I learned, you know, how much -- how much dollars per requisition we were making from the field. So as I -- over time, I think it was more input from a lot of people. As the information came into me, I would, you know, update the model and keep it updated.
Q So you mentioned that either maybe you or somebody else that was working on it would put "projections" on the top. So I was just wondering who at Theranos was working on the model with you.
A Well, [(b)(6); (b)(7)(C)]had provided me -- she used to provide me balance sheets because balance sheets, she just drew out from the QAD system. So there were

some headers that she had provided me, and I had copied and pasted those headers across all three -- or two other tabs at some point.

And then, like I said, I had given that model to the consultants at BDT, and they made a bunch of changes to clean the model up. Formatting. I had a lot of typos. I also had a lot of acronyms, like Normandy and other things in the model. I remember in one meeting, I had a word called "killer software

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engineers." And the board -- some people in the board thought I really meant killer software, like in killer software. And "killer software" means really good software engineers.

So I had to -- these guys came and cleaned up a lot of the model. So they changed the headers and changed other things in the model.

Q Was there anyone else from Theranos who was working on the model while you were working on it?

A I don't think so.

Q Did --

A Like -- sorry. Nobody with direct access to the model. I don't think anybody else modified it.

BY MR. KOLHATKAR:

Q I want to turn to just your understanding of Theranos's interactions with the FDA.

MR. KOLHATKAR: Why don't we take a break right now. We'll go off the record at 11:03 a.m.

THE WITNESS: Okay.

THE VIDEOGRAPHER: Off the record. Please don't forget your mics.

(A brief recess was taken.)

THE VIDEOGRAPHER: Rolling.

MR. KOLHATKAR: We're back on the record at 11:12 a.m.

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BY MR. KOLHATKAR:

Q Mr. Balwani, just to confirm, you -- you didn't have any substantive conversations with the staff during the break; is that correct?

A That's correct.

Q So like I said before the break, I'd like to ask you a few questions about Theranos's interactions with the FDA. I think I interrupted an answer to one of your earlier questions when you started talking about a -- a December 2014 conversation with (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

MR. COOPERSMITH: I'm not sure it was December '14, by the way, but --

BY MR. KOLHATKAR:

Q Oh, I'm sorry. You mentioned a December conversation with (b)(6); (b)(7)(C)

Do you remember when that conversation took place?

A Yeah. It may have been around December 2014 or November. It was towards the end of 2014. And it was not my conversation, it was Ms. Holmes's.
Q And did she update you about the conversation?
A She mentioned that briefly, and then we talked about that later again.

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Q Okay. And what did she tell you about the conversation?
A She said that the discussion with (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) went really well, very friendly. It was actually a courtesy call, from what I remember, around the holidays. She mentioned that it was literally like somebody calling to wish a Merry Christmas or something like that.
And as part of the conversation, they were talking about the future, what we -- Theranos was going to do. Actually, that's why -- maybe December, that's why I remember, it was a holiday call. And they had looked at our CTN data and they thought our hematology data looked good. We had submitted our CTN for a general clearance from the FDA. That means for any test across the board.
And the FDA thought our data for one of those categories, hematology, looked good. They could give us clearance for hematology if we wanted, just hematology, or we could submit additional data and then get a general clearance for -- for all of the assays.
So that was my conversation.
Q And did you understand at any point in 2014 that the FDA believed Theranos needed to obtain clearance for its CTN before using it in

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commercial lab testing?
A I mean, there was a dialogue we had with the FDA in 2013, and '14, and '15 where we were updating them on how we were not distributing CTNs. So as part of the dialogue, there were some individuals who made that comment, but it was not -- we didn't see that as an official position of the FDA at that point.
Q I guess -- I mean, I want to focus on kind of what your personal memory was. Were you ever present for any comments like that from the FDA?
A Personally, no.
Q Who relayed those comments to you?
A I think it will be privileged. It was company counsel.
Q Oh, okay. And again, this is the area you want to be careful just relying on sort of, you know, what you were told --
A Yeah.
Q -- and so don't be shy about -- to raising that issue if it becomes one. I'm going to try and ask

questions that -- that don't infringe on your company counsel.

I guess at any point in time in 2014, did you become aware that -- that the FDA was taking the position that the CTN needed to be cleared?

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A Cleared for what?

Q Cleared for -- before it could be used for commercial blood testing?

A As a part of the LDT and the CLIA lab or for us to commercialize it outside of the CLIA lab? There were two big differences.

Q Sure. For using it to collect blood from Walgreens and then shipping it back to the CLIA lab?

A No.

Q You mentioned the other -- the other use. So you had an understanding that -- what was your understanding with respect to the FDA's requirement concerning commercialized use of the CTN?

A Yeah. So if we were to distribute or commercialize, or the technical term for that is "market," you need a marketing -- before you market something, you need approval from FDA or a clearance. If we were to do that, my understanding was: There were some versions of the CTN for which we needed a 510(k) clearance, which is, again, a technical term the FDA uses. There are three different classes. So my understanding was: For one of those, we would need a 510(k).

Q What was your understanding about those different classes?

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A This is going to be outside of my league, but I will give you the business understanding of this. There were -- there are at least three classes of device clearances the FDA has, Class 1, 2, 3.

Class 1 are designated as the least risky devices. And you would still need to ensure the quality is good, you need to generate the data, but then you file that on the FDA's website as a Class 1 device. The FDA can still come and audit you and take a look at the quality, data, and this and that, but you don't need to submit a 510(k) or clearance for -- to the FDA for that.

And Class 2 devices are devices which the company claims are very similar to other devices in the market. And by the way, the FDA also defines an assay as a device, is my understanding. But Class 2 devices is assays which are higher risk where the FDA, but other companies have gotten clearances from the FDA on those tests or devices, similar tests or devices, and you are trying to show that our device is equal to everybody else's device.

And you generate data, and you submit it to

the FDA. They look at the data and they give you 510(k) clearance for marketing that device. And you can commercialize it then in the U.S. We're talking about the U.S. here.

And then Class 3 devices are novel devices that don't have a predicate in the market yet. These are brand new or highest risk devices. And the FDA will -- usually requires PMAs or what is known as premarket approval. That requires more data, more studies. A similar process of the 510(k), but my understanding is: This requires more data and more studies because there's no predicate to these devices in the market, is my understanding.

Q And, I guess, did you understand that the -- the TSPU would fall into that Class 3 --

A No, sorry.

Q What was your understanding about how the TSPU would fit into that framework?

A So it depends on the assay. Depends on the test. In general -- I'll talk about the TSPU in a second. In general, you can have a device, and if you're running a -- what is considered as a Class 2 assay, then the whole system becomes Class 2 cleared. But if you do a Class 3 assay, like HIV, then the whole system gets a Class 3 clearance. So it depends on the assay.

So the TSPU itself -- by itself doesn't do anything. You need chemistry or an assay to run it. So it depends on the assay whether it's Class 2 or Class 3. In some cases, it would have been Class 2, like our HSV1. And a whole bunch of assays are Class 2. Most of them are Class 2. Maybe I shouldn't say "most," but a lot of assays are Class 2.

And then there are some assays which the FDA classifies them are high risk. Like HIV is -- my understanding is that's Class 3. And then you -- when you submit it, then the FDA looks at it differently. And from what I understand, the audit it performs on sites is also different.

Q What was your -- how -- what was your understanding of how the nanotainer fit into that -- in that classification? Was it sort of similar, it depended on what -- what sort of chemicals were contained in the nanotainer and what assays they would be used for or was the nanotainer different?

A The nanotainer was different. Still -- you still have the same classification, Class 1, 2, and 3. But since the nanotainer had predicates, and the nanotainer is a blood collection and transportation device. Right? And it had predicates in the market. There were other devices available you could use, which you can capillary blood, you know, do exactly what the

nanotainer was doing.

So because of that, it would be classified as a Class 2 device or a Class 1. There were other differences. And we had -- like I said, we had two or three different types of nanotainers, probably more. But some nanotainers are Class 2 because of the complexity of what is going -- what is inside the nanotainer. Again, this is my understanding, so technically -- maybe -- there are maybe technical words to describe it. Class 2. And then there's one nanotainer -- or some nanotainers which are Class 1. And this is also how the predicates are registered with the FDA.

So there are some capillary tubes that you use to collect blood, which are in general, I'm going to make a general guess here, they are EDTA nanotainers or EDTA-type devices. EDTA is a type of anticoagulant that you use in a tube to make sure the blood doesn't clot. And this is, again, my business understanding, right, so not scientific.

But there are different types of classifications based on how -- what is the anticoagulant and what are the other things that you are doing in the device -- in the -- in the collection device. I don't know if I confused you more or not, but --

Q I guess let me just ask it more simply. Did you ever tell investors that the nanotainer was a Class 1 device?

A There was a type of a nanotainer that was a Class 1 device. Yes.

Q Again, my question is more simple than that. Did you ever --

A Oh, sorry.

Q -- tell investors that -- that the nanotainer was a Class 1 device?

A I don't recall that.

Q Did you ever explain to any investors that the -- that the nanotainer could be considered a Class 1 --

MR. COOPERSMITH: Hold on. When you say "the nanotainer," he said that there were several different types of nanotainers. So maybe you need to specify, like, a nanotainer, the nanotainer, a particular type of nanotainer.

BY MR. KOLHATKAR:

Q Did you ever tell investors that nanotainers could either be classified as Class 1 or Class 2, depending on the use?

A It is possible, but it would be talking about the future. Again, keep in mind that the Class 1 and

Class 2 and this whole discussion comes into play if we are distributing and commercializing nanotainers away from our laboratory. Our position at that point was: As long as we are using this in our CLIA lab, it was part of the LTD.

So the FDA submissions and Class 1 and Class 2 classification didn't apply to that model. It only applied to -- if we distributed the nanotainers in the field. And at some point, we would have. This is why we were seeking the 510(k) clearance is that at some point, we wanted to distribute the nanotainers. And at that point, some would be Class 2 and some would be Class 1, depending on the nanotainer. And the ones that were Class 2 clearly did have FDA clearance.

Q And putting this context to the business model, if Theranos's business model had evolved to sort of that Phase 2 Walgreens with distributing TSPUs, was it your understanding that it would have to obtain clearance for its nanotainers -- for any of its nanotainers?

A Oh, it's actually more complicated than that. If you are distributing the device -- I'm talking about 2012 and beyond now, right, our position or our understanding was: Once you file an assay to the FDA -- let's assume we were going to do 20 assays with

0506

Walgreens, right, all 20 have to be cleared by the FDA. That's the 510(k). Some didn't -- some -- even assays were Class 1 assays. They didn't require 510(k) submissions. They are low -- considered low risk. I think cholesterol may be one of those, but I'm guessing here. But there are some assays which you generate data and you don't file with the FDA just like Class 1 devices.

So it depended on the assay. But let's assume we picked 20 assays. Let's assume they're all Class 2 assays. When you submit those Class 2 assays to the FDA, we would have submitted our nanotainer as part of the submission, which is what we did with HSV1, and the entire system gets a clearance. So you get the TSPU cleared for that assay, you get the assay cleared, and then you get the CTN cleared.

Q Okay. Again, I'm being careful not to inquire about what the substance of any advice from counsel was, but in analyzing what you should tell investors about -- let me rephrase it just with the caveat that I'm not -- I'm not asking what any advice was.

Did you ever receive advice from counsel on what you should disclose to investors about Theranos's interactions with the FDA?

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A Not specifically.

Q Do you know if anyone else at Theranos did?

A I wouldn't know.
BY MS. WINKLER:
Q Do you know whether Ms. Holmes ever received advice from counsel about what to disclose to investors about Theranos's interactions with the FDA?
A I wouldn't know. If it was something contrary to what I believed, we would have talked about it.
Q I'm just simply asking you if you know whether she received any advice.
A I don't know.
BY MR. KOLHATKAR:
Q And I guess more broadly, did -- did you ever receive any advice from counsel on what should be disclosed to investors in the C-2 round?
A No, we didn't.
BY MS. CHAN:
Q You attended --
BY MR. KOLHATKAR:
Q Do you know --
MS. CHAN: Oh, sorry.
MR. KOLHATKAR: Sorry.
BY MR. KOLHATKAR:

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Q Do you know if Ms. Holmes did?
A To the best of my knowledge, I don't know. Sorry, I don't know who to answer. Sorry.
BY MS. CHAN:
Q You attended meetings with the FDA; right?
A I attended a few meetings in 2012 and 2013, but I was not participating because I didn't have the background back then. In most of these meetings, I went there to learn or what I thought was out of respect for the FDA because we only had one or two people from our company going and the FDA had more.
But -- and even in 2014, I believe I would attend a meeting, one or two meetings. There was one meeting where (b)(6); (b)(7)(C) had visited us in Palo Alto. It was a great meeting, very positive, friendly. Around Ebola. I attended that meeting. But in general, I was not -- outside of those meetings, I was playing either no or little role in communications with the counsel, and the strategy, and what -- what -- the FDA letters that were coming back and forth, the dialogue, I was not part of that.
Q So you don't recall any discussions during the meetings in 2013 and 2014 where the FDA told you and others at Theranos that no matter the fact that Theranos was not distributing the CTNs or the TSPUs,

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that both of those devices needed to be cleared or approved by the FDA?
A For what purpose? As CLIA LDT?
Q No, for patient testing.

A Yeah, but patient testing is different when you're doing it as an LTD versus a distributing -- putting a TSPU in the store.

Q Do you recall any discussions with the FDA where the FDA told you or others at Theranos that the TSPU and the CTNs were not LDTs and -- not lab-developed tests?

A When using in the CLIA lab context. Like I said, we had dialogue with the FDA. Somebody may have commented without understanding it, and our job was to share with them what we were actually doing because there was some miscommunication that was -- that was created initially when we engaged with the FDA.

But we also had communications from the FDA clearly written that said as long as we are using this in our lab, it is an LDT. I remember that. So that was a clear communication that we had with the FDA.

BY MR. KOLHATKAR:

Q Who do you remember having that confusion about that they -- you said there might have been one or two members that you needed to educate.

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A Yeah. Initially, when we met with the FDA, the very first meeting in 2012, we had a meeting with them where they said somebody had informed them that we were distributing our devices to other labs. And we said, no, we were not doing that. So we had to do some work to be able to tell them exactly what we were doing.

BY MS. CHAN:

Q And you don't recall any discussions with the FDA where they told you that the TSPU and the CTNs needed to be approved or cleared by the FDA before being used in patient testing?

A In the CLIA lab or in the field? There's a big difference. When you are doing -- I'll explain to you the difference. When you are using --

Q Let -- let me just rephrase the question, then, because I don't -- I know you're trying to draw a distinction, but I don't think the distinction matters here.

I'm talking about in the context of Theranos working with Walgreens on performing patient testing on samples being sent from Walgreens stores to Theranos, you were not aware that the FDA told Theranos that the TSPU that was being used to perform that patient testing and the CTNs that were being used to collect

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the sample and send to Theranos's lab that those needed to be cleared and approved before use?

A Like I said, it is possible that during the dialogue that somebody at the FDA made that comment, but there were also comments made by the FDA that us using those -- in that scenario that you just

described, picking up a sample, shipping it to the one CLIA lab in Newark, running those TSPUs in Newark was an LDT.

Now, the FDA had enforcement discretion over that too, but that was also communicated. And that was the dialogue that we had back and forth with the FDA on how the FDA wanted us to pursue that. If -- if the FDA had that official position, we would have received a warning letter. But like I said, we were in deep engagement with the FDA and communicating with them very frequently.

Q Well, you understand that at some point in 2015, the FDA conducted an inspection of Theranos --

A Yes --

Q -- right?

A -- I was there.

Q And as part of the -- do you understand what a 483 is?

A I do.

0512

Q What is it?

A It's a form that the FDA creates after an inspection has concluded that includes the observations and inspection.

Q And are you aware that one of the observations on the 483 was that Theranos was using the CTNs without approval or clearance from the FDA?

A No. There was only one CTN, not all CTNs that were identified. There was one CTN -- I mentioned that earlier already. That there was a lithium heparin CTN with a gel inside it that the FDA said their position at that point was that that should require clearance and -- a 510(k) clearance.

Q Okay. So did you know prior to 2015 that the FDA had a position that that li hep -- what is it? Lithium --

A Lithium heparin.

Q -- heparin CTN needed clearance from the FDA before use in patient testing?

A We had -- like I said, in a dialogue, sometimes the FDA made a comment, but also, the FDA knew that we were already using that as part of LDT. And we've got a letter from FDA -- meeting notes in which the FDA said as long as samples are being shipped from Walgreens PSCs through Theranos's central lab, the

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FDA considered that as LDT and had enforcement discretion, but they recognized that it is an LTD, and they didn't tell us to stop.

So it was a dialogue. Sometimes some people would make the statement, but at the same time, many of the people that we were engaged with would make the opposite. That we were working with them in good faith. At any point if the FDA wanted us to stop doing

it, we would have stopped. And at -- and at some point we did.

BY MR. KOLHATKAR:

Q So when Theranos stopped using the nanotainer, was that because of that FDA audit we were just talking about?

A Well, one nanotainer, one of the two, yes, because of the FDA audit. Because when we talked to the FDA and we asked them, "Do you want us to stop using the nanotainers," and they said, "It's your decision, you know. You decide."

And so we stopped one, but at the same time now that we were making this transition to fully FDA-quality systems, it was also useful for us to stop and -- and do a bunch of other operational details in the company.

Q After the Wall Street Journal article came

0514

out, do you recall Ms. Holmes making a statement publicly that Theranos voluntarily stopped shipping its nanotainer?

A Technically, yes. That's correct.

Q Why is that technically correct?

A Because when the FDA wants you to stop something, you get a warning letter, and we didn't receive -- the FDA didn't ask us to stop. They issued a citation on 483 that this was their position. We could have disagreed with their position, and companies do disagree with the FDA's position. Our position with the FDA always was: We don't want to disagree with the FDA. We wanted to be the company that would be the poster child in the lab industry that was taking all of our LDTs and submitting them for 510(k) clearance.

So we didn't want to be in a position where we are doing something that anybody at the FDA would say we shouldn't be doing.

Q I guess, so in -- in your -- in your opinion, the -- stopping to use the -- the -- that specific nanotainer after receiving a citation was -- was a voluntary action?

A Yeah, we had actually stopped -- sorry.

Q That's your understanding? Yes?

A No, your question, I'm correcting your

0515

question. We had stopped using CTNs before the citation came in. In August -- end of August when we met with -- when we had a call with the FDA, we informed them that we stopped -- we are stopping using CTNs, and we started gradually removing them out. And I think most of them, we had already stopped -- stopped by September -- mid-September or sooner. And then there were a few tests remaining that we removed by September 21st or 22nd. So we started the process before the 483 came to us.

Q Okay. So I guess it's your testimony that Theranos's decision to stop using its nanotainer in 2015 was entirely voluntary?
A Yes, that is my -- that's my understanding.
Q I'm going to hand you a document that's been previously marked as 230.
Do -- do you recognize Exhibit 230?
A I'm not on it, but it seems like a letter from someone at the FDA to our counsel.
Q Do -- do you know if you reviewed this letter after it came in?
A I may have. I don't recall.
Q If you turn to the third page, the page ending in Bates stamp TS-0992590.
A Yes.

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Q And look at the first full paragraph. And let me know when you've had a chance to read that. There's a footnote that goes along with it.
A (Witness reviewing document.) Okay.
Q And do you see the sentence that says, "Please note that without clearance or approval, you cannot continue to ship these collection devices or nanotainers to your sample collection sites for use with tests currently run in your" -- "in your laboratory"? Do you see that?
A I do.
Q Was that contrary to your understanding of the FDA's position at this time?
A From other sources at the FDA, yes.
Q What other sources?
A There was a letter that we received from the FDA, meeting minutes in 2013, where -- end of 2013, I believe, where we had attended a meeting, and we had discussed exactly this point with the FDA's -- had (b)(6); (b)(7)(C) for -- in the IVD division. And he had said -- and that meeting minutes recognize that the FDA recognize us as LDTs.
Q Okay. So you understand that communication took place in 2013?
A Correct.

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Q Did this communication update your understanding in any respect?
A No.
Q Why not?
A Because like I -- like I said earlier, companies that work with the FDA -- my understanding is: You engage in a dialogue with the FDA all the time, and you have disagreements around your submissions to the FDA all the time. Nothing unusual here.
So the fact that the FDA told us something before which was in line with what we thought we were doing, and somebody at the FDA is making a statement

here which is not in line -- there's a line here that says, "We are happy to discuss this issue with you during a call." So it would be a very typical thing for us to be able to discuss this with them and then obviously work with our counsel to see what's our counsel's position and proceed accordingly.

MR. COOPERSMITH: Are you going to ask him a little about the second paragraph of the letter?

MR. KOLHATKAR: You can -- you can ask any clarifications at the end.

MR. COOPERSMITH: Where it says it doesn't bind the FDA?

MR. KOLHATKAR: Sir, I'm happy to let you ask

0518

any clarification questions --

MR. COOPERSMITH: Okay.

MR. KOLHATKAR: -- at the end. You can use any of the --

MR. COOPERSMITH: Well, I just want to be complete with the testimony.

MR. KOLHATKAR: Sure. I'll give you --

THE WITNESS: Actually --

MR. KOLHATKAR: -- the opportunity.

MR. COOPERSMITH: Okay.

THE WITNESS: Actually, that's a good point here. I mean, this actually --

MR. KOLHATKAR: Sir, there is no question pending.

MR. COOPERSMITH: I think he's allowed to finish his answer if you're -- if the record is misleading based on what you've asked.

MS. CHAN: I think he was done with his question. At the end of today, if you want to ask your additional questions, you can do so.

THE WITNESS: But I would like to highlight that this point here clearly says here it does not constitute an advisory opinion and does not bind or otherwise obligate or commit the agency to the views -- So it's pretty clearly expressed here.

0519

BY MR. KOLHATKAR:

Q Okay. Did you -- did you -- but do you recall reviewing that at the time?

A No, I don't. I also don't recall reviewing the rest of it, but it's here.

BY MS. CHAN:

Q Do you recall attending a meeting a few days after this letter was received by Theranos in which the FDA told you again that Theranos should not be shipping these CTNs or using them for patient testing without clearance from the FDA?

A I don't recall, but if I see some documentation, then it may refresh my memory and I could comment.

BY MR. KOLHATKAR:
Q I'm going to hand you another document that I'm marking as Exhibit 247.
For the record, Exhibit 247 is a document Bates-stamped THPFM0001145643 through 1145647.
(SEC Exhibit No. 247 was marked for identification.)
BY MR. KOLHATKAR:
Q We spoke a little yesterday about some of the -- Theranos's media strategy.
Do you recall that conversation generally?

0520

A Correct. Actually, if you don't mind, can I read this --
Q Sure.
A -- real quickly. (Witness reviewing document.)
Okay.
Q Do you recognize Exhibit 247?
A I do.
Q What is it?
A It seems like an e-mail communication between Ms. Holmes and a reporter at -- or somebody at fortune.com, I assume a reporter, that she forwarded to me at the end.
Q And does -- does it generally appear from the conversation that the -- the reporter is asking questions or asking for follow up on specific topics, and then receiving some responses from Ms. Holmes?
A I didn't read the whole thing, but it seems like a communication between them. I can read through it, if you want me to.
Q Well, why don't -- I don't want -- you don't need to read the whole thing necessarily. But if you look at the page ending in THPFM0001145645 --
A Okay.
Q -- Number 4. Let me know when you've had a

0521

chance to read that.
A (Witness reviewing document.) Okay.
Q I guess, generally, did you have -- do you recall having a discussion with Ms. Holmes at any point in the summer of 2014 about how to describe Theranos's devices for -- for media use?
A No, I did not.
Q Do you remember Theranos discussing internally whether to describe things as analyzers, devices, or analytical systems?
A That was a common discussion we used to have, but I don't recall if we had it in this summer or what time frame.
Q And, I guess, apart from the time frame, what was the discussion around the use of analytical systems, analyzers, or devices?

A Just properly describing our solutions because just saying "devices" sometimes didn't encapsulate an analytical system that includes software on the Cloud because that was always part of the TSPUs. So it was always trying to find the best way to describe our solution.
Q Did you have a view of what the best descriptor was for Theranos's solution?
A No. Honestly, I didn't. I mean, I like the
0522
word "systems" better because I'm a computer software guy and I wanted to make sure that software is part of whatever description we had, but I didn't have a strong opinion. At least I don't recall having one.
Q If you look on the page ending -- do you -- do you understand his question here to relate to sort of how to -- how to approach that issue of describing the analyzer or the device?
A Some analyzer or some device that he saw. I don't know what he's referring to here.
Q Do you see the response from Ms. Holmes at the bottom of 644, the -- the paragraph that begins, "With respect to the device size below, the best comparison might be to the" -- "to the NeXT computer desktop"?
A Yeah, I see that. I see that.
Q Were you familiar with the NeXT computer desktop?
A Yes. I used to own one. On college campus, I used to use it all the time.
Q What does it look like?
A It's a cube, literally, about that big (indicating), that big (indicating), about that big (indicating). Sorry, should I --
Q Sure. Yeah. I guess could you describe --
0523
A It was about --
Q -- what your gesture was.
A -- 18 inches wide, I mean, since it was a cube, I would just say all dimensions were 18 inches.
Q Did you ever compare Theranos's TSPU to the size of -- of a NeXT computer?
A I personally used to because, again, my computer science background. So internally, we used to talk about some devices we will have as small as the Apple McIntosh one day, so I used to use those examples often.
Q The -- if you turn to the first page of Exhibit 247, there's a follow up from Ms. Holmes on June 9, 2014, at 1:09 a.m.
Why don't you read the paragraph beginning "We've been spending time --"
A "We've been spending time" --
Q I'm sorry, you don't have to read it out

loud.
A Oh, sorry.
Q I mean, read it to yourself and let me know when you've had a chance to review it.
A Thanks. (Witness reviewing document.) Okay.
Q Do you see the sentence that begins, The

0524

analytical systems we're scaling around are somewhat bigger than those that mentions, dash, analytical systems look like large desktop computers, dash, or analytical systems look much smaller than in conventional laboratories or have a smaller space requirement than conventional laboratories, dash, it's fine, paren, and not inaccurate in follow up to the below?
A I see that.
Q What analytical systems was Theranos scaling around at that time?
A In our lab at that time?
Q In your lab at that time.
A We had, like I said, the modified systems, we had our TSPUs, we had commercial devices.
Q So in other words, the -- and was Theranos scaling in any other way other than the lab at the time?
A We were making a lot of progresses on 4.X, our 4.X system, and our plan in the long term was to scale around 4.Xs. So that could be part of the discussion here.
Q Okay. The -- at some point in time, Theranos was considering opening -- opening a lab in Pennsylvania; right?

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A Correct.
Q And -- and as you mentioned, there -- there were immediate plans on opening a lab in Arizona at this time; right?
A Correct.
Q And the lab in Arizona was going to be a moderate complexity lab; right?
A That's correct.
Q What about the one in Pennsylvania?
A Initially, it was -- initially, I would say they were both planned to moderate complexity.
Q And what was the time frame for having them prepared to be high complexity?
A It depended on our FDA clearances, and I don't know what other parameters we were looking at, but it would -- would have primarily depended on FDA clearances.
Q And nothing about device capability would limit the -- the -- the ability to scale to a -- to a high complexity lab?

A No, no, nothing. I mean, this depends on the assays. It's not a device capability issue.
Q Okay. So in other words, in your mind, the -- was the 4.X sort of ready for a larger deployment in the summer of 2014?

0526

A For what? It depended on -- depended on which assay. If, for example, you were talking about HSV1, which we had already submitted to the FDA, probably. I don't recall what was ready, but it really depended on -- depended on the assay.
Q I guess, in the summer of 2014, was the 4.X ready to scale on sort of the majority of assays that Theranos offered in its retail lab setting?
A I think that's a -- that's a very complicated question. The reason is: Define "scale." Because there -- the -- the device is -- is -- has a lot of dimensions in terms of volume size, speed, run time, uptime, whether you have to service it every month or every three months.
So I think "scale" has to be more clearly defined when -- before one can say, "Yes, we would have been ready to scale" as a blanket statement.
Q Was -- was Theranos's 4.X series device ready -- let me rephrase that.
Were any of Theranos's 4.X series TSPUs validated for use in the -- in the CLIA lab setting in the summer of 2014?
A I don't think so. No.
Q Were there any plans, when opening that Phoenix or Pennsylvania lab, to -- to place 4.X series

0527

there as part of the -- as part of opening those labs?
A Not initially as part of opening, but as we -- like I said earlier, as we got FDA clearances, there were some tests we -- we probably would have launched sooner than later in those labs using those TSPUs at that point.
Q Did you ever have a discussion with Ms. Holmes about the information she was sharing with (b)(6); (b)(7)(C) in this article?
A You know, I don't recall. I'm not in this e-mail. The NeXTcube idea could have only come from me, my guess, because I was the NeXTcube fan boy, and I used to love the machine. So I may have talked to her not necessarily in this time frame, but before because I used to talk about that. But I don't recall specifically this conversation.
Q Did you review the Fortune article after it came out?
A I think I read a few pieces of it, but not the entire article.
Q You don't think you read the whole thing after it came out?

A No, I don't. I mean, I -- again, I may have read more than a few pieces, but I don't recall reading the entire thing and I -- because I didn't recall,

0528

later on when somebody was asking me questions, again, counsel, I didn't recall what was in the article.

Q Okay. And again, I just want to emphasize I'm not trying to inquire about your conversations with counsel. But I'm going to hand another document to you.

A Sure.

Q You can put Exhibit 247 aside.

I'm handing you what I'll mark as Exhibit 248.

A Thank you.

Q For the record, 248 is a multipage document Bates-stamped TS-613 through TS-621. And I'll represent this was produced to the SEC as materials that were included [redacted]

A Okay.

(SEC Exhibit No. 248 was marked for identification.)

BY MR. KOLHATKAR:

Q Do you recognize Exhibit 248?

A Yes.

Q What is it?

A It's an article from Fortune magazine.

Q If you turn to Page 4.

A Page --

0529

Q So I guess it would be page -- page ending in 616.

A Okay.

Q And so it's your testimony that you don't remember reviewing this article in its entirety; is that correct?

A Correct. Right. Yeah.

Q I want to turn to the -- the second column there. It's the column on the right.

A Yes.

Q The paragraph that begins, "The company has performed as many as 70 different tests from a single draw of 20 to 50 microliters collected in a tiny vial" --

A Sorry, where are you? Okay. I see that. Yeah.

Q Fourth paragraph down.

A Yes. Got it.

Q " -- collected in a tiny vial the size of an electric fuse which Holmes had dubbed a nanotainer."

Do you see that?

A Yes.

Q At that time had Theranos conducted 70 tests from a 25- to 50-microliter sample of blood?

A Sorry, what is your question again? I was
0530
reading this.
Q Had Theranos completed up to 70 tests from a
sample as described here?
A I wouldn't know. I mean, this is more for
people in R&D or the CLIA lab. If they had anything
like this, they would know.
BY MS. CHAN:
Q Could the TSPU conduct 70 tests on a single
draw?
A Theoretically, yes.
Q What do you mean by "theoretically"?
A That a single draw, you could -- I mean, I
think about 65 or 70, I had mentioned that number
briefly earlier. But there were some tests where we
could do 65 to 70, a combination of some tests where we
could do 65 to 70 different tests.
Q On a -- on a single draw of a finger prick of
blood?
A Correct.
BY MR. KOLHATKAR:
Q I guess, had Theranos done that --
A We had -- oh, I'm sorry.
Q -- by this time?
A In the TSPU itself, I don't recall if the R&D
guys had tested it. I knew because I was tracking this
0531
project for some time and they were manufacturing a
cartridge. I know that they had demonstrated on a
bench that they had -- they were able to do it. I
don't know exactly if -- which version of TSPU, if in a
TSPU, they had run the entire thing. I don't know.
Q What do you mean by "demonstrated on a
bench"?
A So you -- when you develop assays, you
develop them on the bench first, which is a clinical
lab R&D space. But these are your assays, so you're
developing your own assays -- and this is my
understanding again from -- of chem lab. You develop
the assays and you demonstrate that you can reach a
certain level of sensitivity from a certain amount of
blood.
And we had a panel of tests where we
demonstrated that given, I think it was a very small
fraction of, microliter of blood, we could do a large
number of tests each. And if you put all of that
together, the total amount of a sample needed was
less -- I think it was a hundred microliters or less.
Q I guess, is that sentence a true -- was that
sentence a true statement as of June 2014?
A Which statement?
Q The statement that the company has performed
0532

as many as 70 different tests from a single draw of 25 to 50 microliters collected in a tiny vial the size of an electric fuse which Holmes has dubbed a nanotainer?
A I think -- I think I answered that earlier. That I wouldn't know because the R&D guys had -- were doing a lot of different tests that I didn't necessarily know about. So it's possible they did that, but I just didn't know.
Q You don't know yes or no; is that --
A Correct.
Q What about -- if you look up at the second paragraph on the same column, the sentence begins, "It currently offers more than 200, and is ramping off" -- "ramping up to offer more than 1,000 of the most commonly ordered blood diagnostic tests, all without the need for a syringe."
Do you see that?
A I do.
Q Was that a true statement in June of 2014?
A My understanding is: Yes.
Q Can you explain more.
A Yeah. At this point we had, I think, 200 assays on our menu, and back in 2010 or 2011, we actually had a menu of a thousand tests, and we were sending out a large number of them to a reference

0533

laboratory, but we wanted to be a one-stop shop so that if a customer comes, we don't ever turn any -- anybody away.
And this is a discussion that we were having internally. Should we reintroduce that full menu or should we keep our menu limited to 200. So this is what he's -- that is pointing out. And all of them, we never used a syringe in our patient service centers, at least to the best of my knowledge because we were against it.
Q So in other words, the 200 here, in your mind, includes venipuncture and finger stick?
A Yeah. That was the full menu. It may not be 200. I think it -- it was about 180, 190 and then it ramped up to about 200, but I think the number is about right.
BY MS. CHAN:
Q So what were you using to do the venipuncture in your patient service centers?
A Yeah. It was a different device. It's called a butterfly needle or a butterfly that is usually used on pediatricians, and we drew micro volume.
So if you go to a typical lab today, if you do a test on -- let's say you pick 50 tests or 40

0534

tests, chances are they're going to draw out six, eight, ten vials of blood. And they stick the full

needle in. Sometimes syringes, sometimes a bigger needle.

We had two of our software optimize the workflow so we could perform a similar number of tests from a much less volume, and we -- for -- because of that, we needed a narrower gauged needle, and we were using a butterfly needle for that.

Q So the butterfly needle isn't a syringe?

A No, it's not. Absolutely not. A syringe, you -- somebody sticks it in you, you'll remember it. A syringe is something very different.

BY MR. KOLHATKAR:

Q Would you turn to the page ending in 618. I guess, do you -- do you -- before we turn the page, I apologize, do you recall reading either of those two sentences when the article came out?

A You know, I don't recall in this moment. Like I said, I've read pieces of it, but I may have. I don't recall.

Q If you turn the page ending in 618, again the column on the right, there's a paragraph that begins, "Importantly, it's not just the blood draws that are tiny. It's also the analytical systems Theranos uses

0535

to perform the tests. They take up a small fraction of the footprint required by a conventional lab today."

Do you see that?

A I do.

Q Was that a correct statement in June of 2014?

A I mean, I don't know which analytical system this is referring to, but if it's referring to 4.Xs, the answer is: Yes.

Q Was Theranos's lab footprint smaller than that of a conventional lab in June of 2014?

A I mean, I don't know what a convention lab looks like. But what I'm saying is: Assuming this implies -- the analytical system here implies 4.X machines, yeah, our footprint would be much, much smaller.

BY MS. CHAN:

Q Was Theranos using the 4.X machines to conduct patient testing at this time?

A Sorry. Even 3.Xs. I should include all TSPUs. If this is referring to that, then our footprint, 3.Xs, whether the 3.0 or 3.5, 4.Xs would be much smaller.

Q But you were also using commercially available machines to conduct patient testing at this

0536

time; right?

A For venipunctures. That's correct.

Q Okay. So do you think it's misleading to be saying that Theranos is employing a smaller footprint

than a conventional lab to conduct its patient testing?
A I mean, I don't read it that way. I think I read more here -- it says, "The analytical systems Theranos uses." I don't know if it is referring to 4.Xs, 3.Xs, or what it is referring to.
BY MR. KOLHATKAR:
Q If you'll turn the page to the next page ending in TS-619, the column on the left, there's a paragraph that begins, "Theranos, which does not buy any analyzers from third parties, is therefore in a unique position."
Do you see that statement?
A Where are you again?
Q On the left column about the third full paragraph down.
A Yes, I do.
Q Was that a true statement in June of 2014?
A No, it was not.
Q Did you read this part of the article when it came out?
A No. Unfortunately, I didn't.

0537

Q Did anyone bring this issue to your attention when it came out?
A Not that I recall.
Q Did you ever -- at any point in time, did you ever discuss this line with Ms. -- with Elizabeth Holmes?
A No. I mean, I don't think anybody brought it to my attention, but I don't recall discussing it either.
Q Do you know if the Fortune article was shared with prospective investors?
A I think in some meetings, some investors had expressed interest in learning about the company and what the media was saying, especially some people who actually owned media properties or that were in media. So they said, "Send us what has been out there."
And we said, "Okay. We'll put a compilation together and we'll send it to you."
Q Did you ever send the Fortune article to any prospective investors?
A I think my answer will be the same. If I did, I probably didn't go and find it and send the link. I probably -- if I did send it to somebody, then somebody else sent it to me and I just attached it and sent it out.

0538

Q Do you know if anyone at Theranos raised concerns internally about the accuracy of the Fortune article when it came out?
A I don't recall. I don't recall.
Q I'll hand you another document and we'll break for lunch in a minute here.

I'm marking as Exhibit 249 a document Bates-stamped THPFM0000833200.

A Okay.

(SEC Exhibit No. 249 was marked for identification.)

BY MR. KOLHATKAR:

Q Do you recognize this document?

A Yes.

Q What is it?

A It's an e-mail from Elizabeth to myself and then my response to her.

Q Okay. And your response to her is -- is --

A Number --

Q Sorry, did you send this on or around June 12, 2014?

A Yeah. That's the date.

Q And your response to her is "Great"; is that fair?

A Yes.

0539

Q And is she -- is she sending you an -- an e-mail that appears to be addressed to shareholders?

A Yes.

Q Why -- why did you have a reaction that this was great at the time?

A Well, I don't think I necessarily read it and evaluated it on a scale. It was more of a colloquial comment saying, "Yeah, looks good. Great." I didn't have any comments, basically.

Q I guess, you know, seeing the inaccuracy that -- that you -- that you mentioned about the -- the use of -- of manufacturing its own analyzers, did you have any concerns with Ms. Holmes sharing this document with shareholders?

A No.

Q Why not?

A I mean, I didn't read the article, so -- which is why I -- I was commenting more on her note here, not necessarily the article.

MR. COOPERSMITH: Are you talking about now --

MR. KOLHATKAR: Yeah.

MR. COOPERSMITH: -- as he sits here today?

BY MR. KOLHATKAR:

Q Yeah. Sitting here today, do you have any

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concerns with the article being shared with -- with shareholders?

A No. I think the article was already --

MR. COOPERSMITH: I'm sorry, I -- the -- I was just asking whether the question called for Mr. Balwani to ask -- to answer whether as he sits here today as opposed to at the time.

BY MR. KOLHATKAR:

Q And let me rephrase the question.
MR. COOPERSMITH: Thank you.
BY MR. KOLHATKAR:
Q So sitting here today, do you have any concerns about this article being shared with investors in light of the inaccuracy that you pointed out?
A And I think my answer is: The article was already in public, so, you know, I don't know what else to say.
Q I guess I don't understand that answer. Do you think it was -- do -- do you think it was appropriate to share an article with inaccuracies -- with an inaccuracy to investors?
A I mean, I think it would have helped to provide a more -- shed some light on this maybe, but I think she was just sharing something that was already published in the public, so I actually don't know to
0541
answer to that.
Q Do you know if Ms. Holmes took any steps to correct this -- this header that was already out in the public?
A I didn't.
Q You never heard her talk about it?
A No. I spent close to zero time on media and, you know, PR. Very little time.
MR. KOLHATKAR: We'll go off the record at 12:03 p.m.
THE VIDEOGRAPHER: Off the record.
(Whereupon, at 12:03 p.m., a luncheon recess was taken.)
A F T E R N O O N S E S S I O N
THE VIDEOGRAPHER: Rolling.
MR. KOLHATKAR: We're back on the record at 12:56 p.m.
BY MR. KOLHATKAR:
Q Mr. Balwani, just to confirm, you didn't have any substantive discussions with the staff during the break; is that correct?
A That's correct.
Q We talked a little bit yesterday about your role with -- with the company's financials.
Do you recall that?
0542
A Yes.
Q Did you supervise the company's controller?
A No, I did not.
Q Who did?
A She technically reported into Elizabeth Holmes, but I would interface with her on transactional matters if I needed something, or if she had any questions, sometimes she would come and talk to me.
Q So, I guess, is the answer that she would ultimately report to Elizabeth Holmes?

A Well, she was -- from a hierarchical perspective, she was reporting to her, but I think that she was interfacing with both of us based on what was needed. And, of course, anytime I needed something from her, I would reach out to her directly.
Q And what are the kinds of things that you would -- and are we talking about (b)(6); (b)(7)(C) here?

A Yes.
Q What are the kinds of things that you would reach out to (b)(6); (b)(7)(C) for?
A I used to often ask her for a balance sheet statement if I needed it for any purpose. I also used to frequently ask her to send me a -- I think what ultimately became known as the monthly cash report. So
0543
she would send that to me. I would ask her and she would tell me what was the monthly cash balance, so I was tracking cash that way.
I also asked her, I think, about -- sometimes about expenses, you know, on a particular project or a particular category, so she would send that to me.
Q Who -- and we talked a little bit about the idea of revenue yesterday as well. Who had final say at the company on whether to recognize revenue?
A What -- nobody at the company. It would have been up to the accountants or the CPA who would have made that -- made that decision once we started doing GAAP -- or audited financials. So the business may have -- may have, you know, provided input that we think this is what it is and this is the purpose of this dollar, but ultimately, it would have depended on the accountants.
Q So, I guess, was it your view that (b)(6); (b)(7)(C) was not the company's accountant?
A No. I mean, I think -- (b)(6); (b)(7)(C) but I don't think she had enough expertise to be able to -- in my view, to be able to make a decision on if something was recognizable revenue or not. We would have gone to outside accountants to help on that.
Q In 2013 and 2014, who would that have been?
0544
A Outside accountants. I think the company had KPMG back then. I actually don't remember the name. But it was one of the big three accounting firms, or big four accounting firms.
Q Who was responsible at Theranos for interacting with the -- the accountant?
A Mostly, it was (b)(6); (b)(7)(C) and then I think in 2015, I interfaced with the accountants a few times. I may have spoken with -- with the accountants maybe once or twice a year on other occasions, but I don't remember.
Q During your time at Theranos, was there ever

a CFO?
A Not when I was in the company, no.
Q Did the company ever think about hiring one while you were there?
A Yes, absolutely.
Q Why didn't it?
A We were recruiting and -- the first few years I was there, the company was small, and (b)(6); (b)(7)(C) was doing a good job. We didn't -- we were still recruiting for a CFO all along, but it was not a pressing, high priority because we were focused on hiring -- recruiting scientists and engineers and other managers. So it was -- I would say at that point, it

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was a high priority but not the highest priority.
But I think after 2013, we had a list of eight or ten of the critical priorities, and I think CFO was always number one or number two. We were recruiting for that position. I believe we interviewed many candidates, but didn't quite find the person that we thought was the right person.
Q Was there any reason why you struggled to find someone for that position?
A I think before 2013, nobody knew us, so it was difficult to hire somebody. And I think in 2014 and '15, we actually also hired a headhunter -- headhunting firm, at least one, and we gave them the job for CFO. It cost us a lot of money, I recall that, just to fill that one position.
And they brought us a few candidates, but not many. Obviously, on LinkedIn and other places, we would -- my recruiting team, the head of HR, was also looking for CFO candidates, but I don't recall interviewing too many candidates that were mature enough or who had a deep understanding, in my view, who interviewed.
But it was an ongoing effort. It was not we ever stopped looking for CFOs.
Q Okay. So in other words, you'd meet someone,

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but they just didn't -- they didn't have the right skill set that you were looking for?
A Yeah. Either the right skills set or not necessarily the right approach. You know, they were looking for companies that are planning on going IPO in the next year or two years, and we were looking for somebody a lot more conservative who can help us build a company for the next, you know, 10, 20 years and not think about, you know, IPO and that, going public.
Q Did you ever tell anyone that you were effectively the company's chief financial officer?
A No.
Q Did you ever hear Elizabeth Holmes describe you that way to other people?

A No. She may have joked that, you know, he's doing the modeling, so he has the numbers. But I don't think she or anybody would have described me seriously as a chief financial officer for the company.
Q Did she ever -- do you ever remember her joking about you being the CFO?
A She used to say, "He's the numbers guy in the company." I don't know if she used "chief financial officer" or not, but she used to point and joke that "He's wearing multiple hats. He's also the lead programmer and other things in the company. And as

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part of that, he also maintains the numbers, the model."
Q By "numbers," you understood that to mean the --
A The model.
Q -- financial model?
A Financial model, yeah.
Q Who was responsible for reviewing and authorizing the company's tax returns?
A That was in (b)(6); (b)(7)(C) domain. She would come up with the final reports that she was going to file, and she may have presented those to either me or Elizabeth and one of us may have signed it. I don't recall signing those, but it's possible she presented those to me and I signed those.
Q If you didn't sign them, would there be some documents that you have reviewed before signing them?
A Not necessarily. I would just rely on (b)(6); (b)(7)(C) And if she said, "These are the tax returns," then I would probably scan them, look at them, but then I would sign them and give them to her.
Q Was it your expectation that the company was providing accurate information on its tax returns?
A Absolutely.
Q Do you know if the company reported taxes on

0548

a cash or accrual basis?
A I don't know.
Q Do you know what the difference is?
A I believe so. I mean, high-level accounting.
Q High level, what does it mean to you?
A Cash is when you report something on a cash-in and cash-out basis. And accrual is more where you may have accrued -- you may have accrued an expense but may not have not paid for it yet or revenue that you have earned but you haven't received the cash for that yet. So you have accrued the revenue, but you haven't received the cash for it yet.
Q Toward the end of 2013, the company was running low on cash; is that right?
A I don't specifically recall. I don't know low -- how low. I don't recall.

Q Or I guess in the two thousand -- late 2013 time frame, were you generally kept apprised of the company's cash situation?
A Yes.
Q Would that be a report that (b)(6); would send you?
A Either that or I would just ask her. Yes.
Q And at any point in time, did you become concerned in 2013 that the company was running low on cash?
A I would probably pay attention to it. I wouldn't say I was concerned because our partnership with Walgreens was in a good position and other things in the company were gaining momentum. So I wouldn't say I was concerned, but I had my eye on it.
Q Why did company raise funds from investors in 2014?
A In early 2014 or late 2014?
Q Why don't we start with the late 2013, early 2014 time period.
A Yeah. I think we had identified a few strategic investors -- in 2013 towards the end, our focus was: We were only going to primarily let investors who are strategic investors invest. That means they are not -- it's not just dumb money, as it quote/unquote is called in Silicon Valley. That it's not just money, but they're also bringing a greater value add to us.
So, for example, if a hospital wants to invest in us or -- directly or indirectly, our expectation would be, you know, we would work with them because we would have access to patient samples when we do our 510(k) submissions, which is a major barrier. So any investor we would work with, in our mind, had to provide some strategic value to the company for, you know, the next five, ten, fifteen, twenty years.
So as part of that, we engaged with some hospital partners and then there was this one hedge fund, PFM, who had approached us around November time frame, and then they came to us for an investment.
Q Was the company considering a C-2 round at that -- that time frame, the late 2013, early 2014 time frame?
A We were -- we -- like I said, I don't think we would necessarily proactively, you know, say, "Okay. We're going to go and do a C-2 round, and this is the time frame, and this is how we're going to do it." It was more opportunistic that if we find the right investor, we would bring them in, and if we don't find the right investor, we would wait. Because we always thought that time is on our side as -- the longer it took, the more progress we made, and the better off the

company would be in the long run.
Q And, I guess, what kind of progress did you -- do you have in mind? Do you mean both in terms of the development of the TSPU as well as the commercial rollout or --
A Across the board. I mean, we just felt that, you know, the wind was behind our back. We were making
0551
good progress. For example, in -- 12/31/2013, we signed that amendment with Walgreens which was really important, I think, for us because that committed Walgreens to us as a national partner and besides some other provisions in there. So that was a big milestone for us.
So that kind of progress. And obviously on the technology side, the longer time he had, we knew our products would get better on the software side. Now, finally, we were able to recruit more aggressively, so we were building our software team, and, you know, a year from January 2014, we would have a lot more software to show our vision. That, you know, we could actually tell somebody to go to Walgreens with their iPhone app, and they can see the whole process working rather than us just visually describing to them what it meant.
So the more time passed, the better we got, the better our product got, and more we could show.
Q Do you remember what the company's burn rate was in late 2013?
A I wouldn't remember that specific detail.
Q Do you have -- I mean, just a ballpark, kind of. Was it spending more or less than a million dollars a month?
0552
A I'm sure it was more than a million -- a million dollars a month.
Q Less than 10?
A Yeah, I think it was certainly less than 10.
Q Do you think it was more than 5?
A That, I don't remember specifically.
Q So we talked about the financial model a little bit. Was -- in -- in -- in the late 2013 time frame, was Elizabeth Holmes familiar with the company's financial model?
A I may have shown it to her. Because over time, we would sometimes sit and I would talk to her about some assumptions I was making in the model, and a lot of times, it was in the context of R&D because we -- she was focused more on R&D.
And I would say, "What do you think your head count's going to look like in chemistry," because I didn't understand chemistry. So it was in the context of kind of fine-tuning the model. And I would share with her, "Hey, look, I" -- "I found this detail. I

want to share something with you."
So she probably would be familiar with a few details, but I don't think the whole model -- we never spent exhaustive time, me walking her through the entire model.

Q At any point in time in 2013 or later, did she express any concerns about any of the assumptions you made in the model?
A She probably would have. I mean, that was the whole point of having a discussion with her. That if she thought that our requisition per visit is low or high, we would have -- you know, she would have made some comments.
Q So you think -- you think you at least discussed the assumptions with her?
A It may not have been that "Let's sit down and show you all the assumptions," but like I said, over time between 2010 and beyond, you know, we would discuss assumptions and -- whether it was in the context of the model or in general, but knowing that it was going to go into the model, of course. So we discussed a lot of things that ultimately made their way into the model.
For example, if I recall correctly, I didn't account for any estimates for -- any assumptions for the DOD side, and that's something I would have said, "Look, I don't want to include anything here because I don't have visibility into that," and she would say, "Fine" or something like that.
Q You -- you -- you -- sorry. You understood that -- let me rephrase that.
To your knowledge, Elizabeth Holmes understood that you maintained a financial model for the company; right?
A Correct.
Q And that -- that model was based on certain assumptions based on -- in terms of the business and its R&D; is that fair?
A And a bunch of other inputs. But, yes, that's fair.
Q And she was generally familiar with the kinds of inputs that went into the financial model?
A She may have been at some point, but I was revving the model and adding so many assumptions that she may not be familiar with all of them or even most of them. So I -- I wouldn't necessarily make that -- that blanket statement.
BY MS. CHAN:
Q Did she ever edit the model?
A To the best of my knowledge, no. And there was one time I actually had a couple of questions for her, and I had put a model with her name on it so she

could edit, but I don't think she ever did because I continued with my assumptions and I never even looked at that model. So my -- I think my answer is: No.

Q Where did you keep your financial model? In which folder?

A It was a folder called 300, and this is -- I shared earlier yesterday that I -- I used that almost as my home drive. So everything that I was working on was on -- pretty much everything. I shouldn't say "everything." Pretty much everything was on the H drive. And under the H drive, I had a folder called either Fin or something like that. Oh, sorry, under 300 folder.

Q And Ms. Holmes had access to the 300 folder?

A I believe so. Yes, she did.

Q Do you know if she opened documents or reviewed them?

A I don't know.

Q Do you know if she would have opened documents and revised documents under the 300 folder?

A I would say in general, no, because I didn't see much activity from her on -- on the 300 -- in my folder, like, the 300 folder. She may have had her own folder and she'd use that as her own folder. I just used our common folder as it were my own folder. So she may not have. I wouldn't be able to tell.

BY MR. KOLHATKAR:

Q I'd like to turn back to the big rubber-band document that's Exhibit 221.

And if you could turn to the page ending 1036263.

A Okay.

Q And I'm looking at the lines starting on November 21st, 2013, at 5:35 p.m., or 5:35.

A Yes.

Q And do you see that message from you saying, "U should make yourself comfortable with financial models. Alternatively, you can cover everything else and I can meet with him on Tuesday and answer any questions."

A Yes.

Q And do you see this is in relation above to -- this is in relation to someone name Saurabh above?

A Yes.

Q Who is that?

A He was a quant, a number cruncher for an investment firm based out of Hong Kong.

Q Do you remember what that investment firm was?

A DST.

Q Was DST a prospective investor in Theranos?

A They had shown interest in -- in us. So I met with them, I think, once or twice, but I don't think our conversations really progressed much further.

Q I guess, do you have any -- any recollection of why you're asking Ms. Holmes to get comfortable with the financial models?

A Yes. Because otherwise, I would have to be in the meeting. So I thought if she could cover that, then I didn't have to be in the meeting and I could do something else. But if she didn't, then like I said here, you know, I would do it on some other day, on Tuesday.

Q And do you know if she ultimately did get -- did present the model to someone from DST?

A She did not.

Q How do you know?

A Because I did. I met with this guy. That's why I remember him. He was a quant.

Q Okay. If you turn to the next page -- I guess, what do you mean by "quant"? I should clarify that.

A Yeah, sorry. He's a number cruncher.

Q The page ending 1036264.

A Yes.

Q I'm looking at the -- still November 21st, 2013. Now this is at 1727:58.

Do you see that?

A Sorry, again?

Q 1727:58 is the time.

A Yes.

Q And the question from her is: "Does he need username and password for financial model?"

A Yes.

Q And then it looks like a couple of lines down, you say, "Please close file."

A Yes.

Q What are you asking here?

A She had probably had the file open and I couldn't save it. So she was probably looking at the file, and I was telling her to, I'm guessing because that's what it would mean, to close the file so I could save it.

Q And it looks like a couple of lines down, you say, "File under DST folder under Fin."

A Uh-huh.

Q "Not safe to give to him yet."

A Yes.

Q Why was that?

A That's because you're looking at the time frame, which is 11/21/2013. At that point my financial

model was really raw. I had my commentary all over the place with my code names like Normandy and bunch of other things, and many of the assumption were blank or I didn't have them filled out correctly. So I wanted to clean up some of my internal commentary. Chances are, there was probably something internal that I didn't want him to see, so I probably had wanted to remove that.

But I would glance at it before I would hand off the model to somebody else to make sure there's nothing referring to anything proprietary in the model.

Q Okay. So in other words, you wanted to make sure that you weren't revealing any of those trade secrets in the financial model; is that correct?

A That would be one, or it could be something else. Like I said, I had a lot of foolish comments to, like, killer software engineer and stuff like that. So I wanted to send a reasonably saner model.

Q At some point in time, did you develop a -- a reasonably saner model that could be shared more broadly?

A I think around the end of 2014 when I had this consultant who helped me with this model from DST -- not DST, from BDT, it started to look better and I had removed a lot of that vocabulary from there.

0560

MR. COOPERSMITH: Mr. Balwani, you said the end of 2014. Is that what you meant to say?

THE WITNESS: Yes. Towards the end of 2014.

MR. COOPERSMITH: Okay. Sorry. I don't --

MR. KOLHATKAR: Go ahead.

MR. COOPERSMITH: There was some lack of clarity on the date.

BY MR. KOLHATKAR:

Q Sure. I guess, in your mind, I guess, when did you develop a, you know, a model that was cleaner for -- to -- that took out some of that internal commentary you described?

A It happened over time because I -- I was obviously, like here, I was cleaning it also. But the end of 2014 is when I met with a consultant who helped me format the columns, label the columns correctly, put some percentages here and there to show more information that was already in the model, but to view -- make it easier to read.

And then after that, I continued to -- to make it better, to make it even more saner. But I wanted the model to be easy to consume and easy -- easy to -- to edit and change.

Q If you'll go to the next page, the page ending 1036265. The top of the page, about five lines

0561

down, there's a message from Ms. Holmes. It says, "Projects include BS and 2013 numbers. I guess it is

okay."
A Sorry, where are you?
Q Five lines down at 11 -- 22nd of November 2013 at 5:17 and 38.
A Yeah, I see that.
Q It says, "Projects include BS and 2013 numbers."
What did you -- you understand that to mean?
A I mean, I don't recall looking at the line. But what it says, "BS" stands for balance sheet, I assume. And I don't know what "2013 numbers" would be. I would have to look at the model to refresh my memory.
Q And does "projects" refers to projections?
A Probably, yes.
Q So, I guess, did Ms. Holmes sometimes use the term "projections" when talking about your financial model?
A Internally. Like I said earlier, we used to refer to this file as financials, fin, fin model, different names referring to this file.
Q And she may have used "projections" as well for that file?
A In this case, seems like it.

0562

Q And it looks like she says, "Saw you took the 10M TPS out of Sequoia 2013 projects."
Do you see that?
A Yes.
Q What does that mean?
A I don't recall what it means.
Q Do you know -- do you know what "TPS" mean?
A Yeah. "TPS" would be Theranos pharmacies shield. It was the acronym we used for I think some of the pharmaceutical work we did -- we did, so we had to come up with an acronym to define the pharma projects -- the pharma contracts. And we used to call it TPS for some reason. It was -- the name was there before I came.
Q Okay. So -- and just so I understand, the TPS refer to Theranos's --
A Pharmaceutical.
Q -- pharmaceutical --
A Yeah.
Q -- services?
A That's what I think, yeah.
Q Okay. The -- and it looks like -- so it's your understanding, this -- this 10 mil -- 10M, do you understand that to be 10 million?
A Seems like it, yes.

0563

Q To be in reference to the pharmaceutical services?
A Correct.
Q In 2013, was -- again, was -- was Theranos

receiving $10 million for pharmaceutical services?
A I don't know. I mean, like I said, this was a model, so I would have probably put some number or not. So I don't recall what it meant here. And if I see the model, I would be able to comment more accurately.
Q Okay. I guess I -- I do want to get to the model. I just want to get a sense of what you understood Ms. Holmes to -- to understand about the model.
A I think she was commenting on something in the model.
Q And was it your sense here that one of the lines she's commenting on is the pharmaceutical services line that's in that model?
A That's what -- it seems like it, yes.
Q And looks like at one point, she says, "I guess if 25 is an issue, 35 would be too."
And you respond, "We'll look another way. If 25 is not good enough, then 35 won't be either."
What does that mean?

0564

A I wouldn't be able to guess from this general statement. I would -- like I said, if I see the model, it may make more sense.
Q Do you have any recollection of a discussion with Ms. Holmes about the model that was sent to Sequoia?
A I don't.
Q Who is Sequoia?
A It's a venture capitalist firm that had shown interest in us.
Q And did you consider them to be a potential strategic investor?
A At that point, yes.
Q What about DFJ?
A They were an existing investor in us.
Q Who was it?
A Draper Fisher Jurvetson.
Q Did you share projections with Draper Fisher Jurvetson?
A You mean the model?
Q The model.
A I don't recall.
BY MS. CHAN:
Q Why would you consider Sequoia as a strategic investor?

0565

A Sequoia is a legendary Silicon Valley firm. I mean, it's not just any other firm. They have invested, I think, in some of the biggest marque names in Silicon Valley. So they have incredible depth. They could have guided us like no other -- very few VC firms.

BY MR. KOLHATKAR:
Q Did you see Theranos as a venture stage company in late 2013?
A We saw us as a -- still like a life sciences startup. I don't know what "venture stage" technically would mean. But -- you mean like something that we'd go to a venture capital for money?
Q I guess in your own mind, in 2013, what did -- what did a venture stage firm mean to you?
A Well, I don't know, which is -- what -- the way we described ourselves was: We were an LS startup. And even though, yes, it was 2013 and we had, like, 200 people or something like that, but where we were in our life cycle, we looked at ourselves as a startup. And actually even in 2015, I'd say we are a startup. So we used to look at us as a startup. I don't know about "venture stage." I don't know what that means.
Q Did you ever describe it as a -- in your own mind, was Theranos a late-stage or early-stage startup?

0566

A I don't know. I'm not familiar with the VC industry, and I haven't spent too much time there, so I wouldn't know how they categorize things, so I wouldn't like to guess.
BY MS. CHAN:
Q Could you turn back one page to 1036264 of Exhibit 221.
A 264?
Q 264. Yeah, just one page back.
A Yes. Uh-huh.
Q So towards the middle of the page, it's November 21st, 2013, at 1745 and 19 seconds. Do you see there's a text message from Elizabeth to yourself where she says, "Can I edit it? There are typos."
A Yes, I see that.
Q She's talking about editing the financial model?
A It seems like it. Because if that's the conversation that we are still talking about, then the answer would be: Yes.
Q Okay. And then she goes on to say, "Okay to open?"
Do you remember her editing the file at that time?

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A Like I said earlier, I don't recall. She had access to it. And this was in 2013. We are early. So even if she edited it like she's referring to here, there may have been typos, but I don't recall her making any meaningful changes that I recall in the model. And it is highly likely that if I didn't know that she had made changes, I probably ignored them because I had another version that I was working off

of.
Q When you discussed the financial model with Ms. Holmes, how would you do it?
A I had probably the biggest screen anybody else had in the office, about a 30-inch Mac terminal. And usually, I would ask her to come over, and I would tilt the screen towards her, and would have it on my machine and I would show it to her. Sometimes I would project in the conference room, but rare. Mostly it was on my screen.
Q So you would talk over the assumptions with her, and, you know, if she had any input, would you make those changes?
A Yes.
Q And generally, did she -- did she understand how the model flowed? You know, that you would put an assumption and that it would run through the other

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different financial statements?
A Yeah. I mean, I think in our -- 2013 when the world was simpler, we spent a little bit more time. But after that, we got busier, so she spent less and less time. So I don't know how much she understood after that point. But in 2013, I did show her "Here are the inputs. If I modify these, it will reflect here and it reflects here and it reflects here."
So I -- I walked her through it. I don't know if she spent any time on that or not.
BY MR. KOLHATKAR:
Q What was your saving convention saving the files -- these model files in your 300 folder? Did you name the file by the date that you were changing a file?
A It changed over time, and actually depended. In many cases, I would just keep editing -- if something was not major, then I would not rename it, so I would just keep editing the same file. But when I reached a point where I thought it's worth forking because I would like to go back and remember some things from the old model, I would fork it out. I would rename it as something else. And I'd keep the old one as is, and then I'd work on the new one, and then I'd keep doing that.

0569

Q I guess, how would you -- how would you delineate which was the -- the more current fork in the road?
A Yes. By the timestamp, most likely, but I would also give them somewhat -- over time as I had more models, I would give it a little bit more descriptive name. So, for example, "As of BOD meeting" or something or "As of talking to Elizabeth" about something. So I would put some kind of commentary in the file name itself.

Q I'm going to hand you a document that I'll mark as Exhibit 250. You can put Exhibit 221 to the side for now.

For the record, 250 -- Exhibit 250 is a document Bates-stamped TS-0400455 through TS-0400456.

Let me know when you've had a chance to review it.

(SEC Exhibit No. 250 was marked for identification.)

THE WITNESS: (Witness reviewing document.)

Okay.

BY MR. KOLHATKAR:

Q Do you recognize Exhibit 250?

A Yes, I do.

0570

Q What is it?

A It's an e-mail exchange between myself and (b)(6); (b)(7)(C) Sequoia Capital, and I've CC'd Ms. Holmes on this -- actually, she's CC'd on the thread.

Q Who -- and who -- what was -- do you know what (b)(6); (b)(7)(C) role was at Sequoia Capital?

A Yeah. (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

Q The -- I'd like to focus your attention on the last e-mail in this chain. The -- the long paragraph in your e-mail dated December 6, 2013, it says, "We have approximately 108 million currently in deferred revenue."

Do you see that?

A I do.

Q Is the paragraph that proceeds kind of an accurate summary of your understanding of Theranos's deferred revenue as of December 6, 2013?

A It would be accurate as of 12/6/2013, back then. I don't remember right now, sitting here, whether -- without the model to be able to comment on that. But it would be accurate. I wouldn't be sending anything to him that was not accurate.

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Q I guess, just -- well, you know, I understand that the elements of this would be placed in the model, but does this comport with your memory of what you understood the deferred revenue situation was at Theranos as of December 6th?

A To the best of my understanding, I think the answer would be yes, of course.

Q And did anything -- did anything about Theranos's deferred revenue -- your understanding of Theranos's deferred revenue change after December 2013?

A Yes, significantly.

Q How so?

A We signed an amendment with Walgreens I think just less than a month after I sent this e-mail, and that modified our contract terms with Walgreens, and we got the 75-million-dollar payment from Walgreens as part of that. And that changed the contract -- that changed the -- the assumptions behind this contract.
Q And so how would that have changed the -- the description of deferred revenue that exists here?
A Yeah. So first of all, the -- I think about a hundred million of this -- again, I don't remember the exact details, but the hundred million of Walgreens revenue, 75 million would be deferred. Now, it would not be -- no longer be deferred was my understanding

0572

because now we get to recognize it because the contract -- according to the contract, it was nonrefundable.
Q Okay. That's helpful. Thank you. You can put -- put Exhibit 250 to the side.
We don't have a projector in this room, so I'm going to hand you a document that is -- that I'll mark as Exhibit 251. It's a bigger sheet of paper.
A Thank you.
(SEC Exhibit No. 251 was marked for identification.)
BY MR. KOLHATKAR:
Q For the record, Exhibit 251 is a native printout of an Excel document. I'll represent that each page printed out represents a single worksheet in the -- in the Excel file. And the document was produced at PFM0017759.
Mr. Balwani, I'll represent to you this is a native version of the model that a PFM representative received from -- from Theranos in January 2014.
A Okay.
Q Do you recognize Exhibit 251?
A It looks like one of the models that I worked on.
Q And I guess -- I guess, just stepping back,

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what is PFM?
A It's a hedge fund. I think it's called Partner Fund Management. I used that as an acronym. They had different funds under management, but I used PFM to refer to that -- all of them together.
Q Did you provide PFM with a -- with your financial model in January 2014?
A I did.
Q The -- were they considering an investment in Theranos at the time?
A Yes, they were.
Q Did Theranos consider PFM to be a potential strategic partner?
A Yes.

Q Why is that?
A When they had approached us in November of 2013, their first couple of meetings they had with Elizabeth and then briefly with me in January, again, they were giving us their background about their depth in healthcare, their expertise, their interactions with the FDA, their -- some of the LPs had FDA expertise.
So it seemed like a fund that knew of our space very well, and they seemed -- seemed very knowledgeable. And so that was the primary reason.
Q How did you provide this financial model to
0574
PFM?
A So first, I had shared this model with them on a screen. I projected it in the conference room. And I worked through the model, showed them different assumptions. And then they wanted a copy of this model so they can play around with it, and I gave it to them on a USB stick.
Q And did they ask questions about the financial model?
A I'm sure that when I was talking to them in the conference room, they did. But I don't think after I gave them the USB stick, then we went together and went through the model after that. But they may have asked me a few questions after that.
Q Okay. So just -- I mean, to the best of your memory, the primary conversation about the model was when you were displaying it on the screen, and then after that meeting, you provided it to them on a thumb drive?
A Yeah. And if they had any questions, they probably asked me those questions and I answered them, but I don't recall right now.
Q So this first page is -- I'll represent is entitled "Macro Market Assumptions."
A Yes.
0575
Q Sorry, the -- the -- the sheet page doesn't show up on the -- on the printout.
But what did you intend the Macro Market Assumptions tab to include?
A There was some data that was what I call constant or fixed that, you know, I had learned from -- like I said, some data from the CDC and some of our internal calculations or internal assumptions. And I put all of those big assumptions in one tab right here.
Q If you focus on the top of the page, there's "2014 device cost plus installation/config plus training."
A Yes.
Q What does that refer to?
A It refers to one of the devices, whatever the current version of the Theranos TSPU would be,

manufacturing and training cost for that.
Q So here, the assumption is that the -- in 2014, the cost for -- is this for -- does this assumption include manufacturing?
A Yes. It includes everything.
Q Okay. So building it, installing it, getting it ready to -- to go?
A And training the people in the CLIA lab or whoever is going to get trained on it and -- yeah,

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fully loaded cost.
Q How did you come up with a 70,000-dollar figure for that assumption?
A At that point -- again, this is two thousand -- late 2013, so it was a rough ballpark. I was looking at our expenses in manufacturing, how many labor hours it takes in the manufacturing, again at macro level because we were not making enough units to be able fine-tune this yet. And so I probably asked some data from (b)(6); to see what our spending was in manufacturing, how much we are spending on the supply chain. I may have asked (b)(6); (b)(7)(C) to crunch some numbers for me.
So it really -- was a really rough ballpark where we thought we were -- or where I thought we were.
Q And how did you decide that 50,000 would be the -- should be the assumption for 2015?
A Primarily, it was assuming that in 2015, we would improve our manufacturing processes. Our device is going to evolve. Some components will get cheaper. Some of the detection systems that we use in devices were -- were expensive. Like any other electronics, you know, you buy the latest version, it's more expensive. By the next year, it gets cheaper. So there were some pieces that were going to get cheaper, some

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economies of scale we would have achieved. So again, it was a ballpark, rough estimate.
Q Does -- do -- do any of the assumptions here include costs that Theranos would have to incur for -- for either modifying or purchasing third-party commercial analyzers?
A Yeah. I had included all of the big machines or big equipment somewhere. Here (indicating).
Q Sorry, just for the record, you're pointing to what? It's not paginated, so if you could just kind of flip through and count the pages. I think you're looking at Page 4.
A One, two -- fourth page, under "Cap Ex," capital expenditure, "Lines of Production."
Q So in your view, "lines of production" meant costs related to third-party devices?
A Yeah. I mean, third-party devices, also the lines of automation that we were putting in the CLIA

lab because we had purchased an automation line for the CLIA lab also. So every -- all of the big capital equipment that we were going to spend money on is included here.

Q And the -- the fourth page was -- this is a summary statement of cash flow; is that right?

A Correct.

0578

Q Did you ever explain to PFM that -- that the lines of production assumption assumes those items that you just described?

A Yes. We talked about this. They asked me that question. And I said all of the big machines that we buy for any purposes, for R&D, for labs, for manufacturing, I put here bundled together.

Q In other words, it was your understanding that PFM understood that Theranos purchased third-party commercial analyzers for CLIA lab use?

A Yes.

Q And who was -- was that conversation with?

A I met with them several times, and we used to talk about high throughput as part of the Stage 1 -- or Phase 1, sorry, model, and I used to run some numbers for them about how we would automate something. I actually even showed them some of the machines when we went for the tour in the R&D lab, saying, "These are the kind of machines we use for high throughput processing in our CLIA lab," and these were all third-party big machines.

And then, of course, they knew we were doing finger -- venipuncture. And our plan was: When we open the lab in Arizona, I explained to them initially it's going to be a moderate complexity lab where we

0579

will put all the FDA-cleared equipment.

Q Who from PFM did you take on that tour of the lab?

A (b)(6); (b)(7)(C) I believe (b)(6); (b)(7)(C) I believe the third guy, (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) But actually -- you know, actually, it may not be (b)(6); (b)(7)(C) It may be just two. If there was a third, maybe somebody else. (b)(6); (b)(7)(C) didn't come on the lab tour.

Q What about the explanation of lines of production, who do you think you provided that explanation to?

A With (b)(6); (b)(7)(C) I had a long discussion about that.

Q So I want to turn back to the -- back to the macro market page here.

You see there's a -- there's two depreciation lines there. Do you see that?

A I do.

Q Can you explain what the -- the first one

says, Depreciations PP&E, paren, SL assumed.
What does that mean?
A This is -- I just used the words property, plan, and equipment, so all the heavy machines that we were buying. I assumed a ten line -- ten-year straight
0580
line. So I was not using any -- any complicated formulas. I was just dividing it by ten and using that as my assumption.
Q And -- and what about "device depreciation," what does that refer to?
A That -- again, if I looked at the model, the formulas, I would be able to confirm it, but I think it would refer to our TSPUs, the two lines you see above.
Q And how did you decide the period of time over which Theranos would depreciate these assets?
A I just picked a ballpark number. There wasn't -- I didn't know what the accounting was going to be. Just for the sake of modeling, I was using these two numbers.
Q Did you share these assumptions with (b)(6); (b)(7)(C)?
A I don't think so.
Q Did you ever ask (b)(6); (b)(7)(C) how long the -- the company's depreciation period was for its assets?
A You know, I may have asked her once about what was our -- you know, the depreciation timeline. The ten years may have come from that, but I don't -- I'm not a hundred percent sure.
Q How did Theranos track the number of devices it had at this -- you know, end of 2013 early 2014 time
0581
period?
A For the most part, in software because when a device wakes up, it sends its heartbeat to the Cloud, so in the Cloud, we can see which device is there or how many devices. And they were all unique. They had a serial number. But then we also had a log in manufacturing where they tracked it.
Q Do you have a sense of how many 3.0s or 3.5s the company had around this time period?
A End of 2013, I would say 2 to 300 would be a good estimate.
Q Were they -- were all 2 to 300 in use in the -- either of the R&D or CLIA labs?
A Yeah. I think I answered the question yesterday. That they used to rotate because they are such small devices, they're so easy to move, that they would be rotating between R&D, CLIA, manufacturing would be refurbishing them, servicing them, so they would keep rotating.
Q I guess, in that refurbishing or servicing process, would it ever be the company's practice to sort of use a machine for parts?

A Or to just break it down and --
Q To break it down and say, "This piece is still good. The rest of the machine is not working.

0582

Let me use this piece in another device"?
A I would say yes, but I'm not sure about that -- that level of detail, but I would -- my common sense would say yes.
Q Who at Theranos was responsible for overseeing the manufacturing process for TSPUs?
A It evolved over time. Obviously when we were a small company -- you know, when I joined the company there were, I think, ten people in manufacturing, and there was a guy, (b)(6); (b)(7)(C) but then within six months of that, we had hired another guy. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) and he kind of grew into that role of managing not just the R&D but also the production.
So -- and then ultimately I believe in 2013, we hired a full-time VP of manufacturing. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) So -- and then he basically took over the whole manufacturing.
Q Who did those people report to?
A (b)(6); (b)(7)(C) reported to me. (b)(6); (b)(7)(C) also reported to me, I believe. (b)(6); (b)(7)(C) I think reported to Elizabeth.
BY MS. CHAN:
Q Is (b)(6); (b)(7)(C) familiar with the development of the 4 series miniLab?
A Not necessarily. He was more in

0583

manufacturing. He would only come at the tail end.
Q Oh, I see. Okay.
So who was involved in the R&D process of developing the TSPUs?
A There were a lot of people. It was -- like I said yesterday, it was a very collaborative process. You would have software developers, electronic engineers, chemists, and obviously mechanical engineers. So there were a lot of teams working together. But there was no one person would owned it. I would say both Elizabeth and I owned it together, but I would, you know, even with that, say, like, 10 percent. 80 percent was a collaborative team effort.
Q Did the 4 series ever go into production, into manufacturing?
A Yes, it did. We actually submitted our 510(k) to the FDA on a 4 series device -- on a bunch of 4 series devices.
Q So they're in production?
A Well, I don't now about now.
Q Or at the time that you left the company?
A I mean, I don't know. By "production," do you mean were they in the CLIA lab?
Q Were they being manufactured by Theranos --

A Yes.
0584
Q -- in bulk?
A Yes. We were always manufacturing those but -- by bulk. Our manufacturing lines, we had made a significant investment in Newark. It was just an amazing facility. And we could -- we had estimated we could produce about 200 devices a month, but we hadn't gotten to full throttle yet. So I think we were about 30 devices a month production capacity.
And most -- some months, we were backed up because we would have this new modification we made and now we needed to make changes, so all these -- manufacture would get busy, and then some months, the R&D guys would say, "Hang on, we need to make some changes before you make anything."
So it was kind of more of a creative a process.
BY MR. KOLHATKAR:
Q If you'd take a look at sort of the box below there. Still on the first page --
A I'm sorry, yeah.
Q -- of Exhibit 251. "Retail Pharmacies," there's a number that says "revenue per requisition."
Do you see that?
A I do.
Q How did you determine what the average
0585
revenue per requisition would be?
A Yes. Again, it was a guess that -- Safeway and we had worked together on this thing, and the way we reached this number is the following:
We had access to what other labs were charging Medicare because Safeway had a lot of data on lab patients. And then we also, I think over time, acquired data from Medicare directly because you can buy data from Medicare. Anonymized, of course. And we looked at what is the average requisition that a Medicare patient has. An average requisition for a Medicare patient was about -- I don't know if it was mean or median, but the average was about $80 -- $65 to $85, just like it says here.
And then Safeway and Theranos, back then, had decided that we wanted to be better, and cheaper, and all the other advantages, so we picked 50 percent of Medicare as the line that we would draw and say, "Okay. We will shoot for that." And the 50 percent of Medicare would have been about 40 to $45. And we went further. We used $35 to be conservative as the estimate.
Q Did Theranos ever conduct an analysis to see if it could break even while charging, you know, half this cost to Medicare for -- for patient testing?
0586

A Yes.
Q Did that happen throughout 2013 and 2014?
A I don't think it happened in detail in 2013. But in 2014, I had generated many models. It was volume driven, of course. You know, it's like a restaurant. If you have one patient coming, you don't make money, and if you have sufficient, you make money.

So I had done an analysis, and I had looked at, you know, different assumptions again. And our revenue per requisition, in reality, ended up being higher than 35. In Arizona, I think we were getting about 44 or $45 over an extended time. And so obviously, you can fine-tune those assumptions.

And as we learned more about how much a phlebotomist is going to cost, what's the fully loaded cost for different things, at some point -- I don't know if it was 2014 or '15, but I had created a very complicate -- comprehensive model that had every single detail all the way to gas, and car wash, and other things.

Q Did that include the cost for maintaining third-party analyzers in a centralized CLIA lab?
A Yeah. I mean, that was under a CLIA lab cost. So there's not -- it's difficult to separate out costs of maintaining third-party analyzers. It

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included the CLIA lab cost. That would include labor and everything else in the CLIA lab, including reagents, of course.
Q The --

BY MS. CHAN:

Q What was your break-even point? How many tests did -- did Theranos have to conduct in order to break even on its costs?
A I won't recall because it was changing over time. As we were investing more in R&D, obviously the break-even point changes. But -- so I won't -- I mean, I'll have to be specific at a time point.

But I think on average, it was about, you know, 15 patients or 20 patients a day, again assuming a certain volume. If you're only in location, at 15 patients a day, you're losing money. You have to be in a whole bunch of locations to break even.

BY MR. KOLHATKAR:

Q Did you have a sense in terms of number of stores Theranos would have to be in before it would likely have the opportunity to break even?
A I don't think it was a matter -- a factor of a number of stores, it was a number of requisitions and patient samples, which is why samples was very important even more than patients per day. Because

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like I said earlier, if somebody brings multiple samples -- it is the value of the requisition that

mattered other than how many people you are getting. Right? If somebody comes in with an expensive test, you make more money.

So it depended on that more than number of stores. Number of stores was just a really weak indicator of growth. Because you could be in, you know, 500 stores and you're getting ten patients a day or you could be in, you know, 200 stores and getting a hundred patients a day. Right? So it was more important that we are getting more requisitions, more valuable requisitions, and then of course more patients, and then how many locations you have.

Q I guess, did you -- did you have this view in 2014 that number of stores was a weak indicator of growth?

A Yeah, of course. It's evident from the model.

Q How so?

A Because if you just look at the assumptions --

Q Okay. Again -- you're ahead. I want to circle back to that point.

A Yeah, of course.

0589

BY MS. CHAN:

Q Can I just clarify.

So when you said 15 to 20 patients per day would break even, is it patients or is it requisitions? You were making a distinction there.

A Yeah. Like I said, it depends on the time point, and I'm giving you a very rough figure from memory without knowing which time point we are talking about. But if you get highly valuable requisitions, then even 12 would -- or 13 would have been fine.

And there was, actually, I think one analysis I had done where 10 to 12 patients or 13 patients was sufficient. And another, you know, 20 was sufficient. So it was -- it was a wide change. Obviously, as we learned more, it got more and more fine-tuned as we get -- got more data from the field.

Q Is that patients or requisitions from the field?

A I don't know. That's what I'm saying, is that I didn't have enough data. So you can slice it any way. Either you can say it was 12 to 20 patients or 12 to 20 requisitions. It doesn't matter. It's the value of the ticket that matters. So my range was pretty broad and we were still learning, like I said earlier.

0590

So you could assume requisitions doesn't really matter. I think my point is: At the end of the day, it doesn't matter.

Q Okay. So when you said 15 to 20 -- you

remember it at some point being 15 to 20 patients per day. When was that?
A I don't know. That's what I've said several times. I don't know the time point. This number would have changed depending on how much were -- we were spending on R&D, whether we were going to spend more on R&D. You can also modulate those assumptions. If you assumed we are going to reduce the R&D burn, R&D expense, then the patients per day or requisitions per day goes down.
So there were a lot of inputs that went into coming up with that pretty broad range, which is why it was not the most important thing that I focused on. I was more focused on the overall growth.
MR. KOLHATKAR: We'll go off the record at 1:50.
(A brief recess was taken.)
THE VIDEOGRAPHER: Rolling.
MR. KOLHATKAR: We are back on the record at two zero -- 2:03 p.m.
BY MR. KOLHATKAR:

0591

Q Mr. Balwani, just to confirm, we didn't have any substantive conversations during the break; is that correct?
A That's correct.
Q Before we went on break, we were discussing Exhibit 251.
Do you recall that?
A Yes.
Q And I want to return to that exhibit now.
A Yes.
Q I guess looking down at some of these other macro assumptions, there -- there's an assumption in the ER space for annual tests per miniLab ratio.
A Yes.
Q What does that represent?
A I don't know exactly. I will have to look at the formula and -- and make sense out of that. It's a ratio. So I don't know what it is -- what numbers are being divided out.
Q Okay. Based on the description, would you imagine it to be the -- it's the number of tests divided by the number of miniLabs?
A That's what the formula -- I mean, the expression says here, but I don't know what the logic behind 6,000 is.

0592

Q I mean, did you -- did you have a sense at that point in time how many samples a TSPU could run in a year?
A Not in the ER setting, not by a long shot, not by a long shot. And ER and ICU were not part of our models for a very long term yet.

Q Okay. So, I guess, what were these -- why were -- why -- why did you have assumptions for the ER and ICU here?
A Well, like I said, earlier, as I learned information from the market, I would just add things here. And these are important things that I had learned by doing some research, and I didn't want them to get lost in some other document somewhere, so I just put them here as an FYI. And it says at the top it's just market data. But there was no other logic behind it. And certainly, like I said, it was not part of any model.
Q If you turn to the next page, which is a printout of a sheet entitled "Theranos Market Assumptions."
A Yes.
Q This might be a little small. Let me know if you're able to read it.
I guess, generally, can you describe for us

0593

what this sheet explains.
A Yeah. This sheet includes additional assumptions in addition to what was on the first page. So I had split the assumptions, which are more general and global in nature on the first tab, and then assumptions that were changing by either month, or by quarter, or by year on the second page.
Q Okay. And so -- and where are those changing assumptions reflected on this sheet?
A So there are several things here. It's kind of all over the place. But the assumptions are the number of Walgreens locations or stores. That's the -- unfortunately, I don't have cell and columns, but under January 14, there's a cell under Walgreens. Do you see that?
Q Yup.
A So that. And then "Other Retail Pharmacy" would be whatever other retail pharmacy locations. The third line is the addition of those two. Then is the prescriptions -- actually, that's -- the "RX" means prescriptions per day per location, and that's the assumption there for Walgreens and retail pharmacies. And the final one is the total of locations times prescriptions per day at -- at a given location.
Q And was prescriptions another way of

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describing requisitions?
A That's right. That's correct.
Q And --
A That's what -- that's what I remember now from looking at it.
Q And the first -- the first description on the -- at the top -- in the top left there is "RX locations."

Does that -- does that refer to pharmacy locations?

A Yes.

Q The -- and then sort of below those assumptions in terms of locations and requisitions per -- per location, there's a set of assumptions -- there's a set of figures there.

A Yes.

Q Do you see that?

One's related to retail pharmacies, physicians' offices, hospital courier, hospitals on site.

Do you see that?

A Yeah, I do.

Q Can you walk just through those and explain what -- what those categories represent in the model.

A Sure. So the retail pharmacies is just the

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summation of what you see above. So it carries forward the number of total retail locations, number of patients processed during that month. So if you look at the formula, I'm sure it is multiplied by either 26, or 28, or 30 days a month. I don't know what I assumed. And shows you the revenue coming from that bucket.

Q And so -- so would you -- essentially, would the revenue be sort of the per-requisition average multiplied by the number of patients processed?

A Yes. And most likely, if you multiply 3,200 by 35, I think on the previous page, you'll probably end up with this number. And then it carries over --

MR. FOLEY: 3,300? Are you looking at --

THE WITNESS: Oh, 33. Yeah, sorry. It's kind of small writing.

MR. FOLEY: Yeah, understood.

THE WITNESS: Yeah.

BY MS. CHAN:

Q And is patients and number of patients processed here, is that the same as requisitions above?

A Yeah. I'm using them here -- loosely here. And also, you probably know, maybe I should highlight that. "RX" is really pharmacy prescriptions in

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general. "DX" refers to diagnostics per prescription, but I again used "RX" in the -- in the wrong way here.

And then the third one is the hospitals --

BY MR. KOLHATKAR:

Q I'm sorry, I think I interrupted you before physicians' offices.

A Yeah. And what I was going to say is: Then you can see month by month, as you change these assumptions all the way at the top for RX locations, this column changes. So once you go from January to --

from 11 to 41, then 40, then a hundred, these numbers get reflected in the retail pharmacy bucket. Make sense?

Q What about the physicians' offices lines, can you explain those.

A Yeah, I was going to get to that next.

So the physicians' offices assumptions were the number of physicians' offices, where we were picking samples -- going to pick samples from. So our plan was: As we launched in a given geography, once we had the retail footprint, then we would also, because we already had the insurance contracts, and independent labs, basically go and pick up samples from physicians' offices, we would also do the same and go pick up samples from physicians' offices for processing in the

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lab.

These would not be finger stick samples. These, in most cases, would not even be our Vacutainers. Physicians do all their own draws today in their offices, many of them do. Some -- the larger ones, the lab will put a phlebotomist on site if there's sufficient volume and if the law requires -- law allows. So that's what -- what the physicians' offices are. Sorry.

Q And how did you -- how did you come up with the -- your assumption for the number of physicians' offices that would open -- that you would be collecting from given a -- given a retail footprint?

A It was a bottom-up assumption based on how many samples our lab is going to be able to handle. And the assumption was: As we grow, there would be certain physicians in a geography. And I think in Arizona -- I forgot what was the right number. Arizona had 6,000 physicians maybe, or 4,000. I forgot the right number now. That we would be able to capture a certain percentage of that market, and a certain percentage of that, we'll be able to process in this lab and in this lab. So it was more of a bottom-up kind of calculation.

And if you look at the next number, you'll

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actually be able to see further assumptions. 17,600 divided 40 -- I don't know what the -- and then -- again, if I had the formula, I would be able to tell what assumptions I'm making here on how many samples we are picking up per day from the physicians' offices. I had made it more clear for the retail locations. For physicians, I just lumped all the values in this cell.

Does that make sense?

Q Okay. Yeah.

The -- what about the hospital couriers?

A It's a similar model as physicians' offices, but in this case, you are picking up samples from a

given hospital location. And again, this is just a pure courier model. Like pick up samples, you have samples that you can process faster, or cheaper, or for whatever reason the hospitals cannot provide, and then like independent -- other independent labs, you'll be able to process those samples for them.

And again, these numbers are bottom-up assumptions. We look at how many hospital -- and hospital is also the Accountable Care Organizations, the physician networks that are owned by hospitals, how many locations they own. And you just do a bottom-up analysis of a certain percentage you'll be able to capture in the market.

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MR. MCKAY: Can you slow down just a little bit.

THE WITNESS: Sure. Sorry.

BY MR. KOLHATKAR:

Q I guess, in this -- in this model, why did you assume that the -- sort of the hospital courier component would ramp up after the physician pick-up component?

A The reason for that is: In most cases, you are calling on physicians first. So when you launch in a market, even when you are doing retail, like Walgreens, and CVS, and others, you are still calling on physicians. We were calling on physicians starting 2013 because physicians have to write the prescriptions to send them to all the Walgreens locations.

So you make an assumption that you have already called on physicians. We already know sufficient physicians who would -- who we can pick up samples from because a lot of physicians draw blood in their own office, like I said, and it will be faster. Most likely, you will be able to do those faster than -- before than hospitals.

And the other reason was also, about ten years ago, 80 percent of the physicians were independent and 20 percent worked for hospitals. The

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last ten years, the equation had changed. I think now it's 60/40, 60 percent physicians work for hospitals and 30 percent work for -- they are independent, 40 percent are independent. Ballpark numbers. I'm not exactly sure. It obviously changes by -- market by market.

But the assumption was -- I think in Arizona, we had more physicians that we were calling on sooner, and then hospitals in Arizona would have been probably a little bit longer cycle.

Q Why is Theranos considering servicing the -- the -- sort of the doctor's office market for -- for lab care services?

A Every lab does that. That's part of the lab

industry. So Quest Diagnostics and LabCorp, they pick up samples from labs -- doctors' offices. You already have insurance contracts. Besides, the insurance companies like it because our prices were lower. We were also billing Medicare 50 percent.

So the -- most of the advantages of retail location except for obviously being in the retail location applied in physicians' offices also. You pick up the samples -- we control the billing, and that was an important part of this, and -- and we would bill the insurance company what we had agreed on with the

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insurance company. So -- and basically that meant whatever prices we have advertised.

Also, Arizona had a lot of out-of-pocket patients who otherwise couldn't afford lab testing, and we were offering the same prices that we were offering at retail locations and physicians' offices.

Q For the physicians' offices, was -- was it Theranos's proposed model to -- to distribute a TSPU to those locations? Or it sounds -- sounds like it was to operate it in -- just pick up venous draws and process in the CLIA lab?

A Yeah. It purely means courier. This was not -- we couldn't distribute the TSPUs to physicians' offices without FDA clearance, so that was not part of the plan. Ultimately in the long term -- definitely, it was part of our original because that, you know, hopefully four or five years from -- from now, it changes the game in physicians' offices if you can do the test and see the physician in the same office.

And we believed that our TSPU, you know, I thought, for the first time in history, will be able to provide that -- that kind of healthcare. So -- but it was not part of this model, though.

Q And for -- just so I understand the model, the physician's office courier model doesn't include

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any finger stick, is that right, it's just collection of -- if the doctor is able to collect blood venously on site?

A Exactly right. Most doctors do venipuncture today, maybe most -- a lot of doctors, but I think it's most. They do venipuncture in their offices today. They have trained nurses. In some cases, doctors can do it. But mostly they have a physician's --

THE REPORTER: Can you slow down, please.

THE WITNESS: Most of the cases, they will have a physician's assistant or a nurse who will draw the blood. And they will pack it, they will put labels on the samples, they will put the requisition. If they have EMR connectivity, electronic medical records connectivity, then the transaction goes to the lab automatically. And then if it is a manual process,

then the physician will call the lab and say, "Hey, I have samples for you today."

And in many cases, the labs will provide the physicians with the kits, collection kits, so that the lab can process the samples the way lab is expecting to. Like I mentioned yesterday, there were some assays that are validated on serum and plasma, and different labs do it differently, so you need different tubes. So labs would provide that to the physicians.

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But our model here was just pick-up.

Q And is that the same for the hospital model -- courier model here, that it's just pick-up of venous blood?

A Well, venous blood and nasal, urine, feces, all matrices.

Q But you weren't -- you weren't proposing to -- to -- let me correct that.

This model in Exhibit 251 wasn't, in your view, representing Theranos distributing the -- the CTN and having hospitals conduct finger sticks for this courier aspect?

A At some point the answer is: Yes. It doesn't impact the model, though. Just like if you look at retail, whether the patient is getting finger stick or venipuncture doesn't really impact the model. So if we had received FDA clearance in the time frame -- in the -- during the life of this model, we could -- absolutely could have distributed our CTNs. And that would have been great. I mean, I think we could have gotten even more volume.

But here, this model does not assume either CTNs versus finger stick here. I mean, if you include them, it doesn't change because we were not charging more or less for finger stick or venipuncture.

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Q Would it have affected Theranos's cost on the back end whether -- whether tasks were performed using a Theranos CTN or a traditional venipuncture?

A I don't think that reagent cost was a significant factor. The simple answer is: Probably yes. But the reagent cost for processing samples in the total cost equation is pretty small except for some tests, and in those cases, we probably would have developed our own test to reduce cost. But in general, I would say it's not significantly material once you're hitting a reasonably large volume.

Q In 2013, was it cheaper for Theranos to -- to -- to build a nanotainer or buy a venous draw tube?

A Because in 2013, our volume was extremely low and Vacutainers are bulk produced by millions and billions, actually, and we did have a good deal with Becton, Dickinson or whoever the supplier was. My guess is: The venous puncture tubes is cheaper, just

the cost of the tube itself, but I don't know if that necessarily meant the entire requisition was cheaper.

But having said that, obviously, as the volume increased, our CTN cost over time would have gotten cheaper. It's just, you know, a simple law -- averages of law volumes, and then it would probably would have been cheaper.

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Q The model here lists for -- for January 2015 the number of Walgreens locations as 1,100.

Do you see that?

A I do.

Q In -- in January of 2014, did you expect Walgreens to have opened 1,100 Theranos locations?

A Not exactly 1,100. But in January of '14 when we had these amendments signed with Walgreens, I recall that our model with Walgreens at that point was: Walgreens performing the finger stick, we providing the CTNs, not -- us not hiring phlebotomists in the field, it was going to be their labor, we will just train the trainer and they will train all of the technicians and they would handle all of the operations in the PSCs, our expectation was that we would scale very rapidly. And Walgreens used tell us they're execution machines.

So like -- I think I already answered your question, that not exactly 1,100.

Q Did you have any sort of exact figure in your mind about where you expected the Walgreens rollout to be by January 2015 as of January 2014?

A I didn't have an exact number, which is why I was using this as a modeling exercise to see in two or three years, we want to get to a ceratin number. But I wasn't sure if -- for sure in a certain month, or even

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a certain quarter, or even a certain half a year we will be able to hit those numbers exactly the way they are in the model or not.

Q What about with respect to the February 2014 number, do you see you go from 11 stores to 21 between January and February 2014?

A Yes.

Q Did you have reasonable confidence in January 2014 that Walgreens would go to 21 Theranos locations by January 2014?

A No, I don't think so.

Q So how did you set the assumption for 10 additional stores for the next month?

A I think there are two answers. One is: It was a model, so I had to start somewhere, and I started with 11 in January of 2014. The other thing is: If we missed a month, and I showed this to PFM and I showed it to a bunch of other people, all you had to do is go to that column header that says "January 2014" and enter "March 2014," and it shifts the entire model out.

So -- as a matter of fact, when PFM invested -- signed the investment agreement, it was February 4th, and at that time, this model showed that we had 11 Walgreens locations. And clearly we didn't, we only had three. So it was well understood that this

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is just a modeling exercise, and one could plug in numbers based on as we learn and as we move forward.

Q You mentioned that there were some other investors that you provided that explanation to. Who else do you remember providing that explanation to?

A Nobody specific. But it was a common thing that I would do when I brought up the model. I would say, "Here is how you manipulate it and here is how you change it. And here's the column header. Just modify this." So I would -- used to just basically give a brief overview of the model before I give the model to anybody who wanted a copy.

Q The -- if you look further down in the -- again, this is the Theranos Market Assumptions page of Exhibit 251 -- there's a section at the very bottom there for miniLabs new production? Bottom left --

A Yes, I see that.

Q What does this set of rows represent?

A This is an estimate of how many new units of our TSPUs we had to produce based on these assumptions. And as a matter of fact, if you look at the formula behind these, you will see they're linked to something, some math based on the assumption model -- assumptions in the model.

Q In your mind at the time, why was Theranos's

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growth here related -- how would that impact the miniLabs that it needed to produce?

A It was a rough assumption that a certain percentage of samples, you'll be doing on finger sticks. And obviously -- again, this is the end of 2013. We were in three stores. Two of those three stores had just opened a month ago. So we didn't have enough data. But for the sake of modeling, I made some assumptions that, you know, if X number of samples come from finger stick and you run them on TSPUs and on other machines, then this is how many units you will need.

So if you have spreadsheet, you'll be able to see the formula behind this linked to the volume numbers from different locations.

Q I want to turn the page to the next sheet which is mercifully easier to read. And it's entitled "Projected Statement of Income."

Do you see that?

A I do.

Q And I guess just as a general matter, what -- what did this sheet in the workbook represent?

A Yeah. So this basically is an output of the assumptions one would manipulate in the model. So as you change any assumptions on Page Number 1 and Page 0609 Number 2 of this model, they will just bubble up to this page and the next pages here. So it's -- it's a summary of what was shown in the pages back there and some additional information.

Q If you look at the period ending -- the period ending 12/31/2013, if you look under the "Revenue, U.S. Commercial Only," it's listed as 25 million for lab services from U.S. retail pharmacies. Do you see that?

A Yes, I do.

Q What does that number represent?

A At that point in my mind, that meant the 25-million-dollar innovation payment that we had received from Walgreens, is I think what is -- what is this referring to.

BY MS. CHAN:

Q When did you receive that payment?

A I think it was in early 2013, January time frame, something like that.

BY MR. KOLHATKAR:

Q Do you know if Theranos -- I mean, do you think you were representing to -- to PFM that Theranos had $25 million in revenue from its retail pharmacy services as of the end of 2013?

A No.

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Q Why not?

A Because PFM knew that we were in three locations, two of them we had just launched. I explicitly talked about this number and I told them that as part of the Walgreens contract, they have a hundred-million-dollar commitment to us. That's $25 million. We have another $75 million coming.

Q Okay. But I guess did you -- did you not view that $25 million as being Theranos's revenue for -- for 2013?

MR. COOPERSMITH: The question is a little vague, but if you understand it, you can --

THE WITNESS: Yeah. I was going to ask you to clarify that because I don't understand the question.

BY MR. KOLHATKAR:

Q In your mind, was -- did Theranos earn $25 million in revenue in 2013?

A In my mind at that point, yes.

Q Did that understanding change over -- at any point in time?

A No. I mean, we were starting to modify the contract. But no, at that point we had -- I was -- the $25 million that were coming in 2012 was my

understanding that that is revenue.

BY MS. CHAN:

Q What is your understanding of when revenue can be recognized?

A That, I don't know. And I used to -- actually, when I met with PFM, I made the -- exactly the same statement that you asked me right now, is: "I don't know how this is going to get recognized, but this is cash in the bank. According to our contract, this is nonrefundable. So it is here. You can" -- "in your model," PFM, or (b)(6); (b)(7)(C) whoever I was talking to, "you can use it any way you want. You can move it into 2014 or 2015. I don't know how this is going to get recognized, but I want to alert you that we have received this cash." That was a conversation that I had.

And from what I understood, he told me in a brief conversation later that they had looked at this model and they put it aside and created their own model, and in that, they had assumed zero revenue. And I think they testified to that also at the PFM trial.

Q You mean deposition?

A Sorry, deposition. Sorry.

Q The -- I guess, did you take any steps internally to check to see if -- if Theranos had retained $25 million in 2013 when -- when building this model?

A No, I did not.

Q You didn't check this number with (b)(6); (b)(7)(C) did you?

A No, I did not.

Q Do you know what Theranos ultimately reported in revenue on its taxes in 2013?

A I would not recall. But like I said, I wasn't sure how this was going to get reported from accounting standards. We didn't have audit financials, so I just wanted to really make sure this is -- that's clear.

Q Did you always make that clear to investors that Theranos didn't have audited financials?

A Yes.

Q Did any investors ever ask if Theranos maintained audited financials?

A I mean, if some -- I don't recall explicitly somebody, but if somebody would -- had asked me, I would have said, "We don't have the recent audited financials," and that was the truth.

Q Did you ever hear Elizabeth Holmes tell investors that they couldn't -- that Theranos couldn't share its audited financials?

A I don't recall it, but that would be correct

because we didn't have it. That's why she couldn't share.
Q Did she provide that -- do you ever recall her providing that --
A I don't know. I'm guessing here. I'm just saying I didn't -- never heard her say it.
MR. COOPERSMITH: Mr. Balwani, you don't have to guess.
THE WITNESS: Oh, sorry.
MR. COOPERSMITH: Just answer the question if you have knowledge of the answer.
THE WITNESS: I apologize.
BY MR. KOLHATKAR:
Q Again, this is not a memory test. If you don't remember --
A I don't remember.
Q -- there's no penalty.
A Okay. Thanks. I appreciate that.
Q The -- so just to make sure I understand your answer, do you ever recall Ms. Holmes telling any potential investors that the company couldn't share its audited financials because of sensitive information in the footnotes?
A I don't recall.
Q The -- the model also shows expected revenue

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from -- so I think -- is it -- is it fair to say that the -- the 12/31/14 numbers, the 109 million, 72 million, 50 million, would -- would roll up from the last sheet?
A Yes.
Q There's a 30-million-dollar number below that for pharmaceutical services.
Do you see that?
A I do.
Q How did that -- how would that number get generated in this financial model?
A I think in 2013, we had ballparked -- I forgot what was the calculations we used. And again, if I see the formulas, it may refresh my memory. But that in 2014, at some point, we would revive our pharmaceutical business, and -- and we projected that if we do X number of samples and we provide software services, then this is probably what we will be able to generate from pharmaceutical companies.
Q When -- when creating those assumptions about what you would be able to generate from pharmaceutical companies, did you -- did you compare Theranos's historical revenues for -- for pharmaceutical companies?
A No, I did not.

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Q Do you know if anyone did at Theranos?
A Not to my knowledge.

Q I guess I'm trying to understand how in 2014 -- at the start of 2014, I understood your earlier testimony to mean that -- to be that Theranos wasn't actively engaged in -- in work with any pharmaceutical companies; is that --
A Correct.
Q I guess, how did you expect Theranos to generate $30 million within a year if it wasn't actively trying to do anything on that front?
A I think it was the combination of two things that I alluded to earlier, which is: We knew -- we had conversations with Walgreens that they were already priming that channel. That once we were ready to process more samples, we would have an opportunity to -- to do more clinical trials which are usually more expensive than a typical patient requisition. And then we probably would have started engaging in pharmaceutical companies also directly.
Q In your mind, you expected that to be able to generate $30 million in revenue within a year?
A That was my -- my -- my estimate, yeah.
Q I guess, what was that estimate based on?
A How many number of samples we will be able to

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process in a typical pharmacy coming from clinical trials, and I think we had assumed, again in discussions with Walgreens, that, you know, one out of ten patients -- or 10 percent or 15 percent of the patients we can get from pharmaceutical trials.
But again, I'll have to look at my notes in the model or other places to be able to refresh my memory. I forget what were the assumptions, but there were some assumptions that had gone behind this.
Q The -- the revenue section also includes a section on costs for revenue just below that.
Do you see that?
A Yes.
Q How were these numbers generated in the model?
A I think I had assumed -- again, at this point we didn't have enough data, so I had some cells in the model where I had made an assumption that retail pharmacy would be 30 or 35 percent of the cost and -- of the revenue and others were going to be different. So it was some percentage that I had assumed off the revenue.
BY MR. FOLEY:
Q So meaning, you just -- you assumed a certain margin based on the -- the revenue that the model

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calculated?
A Correct. And as we got more knowledgeable about those numbers from retail pharmacy and then ultimately from physicians' offices, we get more -- got

more knowledge, I fine-tuned that number as we moved on.

Q So as you came to understand the granularity of costs that were associated with it?

A Exactly right, yeah. And at some point, like I said earlier, we had created a very granular model market by market. We had created a model for Arizona with, you know, gas prices, and car washes, and all those things fully loaded that came pretty close to the assumption that I started with.

Q So what was the basis for your initial margin assumptions?

A It was high-level assumptions based on what we -- I saw in the field. And also, I may have consulted (b)(6); (b)(7)(C) or Safeway may have also looked at what Quest and LabCorp costs for work -- for certain services. So I may have made a bunch of assumptions that went to this one to start with in 2010, 2011, and then they kind of stuck. And over time, as we got our own data, we started refining this.

Q But at the time of this calculation, it was

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just you didn't have the -- the detail understanding this is a top-down?

A That's right, yeah. We didn't have detail.

BY MS. CHAN:

Q So at this time, this was, say, you know, three months from, I guess, the soft launch in Walgreens.

A Yes.

Q So you had already been -- or Theranos had already been conducting patient testing for a few months at that point; is that right?

A About a month and a half or so, yeah.

Q So wouldn't you have had some of these costs to include in here sort of how many nanotainers are being used and what the cost is for that, the cost of the courier services that you're using to courier the samples back? Why wouldn't you use those costs in your cost assumptions?

A The reason is: The volume was really, really low. We were in three locations. So you hired a courier and that person goes to two locations versus as you grow 12 months from then, they can go to 20 locations. And I didn't have enough knowledge -- ultimately obviously, I did, but in -- a month into this operation, I didn't have enough knowledge to be

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able to make those accurate predictions. The data that I was getting from our field was just too early.

It's like open -- like I said, you want to open a restaurant chain with a thousand stores and you only have one restaurant and five customers, it's

difficult to model what will be expenses throughout the thousand restaurants based on that one little -- it gives you some insight, of course, and you begin to understand, especially if you've been paying attention to the industry, and you start to pick up those things.

And I was talking to, like I said, Safeway quite a bit and -- and initially also to Walgreens to get a better feel. Walgreens had hired, I think, two or three people from Quest Diagnostics, and one of the -- one of them, I think, was a president in Quest Diagnostics. I forgot the rank. And when I met with them, I would do a sanity check and asked "What can you tell me about costs? What assumptions should I make?" So I had a conversation with those.

So I was just kind of soaking that information from everywhere. But I didn't have enough, like I mentioned earlier, to be able to pinpoint with accuracy.

BY MR. KOLHATKAR:

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Q Why doesn't this model include costs of revenue for 2013?

A Why doesn't it?

Q Right.

A That's because, like I said, the $25 million is the -- the innovation payment made by -- made by Walgreens. And it may have been also an oversight. Like I said, you know, it was early enough that it was not accurate, obviously.

Q And it's your understanding that you made it clear to PFM that this was not accurate?

A If I made it more than clear that this is a model. I actually asked them, "If you see errors in this one, please let me know. And if you have" -- "you have so much insight" -- which is what they were trying to tell us during that time frame, that November, December, that they know the healthcare industry really well -- "please tell me. And I'm looking forward to your feedback." Absolutely.

Q And again, you think that's -- that was in a conversation with (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)

A Those guys, for sure. Those guys -- and they actually had another third, a junior numbers guy. I forgot his name, but he used to be in the meeting

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also -- in one meeting, but I don't remember even his face, unfortunately. But (b)(6); (b)(7)(C) was also a numbers guy, so, you know, he could understand numbers. And Brian certainly was a numbers guy.

Q Can you walk me through these operating expenses and how you created these assumptions.

A Yeah. I mean, one is the -- there's the killer software right there (indicating). Research and

development, including killer software and apps and support. I had ballparked what percentage of revenue we would want to spend on R&D.

CLIA lab operations, I think I started out with some information that I got from the CLIA lab. And, actually, to go back to your question, the retail pharmacy cost, why did I not include the cost of revenue for pharmacies, some of this was included here, the CLIA cost.

Then we had the data center. Again, I had made assumptions of the percentage of revenue I think we were spending on data center. Same thing with sales and marketing and G&A.

So, again, there was additional cells in this spreadsheet, probably, or I had hardcoded the formula. Again, if I see the formula, I would be able to tell that I had assumed certain percentages we'll be send

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spending on these categories.

Q I guess, do these expenses include the per-patient fee Theranos was paying to Walgreens?

A Well, in the -- 2013, the answer is: No, because we don't see the cost of revenue for retail pharmacy here. But after 2014, my calculation was that that was included in the cost of revenue there.

Q So, I guess, what -- what is the cost of revenue figure in 2014? What does that include for -- for retail pharmacy?

A Well, it was -- again, it was -- there is no further, you know, breakdown of this on the spreadsheet because I was, at that time, bucketing everything pretty broadly. But anything that is not included in the operating expenses, including sales and marketing, data center, IT, CLIA lab, R&D, including the software costs, because software was a pretty significant cost, I was not including in the cost of revenue, this would be, you know, mostly variable costs associated with a requisition. So reagents, and money that we were going to give to Walgreens, and probably something other -- some other costs here. Probably phlebotomists was included here. So directly variable costs for the sample collections.

But again, I don't remember the assumptions.

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If I see the numbers in front of me, I would probably be able to give it better.

Q If you turn to the next page, there's a -- it says, "Pro Forma Quarterly Statement of Cash Flow."

Do you see that?

A Yes.

Q And the numbers here aren't provided quarterly, right, it's just annualized?

A It's annualized. Correct.

Q What is "Services NBL by Walgreens" mean?

A Internally, we were calling the innovation payment as a licensing fee. I don't know why we came up with that -- with that name, but we were just -- initially, we used to refer to it as network bundling licensing fee.

The thought was: We are bringing the insurance companies, we are bringing software, we are bringing a lot of value added network, and in exchange for that, we are getting this innovation payment. And we used to called it network bundling licensing fee. I actually don't remember where this name came from. And if you ask me, "Tell me how did that makes sense," I would not be able to do.

But it was just kind of a name that we used for all of the services we were providing as innovation

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services.

Q When you say it was a name "we" used, who is the "we"?

A At the board level, we used that name, so some board members early on in 2010 used it. 2011, Elizabeth and myself.

Q It's your understanding that she would understand what network bundling licensing fee would -- would -- would mean?

A You know, I'm closer to this model, and if I don't recall, if she does, that's awesome, but I wouldn't be surprised if she doesn't either.

Q I, guess what was the -- and how would there be a -- an NBL fee by Safeway and other retailers?

A Yeah. So the -- our Safeway contract included rights that we give to Safeway. Safeway wanted to be the, for the lack of a better -- what I will say a middle man. The right word will come to me, a middle man for providing our services into all grocery stores across the nation and probably including Canada. And they wanted -- because they had a smaller footprint than Walgreens, they wanted to have as many locations as part of Safeway as Walgreens, like 2,000, 3,000, something like that, but they didn't have that many stores.

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So (b)(6); (b)(7)(C) said, "If you give us the rights to make 10 percent off of the revenue" -- or 15 percent, I forgot the number, "we will go with you because we know the grocery network, and if they sign deals with you, you'll get an up-front innovation fee from them, and then we will take over all of the operational details to help you scale," Safeway Corporation will.

"And we will make sure the branding is good" -- and his model was Starbucks. He said, "You know, just like Starbucks gives them," I guess, "the way" -- "the rights to manage the brand in their

stores," he said -- only in Safeway stores -- he said -- their point was: They would take all off -- all of the responsibility off of our shoulders so we don't have to hire people who are maintaining a quality of service that they would have people going around making sure the services are good, the people are leaving happy, the stores are clean. In exchange for that, they will make money.

And so that was kind of what -- what the model was.

Q Okay. And is that how you -- was that explanation just so you provided the -- what will represent the $25 million to Theranos in 2014?

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A That's my guess yes.

Q What are the adjustments to the prepayment of revenue?

A Yes. We had -- we had a contract with, I think, Blue Cross Blue Shield of Massachusetts that we were going to launch in Massachusetts first, or we were going to try. I don't think it was contractually binding. And when we launched in Arizona, they were unhappy about it. And so that's my recollection.

So in 2013, we modified our contract with them. We returned them this 18,500,000, and we said, "Okay. We will come back to you at some point when we are ready to come to Massachusetts." But that's what it is.

Q And what about the equity transactions in 2013, what -- what equity transactions do you recall taking place in that time frame?

A You know, I don't remember exactly whether they were early in 2013 or later. I would have to -- I would need more details for that, but I don't recall right now.

Q Where would you get that number?

A I would probably ask (b)(6); how much we have raised or I would approximate how much we are planning on raising in 2013 and include here.

0627

BY MS. CHAN:

Q So the lines of production line that you see under "Capital Expenditures" --

A Yes.

Q -- where are the assumptions that go into that line?

A I don't remember the formula behind it, but I may have looked at the number of labs we were opening and the cost of new labs, or some of that parameter. I don't remember the formula or the assumptions behind it, but I'll have to look at -- look at the formula and the notes to be able to say where the assumptions came from.

Q And you said that this line would have

included, you know, any costs or expenditures associated with maintaining the commercially available machines or purchasing commercially available machines; is that --

A I would say purchasing.

Q Okay.

A So any machines that we would buy from outside, whether it's for R&D, we bought a lot of equipment for R&D, a lot of expensive machines, would be included here. And for the CLIA lab and other big machines that we needed. The automation line of

0628

course, yes.

Q So did you have any idea at this time as to how many of those commercially available machines you would need in your lab going forward to 2014 and 2015?

A Yeah. I had done an estimation with -- with my supply chain director and also a few people in the lab to see what is the throughput that we'll be able to accommodate on different platforms. And so I had ballpark figures that ultimately got better and better and better.

But I had ballpark numbers that showed us, you know, we can process 6,000 samples per day on a certain set of machines. You know, let's assume two-thirds of them or one-third are venipuncture or whatever the assumption was. We had enough data to be able to calculate the throughput.

And then either I think in 2013 or 2014, we had also reached out to Siemens who was one of the vendors that we did work with, and we bought a lot of machines from them and asked them to tell us how to optimize things so we can do more and more samples. And we made a commitment to them to buy these automations lines. You know, they're literally like lines of production that go on a conveyor belt, and giant robots pick up the samples, put them in the

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machine. No human has to touch them. Robots can also pick up the sample and store them for later use. Fully automation -- automated.

And that would have included our throughput significantly because no humans were needed and also reduced our labor costs. And they actually had provided us some guidance on that.

Q What was your understanding as to how much an Advia 1800 would cost?

A I think it was about 120,000, $150,000, but I'm ballparking it.

Q And that was the cost back in the 2013, 2014 time period?

A Yeah. I mean, the cost of that hasn't really changed that much. So I would -- and these machines are -- lab machines don't change for, like, decades.

So I think my memory is: It was around 120 or 200 tops. But in that range.

BY MR. KOLHATKAR:

Q So I want to turn to the next page --

BY MR. FOLEY:

Q Before we move on. So the 75-million-dollar Walgreens NBL fee --

A Yes.

Q -- is that in the same nature as the 25

0630

million that is shown in 2013 on the prior page?

A It's part of the same hundred million dollars. Correct.

Q So why isn't this -- why isn't the -- that the cash came in, as reflected on this Pro Forma Quarterly Statement of Cash Flow in 2013, why isn't it being shown as income?

A Yeah. I think there was an omission that it should have been included either in 2013 or 2014, and I didn't include it either -- on either places. So these numbers (indicating), technically speaking, should have been higher or this should have been somewhere else. So that was -- that was an error.

BY MR. KOLHATKAR:

Q And just for clarity of the record, when you're saying "these numbers should be higher" --

A Sorry.

Q -- you're pointing to --

A Yes.

Q -- the statement of income figures for 2013 or 2014?

A Yes. So I'm pointing to the lab services from U.S. retail pharmacies revenue. If you were to assume $75 million innovation payment is coming in 2014, then it would add to the $109 million. Because

0631

the $109 million is coming from the formulas that we saw earlier on Page Number 2 and Page Number 1. So if you add the $75 million, the revenue number should be higher here.

BY MR. FOLEY:

Q And then on the pages titled "Projected Statement of Income," which is the prior -- just the prior page --

A Yes.

Q -- who came up with the title "Projected Statement of Income"?

A I think I cut and pasted it from somewhere. But I put the title. I added that.

BY MR. KOLHATKAR:

Q I want to turn to the last page on this -- on Exhibit 251, which is entitled "Consolidated Balance Sheets."

Do you see that?

A I do.
Q Where did you get the information for the top half of this page here?
A Usually, balance sheet information used to come from (b)(6); (b)(7)(C) and she used to pull it from QAD directly. And I used to just cut and paste and drop it here.

0632

Q And earlier, we had a discussion about some of the descriptions of assumptions that you -- that you had provided, and you mentioned that there were some notes in the -- in the -- in the model.
Are those notes reflected at the bottom of the page here?
A Yes. These are the notes that I had typed in to capture some of the other soft, quote/unquote, assets.
Q Okay. So it says -- under the note, it says, "Please note that the following intangible assets are not included in the balance sheet above. These assets have been valued at multibillion-dollar valuation in the past."
A Yes.
Q Do you see that?
A Uh-huh.
Q Did you write that?
A Sorry. Yes, I did.
Q Who valued these intangible assets at multibillions of dollars?
A Yeah. We -- we had done a round in 2011 when we had -- or 2012. I forgot the exact time frame. We had raised some money where we had very little revenue, I think close to zero, if not zero. And our company

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was valued at, I think, 6 billion or 7 billion. I forgot the last -- exact number. And that's what I was referring to, is that it is because of these innovations that our company was valued at that number.
Q Did you ever explain to any investors that this note about a multibillion valuation referred to, I guess, the C-1 round?
A Yes. They used to -- well, not actually the entire C-1 round, but the fact that somebody had valued -- investors had valued the company. And yes, I had that discussion with several investors.
Q Do you recall any -- any specific ones?
A PFM, because I had long discussions with them around the model in general. And I don't remember who else talked to me about it, but people would sometimes ask me, "Tell me a little bit more." Or actually, sometimes I would actually take the investor here to point out, and say, "Oh, by the way, here are some notes for your consumption."
Q The balance sheet also includes $183 million,

it looks like, for deferred revenue --
A I see that.
Q -- at the time.
What did that represent?
A I don't know that. I don't recall. I mean,
0634
I would have to see the details behind that.
BY MS. CHAN:
Q What was your understanding of -- of deferred revenue?
A This may have included the -- the $75 million or a hundred million from Walgreens because we hadn't gotten paid -- this number paid yet. And it may have also included revenue from the payment from Safeway. But I'm not so sure if that was included here or not, so I don't know exactly what was included here.
Q What is your understanding of what deferred revenue means or when something should be booked in the financial statement under deferred revenue?
MR. COOPERSMITH: Are you asking at the time or as he sits here?
BY MS. CHAN:
Q At the time.
A I didn't have a good understanding of that then and -- or now. Usually, these came from (b)(6); (b)(7)(C) this balance sheet, so I tried not to touch it much.
Q Did she ever ask you what she should be booking under deferred revenue or how to account for the certain innovation fees or prepurchase payments from Walgreens or Safeway?
A She wouldn't ask me, but sometimes she would
0635
come and discuss that, and I would say, "Talk to the accountants" and -- or "We will," you know, "put it here, put a note somewhere so that we can talk to the accountants about it." But it was not like she was asking my direction because she was a CPA, so she's -- she's not going to ask my direction on this.
Q I want to hand you another document that's been --
A Do I put this away?
Q You know, it might be helpful to have it out.
A Okay.
Q I'll hand you another document that's been marked as Exhibit 195.
THE WITNESS: Yes, I see it.
BY MR. KOLHATKAR:
Q Do you recognize Exhibit 195?
A I do.
Q What is it?
A This is an e-mail conversation between myself, Elizabeth Holmes, and three or four people from the consulting firm that we were working with called -- I think called BDT.

Q And is this taking place in October of 2014?
A Yes, it is. October 13 is one of the e-mails.

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Q And it looks like you're providing an attachment entitled "Theranos U.S. 2014/2015-Oct 14.XLSX"?
A Yes, correct.
Q So were you attaching your current version of the financial model for them?
A Yes, it seems like it.
Q Okay. So I want to turn to the -- the attachment which is the model printed in -- it looks like on the fourth page there.
Do you see that, the model that begins with "device costs" at the top left? It looks like you're on the right page.
A Yes, I do.
Q It looks like the -- the device costs lines have expanded from the PFM model.
A Yes.
Q I guess, how -- how did you -- why did you decide to extend out the -- the time period for device costs assumptions?
A Sure. Like I mentioned earlier, the model at the end of 2013 was still fairly raw, and I was still learning and making a lot of assumptions, and over time, I continued to add more and more information.
So this would be an effort to add more

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assumptions that over time, our price will increase as the volume increases. All the reasons that I gave you earlier. And components get cheaper, the labor gets better, assembly gets faster. So I was making assumptions here that over time, our device costs will go down.
And I think we were also getting better data from our manufacturing, and that was feeding into these assumptions.
Q And is it fair to say that from the time of, you know, PFM getting its model in late 2013 or early 2014 till October 2014, Theranos had a lot more information from its retail rollout?
A Had -- comparatively speaking, yes.
Q And did you endeavor and include that updated information in this model as of October of 2014?
A I tried as much. I was not spending too much time on the model, not always. So I -- whenever I got time, I would go back and try to update the model. But I wouldn't say necessarily that it was realtime information, as it came in, I updated it every day or every week.
Q I guess, what changed the device costs assumption lower in this version compared to the prior?

A Sure. I think in 2014, I had started working
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with (b)(6); (b)(7)(C) and a few other people in the --
what we used to call the math team. These were all
quants, mathematicians, and machine learning, and AI
people, data analysis people. And we had pulled a lot
of data from our actual manufacturing, and -- and we
were getting greater confidence what the -- the numbers
would be. So this reflects that information -- that
change.
Q What about depreciation -- the depreciation
years there? It looks like it's changed from ten years
for PP&E to -- to 15 years and -- and four years for
the devices to three years.
A Yeah. The depreciation of PP&E, again, you
know, I don't know if I got the number from (b)(6); (b)(7)(C) or
not, but I made an assumption there for the sake of the
model because, you know, whatever the right number
would be, we can just plug it in and it will reflect
through the model.
And the depreciation of the devise is an
assumption that I had made that as we grow, we wanted
to be obsoleting ourselves. So the device
depreciation, we always wanted to -- I wanted to assume
that we were more aggressively replacing our own
devices, so I had reduced that to three.
Q If you turn to the next page of the document,
0639
it looks like there's some updated numbers in terms of
pharmaceutical locations.
Do you see that?
A Yes.
Q And by October of 2014, Theranos had opened
41 Walgreens locations?
A That's correct.
Q Did you have any expectation in October of
2014 to open an additional 159 by November of 2014?
A No, I did not.
Q Why does the model reflect growth to 200
stores in the next month?
A Sure. When I had started working on this
model with these consults, we just plugged in the
numbers to verify the overall model works according to
our assumptions, so there were no bugs in the formulas,
no changes anywhere. So it was more of, you know,
picking some numbers and -- and sticking them in the
model, not necessarily, you know, what we were doing
next month.
Q Do you know if similar numbers were shared
with potential investors around the same time frame?
A I don't recall.
Q Would it have been accurate to provide
similar numbers to potential investors around the same
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time frame?
A It will be a model, so, yeah. I mean, it's not about accuracy and inaccuracy, as long as the explanation is there that this is a model. One could plug in any numbers and make assumptions. Like I said earlier, in some cases, you can just say, "Well, what happens if you are delayed by six months?"

Well, change the October 2014 to April 2015, and the stuff -- then it just shifts out.

Q How did Theranos provide this model to potential investors? Did it always provide the Excel spreadsheet?

A Not always. I -- like I said, in meetings, I used to project this on the screen, and I would walk people through this. In some cases, people would say, "Yeah, you know, this is interesting. I would like to play with it," and I would give them either an e-mail when I could. Sometimes the e-mail would bounce back because size of the file was large. And sometimes I would put this on a USB key.

In some cases, people would say, "I don't care about these details. Just give me a couple of pages for my reference."

And I would say, "Which pages?"

And they'll tell me which pages, and I would

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print it and hand it to them.

Q Do you recall any investors saying that they didn't care and just wanted a few specific pages?

A Yeah. Most investors didn't ask for it, so --

Q I guess my question is: Do you recall any investors asking for specific pages for -- from this model?

A I don't recall explicitly. Actually, I take that back. I think (b)(6); (b)(7)(C) had asked because he said -- I said, "I will send you the soft copy."

And he said, "I'm not the kind of guy who reads e-mails. Somebody prints them out for me. So just give me a couple of pages from that."

So I think I had printed it for him and either gave it to him there or sent it to him somehow. But that's my recollection.

But there may have been others. I just don't remember. I just remember it because it was funny that he doesn't read his own e-mails.

BY MS. CHAN:

Q So in the case of (b)(6); (b)(7)(C) then, did you change the Walgreens assumptions so that they were more closely consistent with your understanding of when Theranos services would be rolled out in Walgreens

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stores?

A No. I didn't -- I was not modifying the

model to give to (b)(6); (b)(7)(C) He basically said, "Just take a snapshot of what you have and give it to me when you're ready." So it was not that I modified anything. It was to give him how we were thinking about the business, what business line items we were thinking about, the pharmacy and the doctors' offices and -- he was more focused on those categories.

So, no, I didn't modify anything. I just printed what he asked me to print and gave it to him.

Q So you don't think that (b)(6); (b)(7)(C) was interested in knowing about how your revenues would be -- be projected in future years?

A My understanding from (b)(6); (b)(7)(C) is that he saw the model, but his interest was more, I mean, the majority of our conversations with him was around the vision of what we will be doing for 10 to 20 years. So he displayed, I would say, less interest or I think, in honesty, it may have been close to zero interest in what we were doing in the next six months, or twelve months, or eighteen months.

So he -- he was not focused on that. Most of our investors that we met with in C-1 and C-2, our conversations were around five to ten years, and with

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(b)(6); (b)(7)(C) our conversation actually was mostly around "I don't want to sell my stock." And so -- because in our charter, we were talking about, you know, how we buy back the investors and how to structure the company. Yeah, we spent a lot of time on how Elizabeth was thinking about structuring the company.

And (b)(6); (b)(7)(C) said -- yeah, I mean, he was giving us hints on how to structure the company and -- because he has, you know, his kids are also involved in the business, so a lot of our conversations were around 10, 15 years and beyond.

BY MR. KOLHATKAR:

Q Do you remember when this meeting with (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) took place?

A I think it was winter of 2014, I would believe. Yes, winter of 2014. I don't remember if it was December or January, but it was that time frame.

Q So late 2014, early 2015?

A Yes.

Q Did (b)(6); (b)(7)(C) or any of his representatives ask how confident you were in Theranos's 2015 projections?

A I don't recall that. But I didn't present these as projections to begin with, so I think I would

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have probably corrected him that this is a model.

Q So -- just so I'm clear on your answer, your answer is: You don't recall him asking that question?

A Yes. But what I'm saying is: Had anybody

said "projections," I would have corrected them because that's kind of a habit I have.
Q And it's a habit you think you had back then as well?
A For a long time.
Q Did you tell (b)(6); (b)(7)(C) or his representatives that you thought that the projections were within a 30-percent -- that you had confidence that the 2015 projections would be met within a 30-percent, plus or minus, range?
A I don't recall that. It doesn't sound like something I would have said. I may have been talking about something else, but it doesn't sound like something I would say.
Q Do you recall saying that?
A No, I don't.
BY MS. CHAN:
Q Even if potential investors weren't -- you believe that they weren't so interested in, you know, how the revenue was going to be in the few years and a little more interested in other things in your model,

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why wouldn't you want to show them an accurate picture of -- of what you're displaying here? Why wouldn't you want to show them that, you know, Walgreens -- Theranos is likely not going to be rolling out in Walgreens in the next few months?
MR. COOPERSMITH: Objection. Because it assumes things in the question.
But please answer.
THE WITNESS: Yeah. I think the answer is a similar one. Our conversations with the investors were long term. If somebody had wanted the model -- I obviously I had offered the model to every -- every investor and I gave it to several. But I didn't want to spend my time updating the model if it was not required, and especially if they could have modeled it themselves. So that was the reason.
BY MS. WINKLER:
Q But how could they have modeled it themselves if they didn't know how many stores were going to be opened at the end of the year?
A No, I could have given them the -- if I had given them the USB key which I offered, they would have easily modeled it.
Q Right. But if they didn't have the accurate information, the true knowledge of what the state of

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affairs was, how could they have done a model that projected out in the future?
A Yes. The reason is: A lot of the conversations we were having, we were talking about the changes -- the risks to the rollout schedule. If somebody were to ask me what happens, the answer that I

gave earlier today and yesterday was: I would say, "You know, if we miss a deadline, our expectation is: Things may slow down, and in that case, things will get pushed out by three or four months, and you can just go to the top and make that change here. But our assumption is that once you pick up a certain pace that both companies were deeply committed to rolling this thing out."

Q But you're not answering the question. The question is: How, for example, could they have made their own accurate model if they didn't know that by the end of 2014, 200 stores weren't going to be opened?

A I think they could have -- they would have come back and asked me.

Q Did anybody come back and ask you that?

A I don't recall anybody did.

Q Did you ever tell anybody that?

A Tell what?

Q That there weren't going to be 200 Walgreens

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locations opened at --

A Yeah. When we were -- even with PFM --

Q Let me finish my question.

A Sorry.

Q That there weren't going to be 200 Walgreens locations opened at the end of 2014?

A Yes.

Q Who?

A Anytime when I was engaging with -- I don't specifically remember who, but when I would point out the model, I would say, "Of course, we are just months away from this, so we are not opening 100 locations in a month right now. But this is a model and you can modify it" --

Q So who did you tell that to?

A Like I said, I don't recall specifically who, but if somebody asked me a specific question, like "Are you" -- "So you'll be at 400 locations this month," I would say, "That's an assumption on the model. Of course we only have three locations right" --

Q You're telling me what you would say. I'm asking you who did you say that to.

A I don't recall any specific person that I said that to.

BY MR. KOLHATKAR:

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Q If you flip forward a couple of pages in Exhibit 195 to the Projected Statement of Income.

A Sorry.

Q Flip forward in Exhibit 195 --

A Yes.

Q -- to the Projected Statement of Income.

Do you see the Projected Statement of Income

there?
A Yes.
Q Do you see the EBITDA number that is projected for 2014?
A I do.
Q And it looks -1.2 million?
A Yes.
Q In other words, is -- this is predicting that -- this model would predict Theranos would break even as of the end of 2014. Is that what this reflects?
A Assuming we hit those assumptions, yes.
Q In October of 2014, do you think Theranos was going to break even that year?
A No. This was -- actually, you're looking at a model that I was working with with BDT. So no, I didn't -- I didn't think so.

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Q Okay. Did you think Theranos was going to break even in 2014 as of October 2014?
A I don't remember in this moment. I would have probably looked at the model and tried to figure out if the answer is yes or no.
Q I guess, did you have any expectation in the fall of 2014 that Theranos was on track to break even?
A It depended -- it depended on how we would have recognized the $75 million, a hundred million dollars revenue. But if you exclude that for a minute, the answer is no.
MR. COOPERSMITH: Would this be a good time for a break?
MR. KOLHATKAR: I think I'm done with this document. Let me just -- give me two seconds.
MR. COOPERSMITH: Of course.
BY MR. KOLHATKAR:
Q Do you know if Exhibit 195 was shared with other investors?
A This specific one?
Q Correct.
A I don't -- I don't remember. If -- there would be a log for that if it was.
Q Do you recall sharing this Exhibit 195 with investors around this time frame?

0650

A I would share a model with the investors, but I don't know if it was exactly this one or not.
BY MS. CHAN:
Q You just said there is a log if you had shared it with investors. There was a log --
A Yeah. I mean, in the e-mail, if I gave it to somebody, if I presented it, I would saved the file under that name or it would be on the 300 folder. So I would, like I said, I usually used to tag it and say "Showed to so-and-so," or "Used on this date." But

that's what -- sorry, that's what I meant.
Q Have ever recorded it in the file name on your 300 folder?
A In some cases, I did, yes.
Q Okay. What about other cases, are you saying that you just sometimes did and sometimes didn't?
A I think I did it reasonably regularly unless I was meeting with somebody -- multiple people within a week or two weeks, then chances are, if I didn't make any modifications, then I would say, "Model as of February 3rd," or "February 2nd," or "February 20th." And then -- but I would not name it by "Four meetings that I had and presented the model."
MR. KOLHATKAR: Why don't we take a break. We'll go off the record at 3:09 p.m.

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THE VIDEOGRAPHER: Off the record.
(A brief recess was taken.)
MR. KOLHATKAR: Back on the record at 3:23 p.m.
BY MR. KOLHATKAR:
Q Mr. Balwani, just to confirm, you didn't have any substantive conversations with the staff during the break; is that correct?
A That's correct.
Q You can put those exhibits aside. Thank you.
(SEC Exhibit No. 252 was marked for identification.)
BY MR. KOLHATKAR:
Q I'm going to hand you a document I'll mark as Exhibit 252. For the record, Exhibit 252 is a multipage document Bates stamped SEC-ARANCA-E-0000059 through 69.
Mr. Balwani, I'm not going to ask you to read the whole thing, but do you recognize Exhibit 252?
A I do.
Q What is it?
A It seems like an engagement letter from Aranca to address to Ms. Holmes for some services. That's what it looks like it.
Q And if you turn to the page ending in 68.

0652

A Yes.
Q Do you see your signature there?
A Yes, I do.
Q Were you signing this agreement on behalf of Theranos?
A Yes.
Q Is the date of the signature October 17, 2014?
A Yes, it is.
Q What is Aranca?
A My understanding is it's a firm, I think multiple services. But the two I'm familiar with is

they do -- they provide 409A evaluations to the companies for stock option issuance purposes and they also provide consulting services to companies in different industries, and including healthcare, is my understanding.

Q If you turn to the, I guess, the page after the signature page, there's an Exhibit A. It says, "Purpose intended use of this appraisal." Do you see where it says, "The termination of exercise price for granting common stock options to employees in compliance with" -- is that IRC Section 409A? Do you see that, under the "purpose and intended use of appraisal"?

0653

A On the last page?

Q On the page ending in 69.

A Yes, I do. I do.

Q And it says, "The termination of exercise price of grant a common stock options to employees in compliance with IRC Section 409A."

A Yes.

Q And the next bullet point says, "As an input for evaluations to determine the fair value of options pursuant to SFAS123R for financial reporting purposes."

A I see that.

Q Did you understand that to be the purpose of this appraisal?

A That's what is written here. And what the company was using this for was not for this purpose at this time in 2014.

Q What purpose was that?

A Yeah. In -- towards the end of 2013, we had decided that, as a company, and we had several discussions at the board that we wanted to come up with our own evaluation of how to value our stock within the company. And as part of that, one of the things I had asked -- the board had asked me to do was to work with Aranca to see what methodology they use to value our company based on certain inputs. So how does -- how do

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they value what IP and patents or contracts, and also some, you know, software factors, cash position and equity rounds.

Q Did you ever tell Aranca that you wanted to work for them for that purpose?

A No, I did not.

Q Why not?

A Because I wanted them to explain to me how they were using the methodology to value a stock options so I could learn from them.

Q I still don't understand why wouldn't you just tell them that's what you wanted to learn from them.

A I didn't think it was important to tell them

what was the purpose of it. We were signing them for some services that they were providing. My intent was that I will give them different inputs, and based on that, how to value the stock options.

Q Who was responsible for giving Aranca inputs?

A So between -- through 2013, the primary interface with them was (b)(6); (b)(7)(C) And even after that, she was the primary interface. But I started interfacing with Aranca a little bit more in 2012 than 2013 and 2014.

Q Did you ever tell (b)(6); (b)(7)(C) you were using

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Aranca for this other purposes?

A I don't think so.

Q Why not?

A Again, it was unnecessary.

Q If you take a look at the obligation for the client page, SEC-ARANCA-80 ending in 60.

A Yes.

Q Do you see the third paragraph there under Section 3, "Client and its representative weren't represent in covenant to Aranca that the information provided by client is complete and accurate to the best of the client's knowledge and that all financial statement information reflects accurately client's results of operations and financial and business condition in accordance with generally acceptable accounting principals unless otherwise noted."

Do you see that?

A Yes.

Q Were you agreeing to provide Aranca accurate information about the company's financials?

A For a given purpose, yes.

Q And do you believe you provide -- and given purpose that Aranca understood was this 409A valuation?

A Correct. But that was not our intent

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behind -- going through this exercise.

Q Did you provide Aranca with accurate information of its -- accurate information concerning the company's results of operations, financial and business condition?

A We provided Aranca with a certain set of projections making some assumptions. That we are not using their valuation for our 409A purposes. With that in mind, I would say, yes, with the intent clear, we provided them clear accurate information.

Q What intent clear?

A That the purpose of using Aranca reports would be not to value stock options, but the value of stock options given a certain set of assumptions. My plan was to modulate those assumptions to say how do they value the stock options if the assumptions change

from X to Y. And I was going to give them a different set of assumptions.

Q I guess why did you need Aranca to produce 409A report for that purpose?

A Well, the purpose was not necessarily 409A report. The purpose was, like I said, to understand the methodology in the process of them producing 409A reports so that I can understand how they value our softer skills, softer assets, which I didn't understand

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at that time. And Aranca had spent quite a bit of time with the company by then, so that they had the understanding of the company and the -- our IP and other things that we had done in the past and the industry, from when I talked to them, that I thought I would be able to learn something from them.

Q Who at Aranca were your primary points of contact?

A I don't think there was one person. I had spoken to Aranca on the phone two or three times. There was couple of times the gentleman was based in India. Almost all their team was based in India. And so I spoke with some gentleman over there. And then I think I spoke with, once or twice, with their representative here in the U.S. also, but I don't remember the names.

Q Who on the board asked you to do this with Aranca?

A The entire board was -- we had a long discussion around this, and most of the board members discussed that and that we -- it was assigned to me to go and do this exercise.

Q Did you ever carry it out? Did you ever use the Aranca report to help build some sort of value to understand its valuation model?

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A No. I never got the time. I spent a little bit of time with them to get the information, but I was not satisfied with information I was getting. It wasn't all that much money at that point so it kind of fell lower on my radar, lower priority. So I didn't use -- to answer your question correctly, no, I did not use that information for anything.

Q Did anyone on the board express concerns about the way you were proposing to use the Aranca report?

A This particular report or Aranca reports from the past?

Q Any Aranca reports.

A I don't recall any specific. We had discussions at the board level around the use of Aranca and how, you know, their valuation methodology, but I don't think specifically there was any concern. I'm not sure -- I don't think I remember.

Q Why were you doing this exercise in October 2014?
A I think their contract was expiring. This was kind of automatic renewal is my guess. I was not necessarily reaching out to them for a specific purpose at this point. So it must have been an automatic renewal that came to my desk and I signed it.

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BY MS. CHAN:
Q Which board meeting do you recall where the board made a decision to go ahead and use the Aranca reports for the internal modeling purposes.
A So there are two points of clarification. I don't think the board said we will use the Aranca reports for evaluation. It was more the methodology we learned from Aranca we would apply towards formula we would come up with in-house. But there were several board meetings, actually. I think pretty much all board meetings in 2014 had a discussion on this topic. And maybe even in late 2013, but 2014 we had discussions on this topic.
Q So pretty much all the board meetings in 2014, the board would have discussed learning from Aranca how they were valuing the company in order for the company to come up with its own internal model?
A Learning from Aranca and learning from other sources, if we could. And that would have included talking to other private companies, how they valued their internal stock. I had a brief meeting with couple of people from Battelle Corporation, where they were educating me on how they do it. So we had other additional resources. This was not going to be the other one. This was the discussion with the board.

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Q Wasn't the company planning to issue stock options at the end of 2014 and 2015?
A Yes. Our plan was to issue stock options, but we didn't have the valuation in place, how to value the stock options because we stopped using Aranca. So we thought we will be able to come up with the evaluation soon. But like I said, my bandwidth was limited. I never got a chance to spend on that so we didn't issue any stock options.
Q So even though you were planning to issue stock options at the end of 2014 and 2015, you decided not to use the Aranca report for that purpose?
A Correct.
Q So what were you planning to do? Or how would you do -- who were you planning to retain to put together the 409A report, if not Aranca?
A I'm sorry. Didn't mean to interrupt.
One was, I actually tried to retain a firm based in U.S. to see if they can help us with this, and also learn from them. But that firm had very low

insurance around confidentiality leaks or confidentiality violations in their contract. So we got a contract from them and I was going to engage them and get the help. Because one of the reasons I was worried was the discussions I had had with Aranca, the

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gentleman in India, they were very lax about talking about other companies, oh, yeah, we worked with that company, we advise them on this and that. I was worried about the confidentiality of information from Aranca because I felt like they were, like, very casual about it. And so I prefer to work with company in the U.S. So I tried to retain them, but like I said, that didn't pan out.

The other part of your question was what were we planning on using in-house? Like I said earlier, our plan was to come up a formula that the board would approve and then we will stick with it. But like I said, I personally didn't get a chance to spend time on it. And then we were also hoping that I will collect enough information that once we have the CFO, this is a project for them, this is not a project I was qualified for, to take it all the way.

Q Who was the U.S. company you were thinking about retaining for this?

A I don't remember the name, but we had some correspondence with them, even a contract, that we just didn't sign.

Q Did you discuss with anyone at Theranos the fact that you were concerned that Aranca wasn't keeping confidentiality?

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A Yes, I talked to the board about it, the entire board. And I also talked to Elizabeth Holmes about it, that I was -- I had a conversation with them. And I hadn't paid any attention to Aranca until 2012 or 2013 because these guys were in place when I came to Theranos.

And in that conversation, when I was trying to understand a little bit more about how they value IP and this and that, the person on this other side was trying to sell me on consulting services. And I got really concerned that -- and I went to the website, did some research and I saw they do consulting for a lot of life sciences startups. And so I talked to Elizabeth and said has anybody looked at how we are protecting the IP with these guys. And she hadn't paid attention to this either.

And then the next board meeting I brought up to the board's attention that I am seriously concerned about this. And especially if we were going to give them our contracts with Walgreens, there was a lot of confidential information there, that I was not comfortable sharing with them. I had a discussion with

the board about that.
Q Why did you continue working with them in 2014 if you didn't trust them?

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A Well, we were not using them for 409A evaluations. Like I said, the purpose of working with them in 2014, and I think this carried over to 2015 was just to learn from them because we had already made investment in them. They already knew sufficient about the business. It was certainly a good starting point to work with somebody you had been working with for a while.
Q Did Aranca provide you with a copy of their model while they were preparing the 409A reports in previous years?
A I'm sorry, I didn't understand that question. Which model?
Q Hadn't Aranca provided you with the model that they were using to come up with evaluation for the company's common stock in prior years?
A Before 2013, yes.
Q Okay. So why couldn't you use that model for your internal modeling purposes? Why did you have to go through a back door and ask some questions and learn that way?
A We were using that model, actually. So what happened was, the model that you are referring to, that they were using in 2013, what I did was I increased -- I added another year to that and increased it by I

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think 5 or 10 percent or 20 percent for the subsequent year. And I gave them that model. And I did exactly what you just described. Precisely that.

BY MR. KOLHATKAR:

Q Theranos -- so in October 2014, you mentioned earlier Theranos was working with BDT as a consultant, right?
A Yes.
Q Why didn't you have BDT do this evaluation work for you?
A I didn't believe that was their expertise.
Q Why not?
A That's a good question. I mean, I didn't know that BDT had that expertise. Perhaps I should have asked them, but it didn't even occur to me that BDT would be in 409 valuation businesses.
Q What I understood your testimony to be was that you weren't using Aranca for 409A, right?
A Correct.
Q You were using them for a broader company valuation?
A Yes.
Q Why weren't you using BDT for broader company valuation purposes?

A That's a good question, actually.
Personally, I didn't think about that. But we actually did work with BDT on how to structure -- they were educating us on structured deals in the long run, 10, 15 years down the road when we hit positive cash flow coming. How we would use it. But this point that you're making, it's a good point. I didn't think about that. I don't think anybody with the board did either.
Q Did any investors ever ask to see a copy of Theranos's 409A reports?
A I recall one investor who had asked.
Q Which one?
A PFM.
Q Do you know when they asked?
A Yes. I believe it was summer or late summer or early fall 2014.
Q So after they invested?
A Yes.
Q And what information did you provide them?
A So initially, I was not thinking about 409A. I think I had a conversation with (b)(6); (b)(7)(C) and I said I will send it to you. But then I also explained to him that we are not using 409 valuation -- first of all, I told him, we use 409 valuation to value stock options common shares. So actually, let me take a step back.
He had said he needed the 409A evaluation, if
we could provide it to him, because as auditors, we are trying to value their investment in Theranos. And I said yeah, it shouldn't be a problem, and I'll talk to (b)(6); (b)(7)(C) and I'll send you 409A. And then later when I talked to (b)(6); (b)(7)(C) I remember that, wait a minute, we had modified the intent of 409A so I called -- I had a conversation with --
Q Sorry to interrupt. I guess, what about your conversation with (b)(6); (b)(7)(C) refreshed your recollection on that point that (b)(6); (b)(7)(C) didn't know about this modification?
A Because I asked her, do we have the latest 409A evaluation because I didn't remember when was the last time we did one. And when I was asking her that question, then it popped in my brain that, oh, wait a minute, the last evaluation was, I think, December 2013 and things have changed since then. So I had a conversation with him and their general counsel, (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) And I had a conversation with them, I said, look, here's the thing about 409A, we are not using it internally, the last time that we used was in December 13th. I think I gave her the valuation or what the valuation was in 2013, but this one is not going to be used with you. And so I think we left the

conversation with that.
I don't know what they said. They said they send it to us anyway or not, I don't remember that. But then I -- and I kind of moved on. I moved on to other things.
And then later on, I think (b)(6); (b)(7)(C) had reached out to me saying, hey, can you provide us the 409A valuation. I don't know if we met in person or on the phone. I don't remember the details. But I said, hey, what's the purpose. And he goes we just need to give it to the auditors. It's just a checklist, otherwise they may write down our investment. I said, well, we are potentially doing an equity round. And that's a transaction that will value our equity at the same price that we did in February 2014. That should be even more sufficient than what you need the 409A valuation for. And I gave them the background of 409A is not going to be useful to you. And he goes, yeah, that's all we need. That will do it.
Q Did you tell (b)(6); (b)(7)(C) that Theranos was using Aranca to help it develop an internal evaluation model?
A I may have had a discussion with him, but I don't recall. Because I used to talk to him pretty openly and pretty frankly because I was trying to
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solicit his opinion, and his help also many times. But I don't think I dug deep into Aranca, or even name Aranca to him. I told him the model is -- the 409A is not going to be useful for you. And what you really need -- our conversation shifted from you need it for this purpose and we work with other investors and we give them this letter. That will be sufficient for you. He goes, yeah, that's even better because 409A evaluation is probably going to be not that useful.
And so after that, in December or early January, I provided him that information and then he didn't come back and ask for anything.
Q Any other investors ask for a copy of Theranos's 409A reports?
A I don't recall at this moment.
BY MS. CHAN:
Q Why did you sign Exhibit 252 and represent that you would be providing accurate information to Aranca for the 409A purposes if you weren't intending to provide accurate information for that purpose?
A Well, this was a form template. I didn't read the entire thing. It was just a template form to renew contract with them, so I didn't necessarily read all the details in the contract.
Q Did you sign the 2013 letter as well?
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A I don't recall. I don't know.
BY MR. KOLHATKAR:

Q Sitting here today, do you have any concerns that you signed a contract that didn't reflect your intent at the time?
A Not at all.
Q Why not?
A Because internally, as the company and a counsel on the board and the entire board I said this is a good use and this is a good way of doing this. So I didn't have any concern then, and I don't have a concern now.
(SEC Exhibit No. 253 was marked for identification.)
BY MR. KOLHATKAR:
Q I'll hand you what I'll mark as Exhibit 253. For the record, Exhibit 253 is a document Bates stamped TS0021420 through 21507.
Mr. Balwani, I'll represent to you that this document was provided -- the company represented to us, at least, that this document was provided as part of the October 21st, 2014, board binder.
A Okay.
Q Do you recognize Exhibit 253?
A Yes. It looks like an Aranca report.

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Q It looks like -- does it look like a one fair market value of common stock as of September 30, 2014, dated October 21, 2014?
A Yes, sir, that's what it says.
Q Do you understand this to be the report that was produced pursuant to the engagement letter that you saw 253 -- 252?
A That, I don't know. But it would be reasonable guess. It may be something that was already in motion and I just had to sign the paperwork.
Q I want to turn to the page that starts with "company overview."
A What page is that?
Q 21427.
A Okay.
Q The -- if you look at the last paragraph, it says, "The company has previously funding from its pharmaceutical partners through prepayments with contracts. In 2013, the company's product development and manufacturing is on track and products were launched in the market Q3 of fiscal year '13."
Did you understand that to refer to the Walgreens rollout in Q3 2013?
A It seems like it, yes.
Q Overall, did you expect Aranca's description

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of the business to be accurate?
A Not necessarily. It would be high level I think, but I didn't spend much time on this.
Q Who did spend much time on this?

A My guess is maybe (b)(6); (b)(7)(C) probably provided this description, high level description. And I may have edited it, but I don't remember doing it. So -- I don't remember doing it.

Q If you take a look at the page ending in 21447 there's income statement.

A Yes.

Q Did you intend for this income statement to be an accurate reflection of Theranos's income for the -- for -- for 2014?

A I think I've answered that question earlier, that information that we provided to them had a different purpose. So which was to use this report, not for 409A evaluation, but for us to learn how they value other assets. So with that in mind, I would say yes, we provided them with set of assumptions in mind, this is accurate.

BY MR. FOLEY:

Q Why didn't you just ask them to value the other assets?

A You know, I think I had a conversation with

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them, and I try. And I may even have e-mail exchanges with them, and they didn't give me a straight answer. They said, well, we cannot just do that. We need to look at other things and we need to look at the whole picture. And I was actually very irritated with them on that point. And I said, well, you should be able to value IP very clearly and our soft assets. And you'll see that I think I was irritated with them. That they wouldn't do it unless we provided them some numbers, some projections for them to come back with a number.

BY MS. CHAN:

Q When did that conversation take place?

A I don't recall the -- I mean I talked to them multiple times, so it may be in 2012 and 2013, and 2014 also.

Q Who did you talk to?

A I think I answered the question earlier. There were couple of gentlemen from India who I spoke with. I don't remember their names. And then when I was getting frustrated by not getting the answer how to value the IP, I had complained to them. And they said, well, somebody from the U.S. office will call you and have a conversation with you. And this person from U.S. office called me and had a conversation. But again, I don't remember the name either.

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BY MR. KOLHATKAR:

Q Do you see the summary income statement that begins on page ending 448, balance sheet on 449 and the cash flow statement on 450?

A I do.

Q I understand your testimony to be that, in

your view, these weren't necessarily accurate numbers, given the purpose that you had attended this report to be; is that fair?

A In 2014 and beyond, correct.

Q So as of October 2014, you necessarily believe that these future figures represented Theranos's best estimates for future revenues?

A That's correct. What we were -- like I said, just to finish my sentence, is that I commented earlier we took the numbers from the prior years and added two columns, increased that by 20 percent. I forgot the percentage. And we just provided them that information to see how they will come back and provide us with numbers.

Q So between the -- comparing the Aranca report versus the financial model dated similarly, October 2014, which document reflects, in your opinion, Theranos's best estimate at the time of its future revenues, as of October 2014?

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A I would say I relied more on the model as a place where I would look at the health and where the business was headed. So I use model for that purpose, a financial model.

Q I guess my question is: In terms of your expectation for what Theranos was likely to earn in revenues in the next three months, the next fifteen months, which document would you go to look to as of October 2014?

A I would look at the financial model.

Q In other words, the financial model would more closely reflect your expectation in the Aranca report; is that fair?

A The financial model will reflect my expectations better, yes.

Q You can put that document aside. Who is Woodruff-Sawyer?

A I think that's the name of the firm that we were trying to engage, the other firm in the U.S., that would have helped us with 409A evaluation.

Q Did -- did Woodruff-Sawyer provide insurance services for Theranos?

A Well, I'm sorry. Maybe I'm confusing it then. They may be a broker then. I'm sorry. I'm mixing the name maybe.

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Q Did you provide your insurance broker with financial information in connection with policy renewals from time to time?

A I don't think I did. (b)(6); (b)(7)(C) may have. But I didn't provide them information model.

Q Did you provide them any financial information?

A I don't recall. If I see something, maybe it

will refresh my memory.
Q And I guess generally, would it be important for Theranos to provide accurate information to its insurance providers?
A I wouldn't know the answer to that because I don't know what was the purpose of the insurance and how much that financial information fed into -- to the insurance quote so I would not know.
(SEC Exhibit No. 254 was marked for identification.)
BY MR. KOLHATKAR:
Q I'll hand you what I'll mark as Exhibit 254. For the record, Exhibit 254 is a document Bates stamped THPFM0000677241 through 677245.
Do you recognize Exhibit 254?
A One second. It seems like an e-mail conversation between [redacted] and a few people on this
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call from this company.
Q And do you see that in the last e-mail here, there's a reference to, "As Sunny mentioned, we run at about 8 to 9 million" -- "we run at about 8 to 9 million a month. The net loss ended 2014 amounted to about 80 million"?
A I see that.
Q Do you recall having a conversation with any of the recipients of this e-mail where those figures were shared?
A I don't recall at this moment.
Q Do you recall being on calls with any of these individuals?
A I was on calls with insurance company couple of times, but I don't recall the specific calls.
Q Do you remember [redacted] ever sharing with you that the company's net loss for the nine-month period ended in September 30, 2014, amounts to about $80 million?
A I don't recall at this moment the specific -- that information.
Q Do you have any reason to doubt that number's accuracy?
A No. I mean it came from [redacted] and it seems like, as Sunny mentioned, she's mentioned my name that
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it's probably -- she also says about 80 million, so it's ballpark. So I would say, no reason to doubt that.
Q So if the -- if Theranos's net loss for the nine-month period end September 30, 2014, was about $80 million, would you have had expectation to break even for year end 2014?
A I think I answered that question earlier. The answer is, if you exclude the innovation payment and how that was going to get recognized, then the

answer would be no, so same answer.
Q Would there be any reason why (b)(6); (b)(7)(C) would be excluding it from this description here?
A I think for the purpose of this call, we were focusing on burn. But again, I don't remember what the question were and what was the context of the answer.
Q In the 2014 time period, there's a burn rate of 8 to $9 million sound like a burn rate for Theranos?
A You know, I would guess it's on the high side. But probably, yes. I mean, I wouldn't remember what exactly it was.
Q Did you ever share Theranos's monthly burn rate with any investors?
A I don't recall. But yeah, I don't recall exactly right now.

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Q Would you expect the financial model we talked about to reflect Theranos's accurate burn rate?
A To the best of my abilities, I would say, yes, but because the financial model also had a lot of assumptions, and the store rollout and patients per day and other things, and the expenses were tied to that, I would say if you modify assumptions one way or another, then the answer would be no.
Q Let me ask maybe more simply.
How would Theranos's burn rate be reflected in the -- in the financial model?
A Probably not be reflected accurately. The reason is, the expenses were tied to assumptions that one could modify. So it was not dynamically tied to the QAD system where the information was being pulled realtime, so that would be the answer.
Q In other words, the -- the burn rate in the model was tied to revenue?
A In the model.
Q In the model, right?
A Which was tied to the assumptions in the model.
Q And that differed from the burn rate that Theranos's actually experienced at the time that you preserve in the finance database?

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A Correct.
BY MS. CHAN:
Q Actually, I wanted to ask a question about -- and you can keep that in front of you. But if you go back to Exhibit 195, which I think is in your pile, would be the set of financial information that you sent to BDT.
A I see that.
Q Do you see that?
So this was sent in October 13, 2014.
A Yes.
Q And if you turn to -- I guess there's no

Bates numbers on the page, but if you turn to the projected statement of income in the model, you see that for --

A Yes, I do.

Q -- year end 2014, you're projecting revenue of $125 million?

A Modeling, just to correct it.

Q Do you see that?

A Yes. But a modeling, not necessarily projecting. Just to clarify that.

Q What do you mean by that?

A That this is a financial model based on the certain assumptions that I'm modeling. That's what the

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model is showing. I'm not necessarily projecting.

Q Okay. That's fine.

A Okay.

Q And, you know, looking back, then, at Exhibit 254, it looks like you and (b)(6); (b)(7)(C) had told the insurance companies that actually Theranos has a net loss of 80 million as of September 30, 2014?

A Yes.

Q Right.

So which is more correct?

A So this is not correct because this is model.

BY MR. KOLHATKAR:

Q Just for the record, you're pointing to Exhibit 195?

A Yes. The Exhibit 195 is financial model. As a matter of fact, the couple of people from BDT and myself sat in the room and made realtime edits to this model to be able to fix some of the formulas and other things in the model. So this is not representing the accurate information coming from a QAD database at that point.

BY MS. CHAN:

Q So if you gave similar revenue projections for 2014 to other potential investors during this time frame, something over a hundred million dollars, that

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would also not be accurate?

A It would be, again, share with them as a model saying given these assumptions, this is the output, yes.

Q Okay. And -- and so the information that you're providing to Woodruff-Sawyer, in that same month, net loss of $80 million as of September 2014, that would be accurate?

A Well, I don't know what -- I think I alluded to that earlier what was their cushion and what I was responding to. But assuming this information here is correct, this one talks about that number. And again, it ballparks it.

Q Did it concern you that the numbers were so

different, one was, you know, negative 80 million and the other one was over a hundred million?
A No, I didn't.
Q Why not?
A Because when I was sharing this information with any investor, I was talking about a planning model over and over again, and very clearly. And this number, like I said, on the call, the purpose of this call and where this information came from was different.
BY MS. WINKLER:

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Q So did you share accurate financial information with any investors?
A You mean, like, audited financials?
Q No. I mean like accurate financial information out of QAD? Did you tell any investors that?
A I think the balance sheet that came into the model, I shared with them this come from financial systems. And that is the snapshot as of that date or that month, whatever it's labeled. But the other two sheets there were tied to the assumptions and they were models.
Q So were any investors, around October 2014, aware that there was a net loss in the company of about $80 million?
A I don't recall if I had explicitly that conversation with the investor.
Q Did you tell any investors that?
A I don't recall that at this minute.
MR. KOLHATKAR: Why don't we change videos. We're off the record at 4:03 p.m.
THE VIDEOGRAPHER: Off the record.
(A brief recess was taken.)
MR. KOLHATKAR: Back on the record at 4:13 p.m.

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BY MR. KOLHATKAR:
Q Mr. Balwani, you didn't have any substantive conversations with the staff during the break; is that correct?
A That's correct.
Q I'm going to hand you a document that's been previously marked as Exhibit 213. I'll represent to you that Exhibit 213 were the financial materials included
(b)(6); (b)(7)(C)
A Okay.
Q I don't want to ask you everything. But I do want to turn to the last page, which is Bates stamped TS607. It says -- it looks like the note section has been changed to an additional comments section.
Do you see that?
A Yup.

Q Did you make that change?
A I probably did. Because nobody else would touch these files.
Q And it looks like the first line says, "Please note all revenue projections are based on contracts already signed and in place for 2015 and 2016."
Do you see that?
A I do.

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Q You see the use of the word "projections" there?
A Yes, I do.
Q Why did you use the term projections in this?
A Because it is inside a whole financial model so I probably used the word -- this word loosely.
Q And the next line says, "No additional contracts assumed signed." As of the end of 2014, Theranos had not signed a contract with CVS; is that right?
A That's correct.
Q So this model should not reflect any revenues from rollout at CVS; is that correct?
A Well, I think I addressed that question before, that, in some cases, I used CVS or Safeway slash something as a placeholder or just CVS because we had a contract at Safeway. And during the conversations, we will talk through this point with whoever we had a meeting with.
Q I guess how -- how -- I had understood the sentence before to say, "All revenue projections are based on contracts already signed and in place for 2015 and 2016." At this time, Theranos didn't have any contracts in place with CVS?
A That is correct.

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Q So you're saying CVS could nevertheless be included in the model?
A The place in the model where CVS comes into play was revenue from pharmaceutical pharmacy services. In the pharmacy services column -- row, we have two rows in there. One was for Walgreens and the other one was for other. In the other, I used to bundle or bulk Safeway, CVS, Walmart or whoever else we would work with in the future.
Q I guess how would you bundle in CVS or Walmart if you hadn't signed a contract yet?
A The point was, we had a contract with Safeway. So the point I was trying to get across was, either we will execute with Safeway or if we replace that contract, it would be with CVS or some other -- we were working with them, would be the comment that I would make. And that's the comment that I did make in the meeting.

Q Did you make that comment to (b)(6); (b)(7)(C) or his representatives?
A I believe so.
Q In what meeting?
A I think I was only in one meeting where they had two or three additional people in the -- in the meeting. I forgot which meeting it was. And we had showed them pictures from our Safeway locations and we had talked about Safeway in that context.

BY MS. CHAN:

Q So you told (b)(6); (b)(7)(C) during a meeting, that if things didn't work out with Safeway, that Theranos was expecting to rollout with CVS, and that was what was being modeled in the financial projection?
A Yes. I would walk through that. And other thing also is I think that we also had, in -- in that same row, I would say, Safeway, CVS slash dot, dot, dot. I would walk through that, that we may also work with Walmart, if we -- if we decided to do that.

Q When was that meeting?
A I think I answered that question. It was -- I don't remember when exactly it was. I think it was December or January, or maybe it may have been November of 2014. Sorry, 2014. But I was in one meeting, my recollection, is that where I had talked about Safeway was when they had two or three additional people with (b)(6); (b)(7)(C)

Q You can put that document aside. I'll hand you what's been Bates stamped -- what's been previously marked as Exhibit 227. And I'll represent to you that Exhibit 227 is a document that was provided to the board in connection with the April 2015 board meeting.
A Okay.
Q Do you recognize Exhibit 227?
A It looks like one of the models.
Q Did you review this information before providing it to the board?
A I don't remember exactly this one or not. But in general, I didn't use to. I would just project the model and discuss it.
Q Whose responsibilities was it to present financial information to the board?
A Well, we didn't have a CFO. So if there were any specific questions, usually the questions from the board would be around cash position. And that's where we focused on. But I don't recall having a conversation around monthly revenue or quarterly revenue with the board. I didn't have that information is what I would tell them.
Q Whose responsibility was it to provide the company's cash position to the board?

A I would. I would reach out to (b)(6); (b)(7)(C) before most of the meetings where I would need that information. She would pull up from QAD systems. Or I will speak from memory, if I had spoken from memory and I'll include that.

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Q And if you'd look at third page of Exhibit 227. And that's one of those balance sheets, right?

A Yes.

Q And is that information you would generally get from (b)(6); (b)(7)(C)?

A Either that or it would -- if it is linked to the model, then it would be from the model. I mean, usually I would project the spreadsheet on the screen so I don't know -- I need to look at the formula where it came from. But if it came from QAD system, then it comes from (b)(6); (b)(7)(C) But if it came from model, then this would become the model.

BY MR. FOLEY:

Q How would this link to the model?

A I think we had ending cash in the cash flow statement in the model. So there's a tab in the model that says ending cash balance. It says 664 in 2015 and 845. And I will just hyperlink to that.

Q Well, what about the remainder of the balance sheet?

A I probably didn't touch the rest of the columns.

Q So you think cash may have been linked to the model, but everything else came from where?

A If I see the model, I would be able to firmly

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say that, but I don't recall.

Q But if -- if cash is linked to the model --

A Yes.

Q -- you said it's a possibility, where would the other line items on this document come from?

A In the balance sheet?

Q Yes.

A They would come from (b)(6); (b)(7)(C) So I would take that, put in the spreadsheet as much as I can and link from here to the model, I would. The others I would just leave the way they are.

BY MR. KOLHATKAR:

Q Did this information provide your best estimate of the company's projected income as of the April 2015 board meeting?

A Same answer, based on certain assumptions, the answer is yes. But I would actually walk through those assumptions with the board. That's the whole purpose of me projecting this to the board. By talking to them about how things are going at Safeway and other places.

BY MS. CHAN:

Q So this was given to the board in April 2015. So by that time, you know, obviously the company already knew how much in revenue it had made in 2014.

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Was it consistent with your understanding that Theranos has made $108 million in 2014?

A We had discussed that at the board meeting. I recall this because I had -- this was the Walgreens innovation payment that we discussed earlier. And I had highlighted to the board that we had $100 million innovation payment from Walgreens that's included here. I don't know how to recognize this from accounting purposes, that's not my forte, but I'm highlighting that's the -- that's the number here, included here.

BY MR. KOLHATKAR:

Q Where is the other 8 million?

A I actually don't remember. I'll have to look -- look at the spreadsheet. It may be that I was guessing that this is how much we had ballparking, this is how much --

Q I just --

A Sorry. I don't remember this moment.

BY MS. CHAN:

Q In the 25 million, initial $25 million payment from Walgreens came in 2013, right?

A Correct.

Q So why was it being included here in 2014?

A I had discussed that also at the board, at that meeting. That when -- originally when I had put

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the 25 million in 2013, that we didn't recognize that as revenue in 2013. So it may be that the entire payment is going to be recognized in 2014 or 2015. I wasn't sure. So I provided that information to the board.

BY MR. KOLHATKAR:

Q In 2015, who is the company's secretary, the board's secretary?

A I don't recall. It may be me in 2000 -- actually, we had a hired our general counsel, (b)(6); (b)(7)(C)

(b)(6); (b)(7)(C)

Q How did the board maintain its minutes in 2014?

A I think at some meeting, I took the notes. Actually, I take that back. Actually, I took some notes. I think in some meetings either (b)(6); (b)(7)(C) or Elizabeth took the notes, but I don't recall exactly.

Q And would the board vote on minutes from prior meetings and later meetings. In other words, would you vote on -- I'm just -- as an example, vote on the January minutes at the April meeting?

A Not if -- not necessarily immediately on the same meeting. Sometimes we be behind in the board

minutes so then we will roll it and vote on two prior
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meetings. I remember once in a meeting that happening, but I don't recall exactly which meetings.
Q And do you believe the minutes would reflect the fact that you discussed this document as a model?
A I don't know. I don't recall the notes. But in some cases, I was taking the notes. In some cases, others were taking the notes. I was not a very good note taker because I was also doing a lot of talking.
MR. COOPERSMITH: He's talking about the minutes.
THE WITNESS: Oh, sorry. I don't know. I don't know the answer.
BY MR. KOLHATKAR:
Q Who would take notes while you were talking? Anyone step in to the note taker role?
A Later on, when (b)(6); (b)(7)(C) had joined, I think she took over. Before then, I think maybe (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) was taking notes or Elizabeth, like I said earlier. So I don't remember exactly.
Q You can put Exhibit 2 --
BY MR. FOLEY:
Q Can I ask one more question?
A Yes.
Q If you look at the last page, Exhibit 227, and go to Exhibit 213, the last document in Exhibit
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213.
A Okay.
Q Do you see that the total asset from Exhibit 213, as of December 14, are 603,745?
A Yes.
Q Okay. You see that's the same number as total assets on TS0021913, which is Exhibit 227?
A Yes, I do.
Q Those are different months end, right?
A That's right.
Q Do you know why the balance sheet hasn't changed between -- in that one-month period?
A I think it's showing the same balance sheet here, if I'm not mistaken. In the date at the top, it says December 2014 and the other one January 2015.
Q Right.
A So my guess is, it may be the same balance sheet that I didn't get a chance to update probably because all the --
BY MR. KOLHATKAR:
Q Again, do you know or you're guessing?
A I'm just looking at the number. They're all matching. Actually, that's a good observation. So that's what it looks like.
BY MR. FOLEY:
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Q That you -- sorry.
A It looks like that is the same information. Even the date says December 2014 and January 2015.
Q Right.
A And I'm not sure. You know, I think it's -- it may be 12/31 and 1/1/2015, if you look at the formula. I don't know what's behind it. But it seems like it's identical balance sheet so it's not updated.
Q So I guess my question is: What date is this -- are these numbers from?
A Probably January 2015. You're talking about this one, right? The one that says January 2015?
Q I'm trying to figure out why two balance sheets with different dates have the exact same balance.
A I think they may be off by a day. I mean, I don't know. If I look at the date behind this, I may be able to tell.
BY MR. KOLHATKAR:
Q You can put those exhibits aside. Thank you. I want to talk generally about investor communications.
You mentioned earlier sort of a process where you would attend some investor meetings; is that generally your recollection?
A Yes.

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Q Were there certain topics you and Ms. Holmes split up in those meetings?
A Not necessarily. Every meeting was very different. I mean, I'm assuming you're referring to 2014, '15, time frame, or all the way 2010?
Q How about let's take end of 2013 through early 2015.
A I don't think we ever walked into a meeting that was -- or two similar meetings. Every meeting was different because the people we were meeting with were -- had different backgrounds, different businesses. Our conversations were almost different -- always different. Some strategic partners were more interested in how would we work together, you know, five years, ten years, whenever we work together. And others were more interested in learning, you know, how -- more about the business so they can think how they would help us. So it was a very different conversation.
Q In your experience sitting in on it sounds like -- were there a number of meetings in that time frame?
A There were a few meetings. I don't -- I don't remember how many, but not too many, though.
Q More than ten?

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A Probably not more than ten. But that would be about right, ten, twelve number, yes.

Q In any of those meetings, did you ever hear Elizabeth Holmes something -- Elizabeth Holmes say something that you thought was inaccurate?
A No.
Q Did she ever raise any concerns about the accuracy of any of the information you were providing?
A No. I was showing the model so I don't think that was an issue.
Q Did you have any other role in these investor meetings other than showing model?
A Yeah. Like I said, we -- there was no split of what we said. Our focus was describing our vision for the company. And I would say 80 percent of the conversation, if not more, was describing that. And clearly, like I shared with you earlier, software was a very significant part of company's vision. I used to talk a lot about software, and what role software is going to play in terms of future and where we see our growth and so on and so forth.
Q Who at the company had the final authority to decide what written materials were provided to investors?
A I don't think either of -- there was anybody.

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Because most of these conversations we had with these investors more as potential partners. So like I said, each meeting was different. And this is why the information that we discussed in meetings was also mainly different. It depended on the interest level on the person on the other side. Some had more technology background so, you know, we tend to talk more about tech and software. So I don't think it was a decision that this is the word that we are sharing with them. It was a really open-ended conversation talking about vision out in the future, two years, five years, ten years, sometimes 15 years or more.
Q I'll hand you a document -- you can have more water. This will take me a second.
A Okay, good.
(SEC Exhibit Nos. 255 and 256 were marked for identification.)
BY MR. KOLHATKAR:
Q I'm going to mark two documents. One I'll mark as Exhibit 255, one I'll mark as Exhibit 256. And for the record, Exhibit 255 is a document Bates stamped THPFM0003870572. And 256 is a document Bates stamped TS315637 through TS0315903.
Do you recognize Exhibit 255?

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A Yes, I do.
Q What is it?
A It's an e-mail communication between myself and (b)(6); (b)(7)(C)

Q Are you sending him a slide deck?
A It seems like it, yes.
Q I'll represent to you that Exhibit 256 is the document that the company identified as the attachment that was provided to PFM in connection with Exhibit 255.
A Okay.
Q Do you --
A Should I put this away?
Q You can put e-mail aside.
Do you recognize Exhibit 256?
A Yes, I do.
Q What is it?
A It seems like a copy of one version of the slide deck that we used in almost most of the meetings that we had.
Q And I think we described this process generally yesterday. Was this that sort of slide deck that you -- that was on a shared drive with the company that various people would provide inputs to?
A Yes.

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Q Did you review this deck before providing it to (b)(6); (b)(7)(C)?
A No, I did not.
Q Did you present parts of this deck to (b)(6); (b)(7)(C)?
A Yes, I did.
Q When did you do that?
A I don't remember the exact date, but I think, in January of 2014, I met with them two or three times. And we probably used this deck for discussion in one of those meetings, which I think is being referred here. So my guess is it's before January 7 -- 17, 2014.
Q And was something similar to this available for -- did you use something similar to this with other investors in the CT round?
A Yeah. I mean, we use this deck for, I would say, or similar deck for all of our meetings that we had.
Q I want to turn to page ending in 651.
A Okay.
Q Do you see this slide entitled "Same Tests a Whole New Approach"?
A I do.
Q And there's a series of picture here. Can you explain what this is a series of pictures of?

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A Yes. These pictures are showing a process of collecting a sample from finger stick. And finally one nanotainer at the end.
Q The nanotainer is the image on the far right?
A Far right, correct.
Q And the -- is the CTN the -- the item that's

pictured in the image third from the right?
A Correct, yes.
Q So can you just explain to me how -- what would be transferred from CTN to the nanotainer?
A Yeah. So what happens is, there are other steps before that also. You would wick the finger with the alcohol swab, clean it up. And obviously you don't hold the finger like this. But the finger was held using gravity. So people are sitting on the table, but --
Q Sorry. It looks like from this picture that the finger is --
A Yeah.
Q -- faced up?
A Faced up.
Q But you wouldn't do that in reality?
A No, no. It's not the case because gravity is not very happy with it. So you want the finger facing down. A patient would be sitting on a chair. And you

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will use the pink lancet. This was a lancet, just like you use glucose test. We will puncture the skin. We would also, I mentioned earlier, we would give somebody a bottle of water so they can bleed better. And then we would wick off first drop of blood, depending on the test and the protocol. We would use that CTN that you see in the third bubble to wick the blood into the capillary tubes. Then there was an entrance step where you would basically press the CTN and the blood would go inside the nanotainers, inside the holder. And -- and that would be -- and then the -- there were two nanotainers attached to the CTN. Every CTN had two nanotainers. This one is only showing one.
Q The -- the line below the picture says, "Theranos runs any test available in central laboratories and processes all sample types."
Do you see that?
A I do.
Q In -- at the end of 2013 or early 2014, was Theranos running any tests available in central laboratories?
A So I think there are two answers to that. I believe the answer is true, yes, we were running tests available -- any tests available in central laboratories. And processing all sample types.

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However, I think I make a broader point here is that a large number of slides in this slide deck are aspirational. We use to just cut and paste and drop from marketing literature. And some of them are physician office -- office presentations. So a lot of the information here was aspirational. And it was, in many cases, never even used ever.
But when we started this conversations,

usually this deck was running on my computer or there was a separate computer in the conference room where it would run, but I would be manning the computer most of the times. And I would say, here's a slide deck -- I would provide this background basically. It's a slide deck. It has a ton of content. We have collected content from marketing efforts and some of the design work that we're doing for our apps and so on and so forth. So we just want to give you an overview of what we were thinking about. So that's what the slide deck is.

Q Do you recall telling any investors that the slide deck included aspirational information?

A Absolutely.

Q Which investors do you recall?

A Every single investor.

Q Everyone you met with you told --

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A Every single -- there's no way we -- this information that I shared with you, it was my routine every single time I would start with a discussion, not just investors, like I said, I used to man the computer. I used to sometimes walk through the slide deck. Of course, there was never ever any meeting in which we walked through all of them. Not even half of them. Some meeting we would not even get to, you know, ten slides.

But I would always start by saying there's a lot of stuff here that is -- some of it we're doing. Some of it is aspirational. Some of what shows a revision, but we want to share with you what we're doing. Because the people we were engaged with in these meetings, what all people that we wanted to engage with for a very long term, five years, ten years. So we would -- I would always make sure that I could share that.

Q I guess, in just taking a look at this slide, do you see how someone reading a slide could get the impression that Theranos could run any tests available in central laboratories and process all sample types from the finger stick?

A No. The reason for that is almost every single slide here requires a voice or an explanation to

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go along with the voice. And that's the reason we used to use this as a discussion deck. So we could -- some slides have pictures, which don't show you anything, and no words there. You wanted somebody to provide the context. So -- and people that we share this information with, people are very clear about that.

Q Okay. Do you recall sharing this particular slide with any investors?

A I don't recall any -- any one single investor, but this is part of the slide deck. So

sometimes we would actually get the slide deck, but if they had already seen the finger stick process, like a demo, then we would just skip it.

Q If this slide deck required sort of a voice over, would there be any reason for Theranos to provide in the materials to investors before any meetings?

A Yes. Because we would -- any meetings where we would meet with them, we would walk them over, walk -- walk through the slide deck with them.

BY MS. WINKLER:

Q But you just told us that you never walked through the whole slide deck with the investors?

A Yeah.

Q So how are they supposed to decide when they got it, or after your meeting, what was aspirational

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and what was not?

A I mean, if we -- when we were walking through the slide deck, we were actually jumping around and giving them information that they were interested in engaging with. A lot of the slides here are -- they cannot speak for themselves, but they're aspirational. And any time they were not, like I said, we would provide some commentary. But we always provided a slide deck saying -- by saying this is a discussion deck that we will discuss in the meeting. This is what we discussed in the meeting. And sometimes people at the meeting will say, oh, there's a lot of content. There's a lot to go through this. This is very interesting. It shows you plans for the future so give us a slide deck after that.

Q So this slide deck that we're looking at here, is anything on there indicate that's it's aspirational?

A If you just look at the slide by itself, obviously there's no comment here that says it's aspirational, which is why I said there's always a voice over that goes with the slide.

Q So what if you didn't discuss this slide at a particular meeting?

A Yeah. Then people just skip it and ignore it

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and move on.

Q And then if investor looked at it after the meeting, it doesn't say it's aspirational so how would they know that?

A I mean, our expectation was, because I shared with them that there's a lot of ideas in the future and many of these slides are -- show our ideas, they would reach out and ask us the question if there's something that was very important for them that they wanted to know for sure before they made a partnership decision or any decision.

Q Was there ever an occasion where an investor

actually asked for additional information and you refused to give it to them, for example, financial information?

A It depended -- it depended on the information. It would be possible. But I don't recall exactly which and when.

Q So you don't recall any instances where Theranos told an investor that they could not have additional -- a potential investor that they could not have additional information that they requested?

A No, I'm not saying that. I said it's possible. I don't recall it, but it wouldn't surprise me if that was the case.

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BY MR. HABERMEYER:

Q Mr. Balwani, I want to ask you a question in follow up.

I believe I heard your testimony earlier that this sentence directly under the pictures Theranos runs any test available in central laboratories; is that a true statement as of late 2013 or early 2014?

A In my understanding, yes, it was correct.

Q So this was not an aspirational statement?

A At this point, no, I don't believe so.

Q So Theranos was able -- was running, at that point in time, any tests available in central laboratories?

A Yeah. I think -- maybe I should clarify. That central laboratories does not necessary mean Quest or LabCorp running 3,000 tests. Central laboratories is a term used -- like hospitals have central laboratories. So they also run tests, but they don't run all 3,000 tests. So this was not meant to mean that we run all 3,000 tests in our laboratories. The point is, there are different types of tests laboratory run, like urine, feces, general chemistry, nucleic acid amplification, infectious diseases. And we don't do those test. That's what it's mainly communicating.

Q Did you explain that in these meetings with

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investors it was not meant to include the 3,000 tests that Quest and LabCorp would offer and instead, just the handful of tests that you just described?

A We would talk about how many tests we were running in our lab. And we had only 150, 200 tests in the lab -- in our laboratory. So it's one of those assumptions that -- I don't think I said, oh, by the way, we don't have 3,000 tests we are running. Because if we did, they would be on our menu. They would soon be appearing on our menu, we would be telling people we will have 3,000 tests on our menu in two months. That's not the case. We had 200 tests and that menu stayed fairly static in that range. So I don't -- I didn't say it to somebody, by the way, any tests means

3,000 tests. No, I didn't.
But also, at the same time, it was extremely simple and obvious to me that nobody is making the assumption that a small company like ours is running 3,000 tests, like Quest Diagnostics or LabCorp.
BY MR. KOLHATKAR:
Q At this time, Theranos's CLIA lab, if it had a test, if it received a sample for a test it couldn't run, it would send it out to a reference lab; is that --
A That's correct.

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Q To like an ARUP, is that --
A And UCSF sometimes, and may have other laboratories, but yes.
Q If you turn to the page ending in 682.
A Okay.
Q You see the picture where there's a contrast of a picture of a lab day when it looks like someone is getting a venipuncture test and contrast that, the arrow to Theranos picture with the finger stick. Do you see that?
A Yes. So that's not just a venipuncture test. That's also looks like a syringe.
Q Oh. What do you mean -- how do you know?
A Because we know. I mean, people looked at syringes and done lab tests. They can tell that's a syringe, or not a butterfly, like a traditional lab draw. That's what it is.
Q Okay. So -- so what does this pictures represent in your mind?
A I think you have to look at the two pictures and -- next to each other. The one after that. Actually, you already have it, I think.
Q So this -- just for the record, you're referring to the page ending in 83?
A Yes. 683.

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Q Okay.
A So the discussion here is that we're transforming the patient experience. And we talked in one slide about tests that can be performed from finger stick. And obviously people that we were talking to, like (b)(6); (b)(7)(C) and others at PFM, saw that we were not drawing that much blood, we were drawing more blood. But this was to get the point across that we are doing finger stick. Just this one doesn't show a full vial of blood; it just shows the concept. And then this one shows that we also use venipuncture and here's the butterfly needle which is a much better patient experiences that we use.
Q I guess -- so looking at the picture above the butterfly needle picture --
A Yes.

Q -- what's that supposed to represent?
A I think it's a snapshot of Quest Diagnostics Laboratory or -- or a traditional laboratory, patient collect center.
Q I guess I'm a little confused because it looks like a traditional blood center and then two venous draws there?
A Yeah. But one of the venous draw is very different from the other. Just like these are two

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different slides. This one is showing you a venous -- a venipuncture from a different type of vessel. And you have finger stick here. And this one is showing -- I mean, if you look at the headline, transforming the patient experience is what it's talking about.

Q So it's your testimony that the slide ending in 83, transforming a patient experience slide, the picture on the top and the picture on the left refer to the old patient experience and the picture on the right bottom right refers to the Theranos's experience?
A Yes. Theranos's venipuncture experience. Because we -- like I said, that's the butterfly that we've been talking about since yesterday -- yesterday and today.
Q If you turn to the page ending in 85 --
A Okay.
Q -- the column on the right says, "Routine specialty and esoteric testing."
A Yes.
Q Do you see on the left it says, "All 1,000 plus currently run tests slash CBT codes are available through Theranos"?
A Correct.
Q Was that aspirational or current?

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A I believe at that point, it was current. Because we were -- end of 2013, we had shared this with PFM that we were still sending out tests to ARUP. So we did have the entire menu that we had started out with -- with in 2011. But I think in Q1 of 2014, we deprecated it because the overhead of maintaining the tests that we were sending to ARUP, given the low volume was low. And then later on, we were still -- we were contemplating should we add more tests or not. So at this point, I believe in 2013, it was -- it was correct.
Q So I guess in the late 2013, early 2014 time period, Theranos was offering 1,000 plus CBT codes?
A Yes. The way it will work was, the answer is yes, we were offering it, but we were not advertising -- advertising that on the menu. On our menu, we had about 200 tests or so. But if a patient showed up, like, the case at Safeway location that we

had since 2011, the tests that were not on our menu, we would still collect the sample. Because we didn't want the patient to go away. So we still had those thousand or 800 or 700 tests available from the ARUP menu available to us.

Q What about the next bullet, "Theranos runs any test available in its central laboratories," is

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that aspirational or actual?

A I think that's the same comment that I made earlier that -- that we were running any type of test in the central laboratory.

Q So in other words, this wasn't an aspirational statement at that time?

A That's correct. That's my understanding.

Q If you look at the page ending in 98.

A Yes.

Q I think we reviewed an earlier version of the slide in connection in an earlier exhibit. Do you recall that?

A I'm sorry, which -- which one?

Q Validation of Theranos.

A We saw this one before.

Q Something similar to this before, do you recall seeing that yesterday?

A Actually, I've seen a lot of stuff. Sorry.

Q It's fine. My statement had no real use.

A Okay.

Q I'll move on. Do you see the sentence there, the third paragraph in, "Lab infrastructure is validated under FDA, ICH and World Health Organization guidelines." Do you see that?

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A Yes.

Q As of the end of 2013, start of 2014, was that a true statement?

A You know, I was not familiar with the chemistry side and R&D side and lab side of the picture. So I don't know if that was true or not. This was not my expertise. So I would not be able to make a firm statement.

Q Who -- whose expertise was it?

A I think there were different people in the chemistry department who would know more about it. The team leads that we talked about yesterday, six or seven people, that I mentioned yesterday, they would know what guidelines they were following in the chemistry element process. I was not involved with that. I didn't have the expertise.

Q Did any of the team leads ever meet with any investors?

A No. I don't -- I mean, I think when I had taken (b)(6); (b)(7)(C) for a tour of our lab, he may have

seen people and he may -- he may have introduced people, but he didn't meet with them in a meeting, just like a handshake or a hi.

Q Did you ever bring any of those team leads to discuss this slide when going through the slide deck

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with potential investors?

A I don't know because I think this lab infrastructure is validated, has been there since 2010, and before. We saw that somewhere else also. So this was the company's -- these guidelines -- guidelines, what I think in place already when I joined the company. So -- so it's possible some of the lead -- team leads met with investors back then in 2010 or '11 or before, but not in recent days, not in recent years.

Q Between you and Ms. Holmes who would be the person more capable of describing the validation of Theranos systems under the guidelines listed here?

A Which sentence? I think there are a lot of different things here.

Q Just that same third sentence.

A Yeah. The lab infrastructure is validated. She would -- back in 2010, she had more knowledge about this. I don't know if she still was plugged into this or not. But like I said, there were other team leads and chemistry who would know this for sure.

Q I guess. But between the two of you, who would know more about it at the end of 2013, start of 2014?

A I mean, I assume they didn't. But I wouldn't

0716

guess if she knew or not.

Q Turn to the next page, the page ending 700, there's a page called "Products." What is this -- what is this slide used to explain?

A I think it give a flavor of some of the products that we had worked on or some of the products that were available.

Q You mean, you think this slide was just to give a flavor of those products or to actually describe the products that Theranos had?

A No. This is certainly not -- doesn't look comprehensive. Because a lot of things here are -- are not mentioned, like ton of software that we wrote is not mentioned here and --

Q What else?

A We also don't have any mention of 3X devices here. It only talks about miniLab -- miniLab and 4S. We would obviously not talk about our modified devices, but --

Q Why wouldn't you talk about your unmodified devices here?

A Why wouldn't we? Because we would bind them

commercially. They were not necessarily inventions or products that we were developing in-house, would be my -- my guess.

0717

Q Did you ever tell any investors that Theranos was vertically integrated?

A That's the term we used, yes.

Q Was Theranos vertically integrated in 2013?

A That was a revision that were -- I mean, we were already doing a lot of pieces. Vertical integration is an open-ended stack. You can never be completely vertically integrated. For example, in our TSPU, we used to buy micro processes from Intel. So clearly not full vertical integration. But the point here was, and our vision was, that we want to vertically integrate and we want to talk about this with the investors, that we were probably more vertically integrated than any kind of company we knew, and our vision was to be even deeper -- have deeper integration.

Q And part of that discussion of integration, did you explain that Theranos manufactured its analyzer devices?

A Yes.

Q As part of the that conversation, did you explain that Theranos also purchased commercially available machines?

A Depending on the conversation. But in some cases, yes, that would come up.

0718

Q Do you recall any instances where it came up?

A I don't recall, but it's kind of an uninteresting detail that I probably wouldn't remember either.

Q If you look at the next page, there's an overview of Theranos's systems. Do you see that?

A Yes.

Q What are the devices on the top left picture here?

A This is our, I think, 4X and 3.X device.

Q The one on the left is?

A Sorry. The one on the left is 3.X, the one on the right is one variation of 4.X device.

Q What variation is that?

A I don't recall the code name or the version number, but it's a 4 -- 4X series device. I cannot from picture exactly what it is, but I know it's a 4 series device.

Q Again, this is an overview of Theranos's systems, right?

A Yes.

Q I think earlier we were talking about, you know, the use of an analytical systems, analyzer, devices, do you remember that, just discussion

generally?
0719
A Yes.
Q Would Theranos's systems include more than the items that are sort of in that box there?
A Probably, yes.
Q What else would it include?
A We also had our own reagent and antibodies that we were manufacturing. So that would be included over here. Obviously I think I already mentioned that in addition to this decision support system, we also had a lot of software that we were using that would be mentioned here. This is actually 2013, right? This is the --
Q I think the date of the cover e-mail is early 2014.
A Yeah. And obviously the CTNs are not mentioned here so I would say CTNs.
Q Anything else?
A Probably other things, but that's what comes to my mind top of my head.
Q Turn to pages ending in 710, slide called "Theranos Proprietary Test." Do you see that?
A Yes, I do.
Q Do you see that the first number there is routine specialty and esoteric tests?
A Yes, I do.
0720
Q At the time, did Theranos provide routine specialty and esoteric tests?
A Through a CLIA lab, yes.
Q What do you mean by through the CLIA lab -- CLIA lab?
A That these tests were on our menu.
Q Including some that we sent out to ARUP, right?
A No. From -- from what I remember, we were also doing specialty and esoteric testing labs.
Q How was Theranos conducting those esoteric tests?
A I mean, I will have to look at test-by-test basis, but some were probably conducted using our technology on the modified devices. If they were considered esoteric or specialty, and some were being conducted using venipuncture.
Q And so for those ones that were being conducted on venipuncture and run on nonmodified devices, how were they Theranos proprietary tests?
A Then my -- again, this slide would not be referring to that, this slide would be referring to the fact that we are capable of doing routine specialty and esoteric tests using Theranos's proprietary technology.
Q I guess did you -- did you consider
0721

venipuncture run on a commercially available machine unmodified to be a Theranos proprietary test?
A No.
Q Did you explain that the routine specialty and esoteric tests, then, may have referred to more than Theranos's proprietary tests?
A Depended on the discussion. But if the discussion was that can we do using our technologies, these tests, I think the answer would have been yes, and we probably -- I don't know exactly which test falls into specialty and esoteric category, but I know some tests that we were doing using -- using our technology did fall into this categories. So the answer is, yes, we would say our technology is capable of doing this test.
Q Okay. If you want to turn to the page ending in 29 -- I should say 5 -- or 729. And this is -- this is a reference to Theranos cost savings; is that right?
A Yes.
Q I just want to go through these and you can tell me whether these were actual at the time or aspirational at the time. So how about that first bullet, was that aspirational or actual at the time?
A This was aspirational.
Q What about the second?

0722

A Aspirational.
Q Third?
A Aspirational.
Q The fourth?
A Aspirational.
Q The fifth?
A Aspirational.
Q And the last one?
A Aspirational.
Q So did Theranos, in terms of actual capabilities at the start of 2014, what were Theranos's actual cost savings that were available?
A Cost savings to -- to the consumers or cost savings to Theranos itself?
Q To Theranos itself. Or the consumer. I mean, the consumer would just be the pricing, right?
A Yes.
Q Okay.
A So that's -- so -- sorry. I didn't mean to interrupt.
Q What about Theranos internally?
A I don't think this is talking about the Theranos internally, which is why I wanted to clarify this. This is saying how Theranos envisions a fully loaded cost saving and I can walk you through all five

0723

and explain how we envisioned it.
Q Okay. I guess why don't we look at the

fifth -- fifth or six bullet point that says, "The unprecedented lack of variation from system to system yields higher integrity data and longitudinal trending." Do you see that?

A Yes. Yes.

Q At the time, did Theranos's SPU create an unprecedented lack of variation from system to system?

A I would say no. But I also, like I said earlier, we were not representing that either. This slide was talking about the future and the discussion around that would be that this capability would allow us to do what we were talking about here.

BY MS. WINKLER:

Q So why doesn't this slide say Theranos's future cost savings?

A Yeah. I mean, I think what happened was, because a lot of people were just dragging and dropping slides here, nobody actually went and edited it and fixed the tenses because the assumption was, you're always talking through the slide. And people who were present knew, for example, that realtime and ER and hospital reduces bed stays and cost. That's true. Are we doing that, are we in ER and -- and hospital?

0724

Obviously the answer was no.

So when we met with hospital partners or any -- any strategic partner, we would talk about these in vision statements. I don't recall what was the original source of this, but I know a lot of the information was just cut and paste and drag and drop into the slide deck.

Q So as we sit here today, can you tell me that you told every potential investor that Theranos's systems aren't in physicians' offices at that time?

A I wouldn't -- I -- I didn't say to investors that we were not, but we were very clear and we never said we were in physicians' offices. Because it was a vision and aspirational that we used to talk about in the meetings. If we were in physician's office, that would be a major discussion point in our discussions.

Q But did you tell any -- did you tell all the investors that you talked to that Theranos's systems were not in physicians' offices at the time you gave the presentations?

A I think I answered the question. The answer is, no. However, I said we also didn't tell people we were in physicians' offices because the people we were engaging with, the lab partners, the hospital partners, and the investors were sophisticated because we were --

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when we would say, ultimately, when we are in physicians' offices, this is what will happen. We never said, oh, by the way, we are in that physician's office and this is what we're doing. That is not the

case. We were talking about aspirational.
BY MR. KOLHATKAR:
Q You mentioned something in an answer a minute ago that you didn't correct necessarily past tense or present tense, didn't have someone go through the slide deck and correct for that.
Did Theranos sometimes confuse past, present and future tense in discussion with its investors?
A No. And I wish I had gone through this, and I regret that I hadn't paid attention to that, but the answer is no, we were not confusing. It's just that, literally, people were just dropping slides and cutting and pasting into these things. There were too many hands into this thing, the slide deck. And the core assumption was this was a discussion deck. And we are always walking people through this because, even by itself, if you go through a large number of slides, the right audience, if this was given to a completely uneducated person, it would be different. But we were always accompanying this with providing details, providing context. And almost every single time, this
0726
was being used either by me or Elizabeth in meetings that we were having with people with whom we were sharing our vision, and where we wanted to take this company in the next five or ten years.
Q Did you understand that Elizabeth Holmes could distinguish between the present and future tense?
A Yes. I'm pretty sure she could.
BY MS. CHAN:
Q Turn to page ending 733, there's a section of the presentation that's titled "Clinical Data."
A Yes.
Q Do you see that? And then if you flip through that section, which is a very large section of the presentation, there are a number of correlation graphs, it seems like.
A Yes.
Q So for instance, if you go to 780.
A Progesterone?
Q Yes.
A Yes.
Q It looks like there is a graph for progesterone. What is this correlation that the graph is trying to show?
A So again, this is -- I'm going to be out of my league on the science side. But what this shows is
0727
that how does a Theranos assay for progesterone correlate with a progesterone assay most likely made by manufacturer call IBL. If you recall, I talked, either yesterday or today, about when you develop an assay, you need a predicate method to show that you're performing within a certain range of the predicate

method. It's never hundred percent.
If you're a hundred percent, then the R square, the blue would be .99 or 1.0 to be perfect. And if you're not perfect, then the R square goes down. And if you're missing points on the edges, means the very low and very high values, again, the R square shrinks. So many things impact the R square value, but this graph shows how tightly you correlate with something else.

Q So in other words, it's comparing the Theranos assay with the same assay on a reference method?

A No. It's -- it's comparing Theranos assay with the assay that was developed by the reference method, by whoever the FDA cleared assay. So not our assay running on some -- some third-party device. It will be, for example, in this case, IBL made the machine, if they had a machine, and made the assay. FDA cleared, most likely. And we are comparing to

0728

that.

Q Okay. So the progesterone test and the results of that test being run on the Theranos method versus a reference method?

A I'm sorry I'm being --

Q Is that it?

A -- I'm being a stickler to this, but I want to be accurate. Based on my understanding, it's not necessarily method. It's assay. So method is more of a scientific concept, like you have a method, ELISA is a method. Here what we're saying is there is an assay for progesterone assay. And you run -- so if I draw blood from you, let's say -- this is a female hormone. And if you draw blood from -- if I draw blood from you and I run 15 samples on Theranos assay, Theranos chemistry, and I run the same exact samples on IBL machine using the assay developed by IBL, then this is the result we get. This is how we plot.

Q And with respect to the Theranos assay, what devices is that assay being run on?

A I don't know what device. Device is not mentioned here. It may not be device. It may be performance off of our chemistry. Pure chemistry in some cases, it may be devices. But mostly these are performances of our chemistries.

0729

BY MR. KOLHATKAR:

Q You mean like on the bench?

A Yes. In R&D, yes.

BY MS. CHAN:

Q Okay. So -- so I guess I don't really understand. So is the device being used --

A In some --

Q -- to conduct these tests?

A In some cases, the device is being used. In most of the cases, my understanding is these are performance level -- raw chemistry performance and how good our chemistry is performing.

Q Okay. And so where it's -- where it's actually Theranos versus something else, it's just the Theranos chemistries. And how -- how are the chemistries run, are they either run manually or through a machine, right?

A Yeah. So what happens if -- if you look at Theranos TSPU, one of the big innovations in the TSPU is we mimic what a human does on a bench. So, for example, if a human takes a sample blood, puts into one tube, mixes into third tube, takes a reagent, puts in the first tube, washes it, incubates it for 30 minutes whatever the protocol is, that's the protocol.

When you do that in the machine, the machine

0730

does it exactly the same way as a human does it on the bench. It's the same -- same protocol. Now, obviously, the temperature conditions are different so we optimize them. So when you, in our case, when we develop an assay on the bench, means we also have developed the protocol for the -- for the -- on the bench. The final step at that point is to transport all the device, if we had to, in most cases using same -- same a way close to the same protocol.

But the bulk of the work, the hard work, is already done in developing the assay because you have to find the reagents, the antibodies, and perform -- and develop the assay like the chemist do.

Q So in some cases, when you're running the Theranos assay, is it being done on just regular commercially available machines?

A No. In most cases, I would say it's probably not running on any machines. But in this point, even if it is, in some cases, I think some nucleic acid amplification tests, they run on a very generic machine. Think about like Intel CPU, there's some machines for nucleic acid amplification tests. They act like Intel CPU. Everybody uses them for development. But the key thing, when you're developing a nucleic acid amplification test, is to develop the

0731

reagent sequence so you can develop the right test.

So basically developing chemistry properly is the biggest step in many assays. In some assays that's not the case. But in most cases -- assays, that's the case, in my understanding again from having worked with chemists.

Q Did you ever explain to potential investors that these correlation charts are actually comparing Theranos assay against reference assays and not Theranos devices against reference devices?

A Yes. Anytime we talked about a -- a data, we always say we want to share with you our assay performances. We never said does the performance of, you know, an entire stack, including software, CTNs. In some cases, CTNs may not be involved. We used to always focus on saying is the performance of our assays compared to predicate methods.

Q Who did you share that with?

A Anytime anybody wanted to walk through the details, and most of the time, it would be people who are familiar with the assay development process or experts, like for example, PFM, they had at least one guy, I think (b)(6); (b)(7)(C) that I mentioned earlier, (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) So he would be the kind of guy who would be interested in going

0732

through this and he would share with us.

Q So you told (b)(6); (b)(7)(C) from PFM that this was showing Theranos' assays versus reference assays --

A That's correct.

Q -- and not Theranos' devices versus reference devices?

A Correct. Yeah. We didn't use to -- use device names, so I would say -- I don't -- let me actually backtrack.

I don't remember exactly what word -- what I said, but if he had the conversation with Alexei on assays, then we would always say this is the performance of our assays versus predicate method.

Q So you don't remember having a conversation with him?

A I don't remember an exact conversation with him.

BY MR. KOLHATKAR:

Q I'm going to hand you a couple of documents.

A You want me to put this away?

Q Sure. Thank you.

(SEC Exhibit Nos. 257 through 259 were marked for identification.)

BY MR. KOLHATKAR:

0733

Q First I'll hand you 257. And I start this process while you're rubber banding that one. Hand you 258 the same time, and 259 as well. Just while you review these.

A You want me to go through all three of them?

Q Let me read them for the record and we can go through them one by one. Exhibit 257 is a document Bates stamped THPFM0000868711. Exhibit 258 is a document Bates stamped THPFM0000868708. And 259 is a document Bates stamped THPFM0000878985.

Why don't we start, do you recognize Exhibit 257?

A I do.
Q What is 2 -- Exhibit 257?
A It's e-mail chain between myself and (b)(6); (b)(7)(C) and (b)(6); (b)(7)(C) and then I forwarded a draft of that, my response to -- to Ms. Holmes.
Q And then the second one, Exhibit 258, do you recognize Exhibit 258?
A Yes. That seems like an e-mail response from her, from Elizabeth Holmes to me.
Q And then is the top e-mail chain another draft to her, still on 258 here?
A Yes. I mean it's a draft from -- yes, I agree. That's still my e-mail to her.

0734

Q And 259, does that look like you forwarding another message to her?
A It seems like it, yes.
Q Just -- just to go through the timestamps here, it looks like the first one is -- 257 is time stamped Wednesday -- Wednesday January 22nd at 3:50 p.m.
Do you see that?
A Yes, I do.
Q 258 is time stamped Thursday, January 23rd at 12:51 a.m.
A I do.
Q And 259 is time stamped same day at 1:02 a.m. Do you see that?
A I do.
Q What do you understand these documents to be?
A It seems like it's an e-mail response that I'm going to send to (b)(6); (b)(7)(C). And I'm sending her drafts to get her feedback or -- or maybe I was talking to her when I was going to her office and she would give me something to add or remove and I would based on our conversation.
Q In other words, you're discussing with Ms. Holmes what information you will provide (b)(6); (b)(7)(C)?
A In the e-mail this is what I'm doing, yes.

0735

Q And -- and that potentially accompanied by in-person conversations with her?
A Potentially, yes.
Q Do you recall having in-person conversations with Ms. Holmes about this e-mail thread?
A I don't recall.
Q I want to focus your attention to Exhibit 257 in the second long paragraph there, with -- speaking with.
A Yes.
Q It says, "Speaking with you at HG won't be possible, unfortunately, as that will be a negative for our relationship given where we are."
A Yes.

Q What were you -- what were you proposing to tell Mr. Grossman here?
A So if I recall correctly, (b)(6); (b)(7)(C) had asked us to speak with USG, United Healthcare and Walgreens. And I had discussed with Elizabeth that we didn't think it was necessary. We were not -- we didn't want to take a favor from either Walgreens or United Health. And so this is what I was basically referring to.
Q The next sentence, it says, "We can walk you through our R&D lab where we use a large number of our
0736
devices, if that becomes the last remaining item on the list that you" -- "that you check off. Ideally, it would be just yourself and you can confirm that you had Hep C shots administered on you, as this is a BSL-2 facility, but we can work through this."
Do you see that?
A I do.
Q What -- what are you responding to here?
A I think he had sent me an e-mail. If you look at the last line here, "Lastly, we would like to see the lab analyzing any action, if that's possible." And somewhere in here I think he had said just a checklist item. I forgot where it was. I was just repeating his -- his comment here. So this is what I'm responding to.
Q Okay. And turn to the next page.
A Same e-mail?
Q I'm sorry. To the next document, Exhibit 258.
A Should I put this away, the first one?
Q You know, it might be helpful to keep it out.
A Okay.
Q The -- again, the last e-mail in the chain, this is from you to Ms. Holmes at 12:51 a.m. on January 23rd, it says, "If walking through our lab becomes the
0737
last remaining item on the list, then we can walk one person, perhaps yourself, through our BSL R&D lab where we use a large number of our devices."
Do you see that?
A I do.
Q In your mind, what was the reason for the proposed change in language?
A I don't remember. It looks pretty similar to me.
Q Do you know why you were sending another version of this to Ms. Holmes?
A I may have reflected on what I wanted to do with him. I don't remember why I'm sending another version. Sometimes I would think and send something and then I will come back and think that maybe my previous version was not good. I'll modify and send it

again. But I don't know what's going on over here.
Q Turning to the last exhibit, Exhibit 259. Again, this is another draft. It looks like this one is from Ms. Holmes to you. There's no message at the top.
A Okay.
Q Is it possible that she's editing your message below?
A It's possible. I cannot tell what she

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edited.
Q Okay. Why don't we look at the -- that same sentence. "If walking through our lab becomes the last remaining on the list, then we can walk one person, perhaps yourself, through our BSL-2 lab where we are running banks of our devices."
A Yes.
Q Do you see that?
A Yes.
Q Do you -- do you know if that's an edit you made or she made?
A I wouldn't be able to tell.
Q Did it appear in this version, R&D has been removed; is that right?
A Yes.
Q Did (b)(6); (b)(7)(C) understand the BSL-2 lab meant the R&D lab?
A No. The BSL-2 is a designation for a lab. It could be R&D or CLIA. BSL-2 is just saying what is the safety level of the lab. It doesn't have to do anything with R&D or CLIA.
Q What about banks of our devices, do you have any idea why large number of our devices change to banks of our devices?
A She liked using this term because of the

0739

comment I had made earlier that we used to call our devices as racks and blades. So in data center, we usually use the banks of blades. So I think she was just refining the term. There was nothing else that's different between these two.
Q Did you have any concern that by removing the reference to R&D, you were giving the impression that you -- that you were using banks of devices beyond the R&D setting?
A No.
Q Why not?
A Because when I walked (b)(6); (b)(7)(C) to the lab, I told him explicitly, the conversation we had was R&D lab. And I walked him through the lab. I introduced him to people or the -- I told him this is where we're doing nucleic acid amplification test, and I pointed out to him where do development of different chemistries.

Q Okay. So but do you remember when that tour took place?
A Yeah.
Q Sometime after this?
A It must have been after this, but I remember the tour.
Q Did Theranos ever use banks of its devices in its CLIA lab?
A Yes.
Q Which one? Which devices?
A 3.0s, 3.5s. Basically what happened was, if you put -- we had a removable rack where you can just put devices. And it had a big power brick at the back. You could just move the entire trolley back and forth. And we were using those in R&D and CLIA, both places.
Q So at this time, January 2014, where was the R&D lab located?
A In Palo -- 1601 Palo Alto.
Q Where was the CLIA lab?
A 1601 Palo Alto.
Q Was the Newark facility open at this time?
A We had a Newark facility open. We were doing manufacturing. I'm not sure if we were doing CLIA lab over there or not. I'm not sure if the CLIA had moved there or not.
Q Okay. So was part of the CLIA lab in Palo Alto then, or you're -- you're not sure where it was exactly at this time?
A I wasn't sure exactly -- I wasn't sure exactly where it was at the time.
MR. KOLHATKAR: Take a quick break at 5:21 p.m.

THE VIDEOGRAPHER: Off the record.
(A brief recess was taken.)
MR. KOLHATKAR: Back on the record at 5:32 p.m.
BY MR. KOLHATKAR:
Q Mr. Balwani, just to confirm, you didn't have any substantive discussions with the staff during the break; is that correct?
A That is correct.
Q In the 2013 time frame, did you tell PFM that Theranos had validated 1,000 CPT codes?
A No.
Q Did you tell PFM or anyone from PFM that Theranos was vertic -- vertically integrated with respect to its analyzers and chemicals?
A With respect to analyzers and -- I think I answered that question earlier. It's a very broad statement. If you include microprocessors and ingredients into chemistry like salt, the answer is no. But in general, the fact that we were manufacturing our

own devices, and reagents and chemistry, the answer would be yes.
Q Theranos wasn't vertically integrated with respect to the third-party commercial analyzers?
A No, of course not.

0742

Q Did you ever hear Elizabeth Holmes say that Theranos had -- had developed and validated 1,000 CPT codes?
A No.
Q Did you ever tell anyone from PFM that -- that Theranos had been operating on funds from contracts since 2006?
A No.
Q Did you ever hear Elizabeth Holmes say something like that?
A I don't recall.
Q Did you -- did you tell anyone from PFM that the Theranos platform can do 1,000 to 1,050 CPT codes?
A No.
Q Did you tell them you had a tech solution to 1300 CPT codes?
A I don't recall that one.
Q Do you recall Ms. Holmes saying anything like those last two statements?
A I don't recall.
Q Did you tell anyone from PFM that traditional labs need large buildings, labor and equipment, and that Theranos can do same in 200 square feet?
A If that -- I don't remember saying that, but I think I answered earlier that if we were talking in

0743

the context of our devices, then we used to -- we used as an example, but I don't know if I said that to PFM or not.
Q And, you know, I'm just going to try and run through some statements whether or not you made them, I'm going to ask you not to speculate. But just if you have a memory, yes or no or you don't remember --
A I understand.
Q -- I'd appreciate it. If there's an explanation, obviously give it, I just --
A Yes.
Q I don't want you to speculate about what you might have said.
A I appreciate that.
Q Did you say that Phase 1 involved providing any test with a drop of blood?
A No.
Q Did you ever hear Elizabeth Holmes say something like that?
A No.
Q Did you say -- did you tell PFM that Theranos wanted ten patients per day in its Walgreens stores?

A Without context, I would say I don't remember or --
Q Did you hear Elizabeth Holmes use ten patients per day as a goal?
A I don't think -- I don't recall. I don't think so.
Q Did you tell PFM that Theranos' is break-even point would be to have 15 patients per day per store?
A We may have discussed that. But again, there would be context around it. But I don't remember specifically if I use exactly that sentence.
Q I guess what would be the important context around that break-even number?
A If in the context of a model we were looking at what we thought was break even and what volume, those are -- like I said, with PFM, I used to have kind of brainstorming discussions. So it's possible that I probably said under this model -- this scenario is about 15 patients a day.
Q Okay. In -- after the PFM invested, you continue to have conversations with PFM; is that correct?
A Yes.
Q Was that primarily with (b)(6); (b)(7)(C) ?
A Primarily, yes.
Q Generally, what were the purpose of those calls or meetings?
A (b)(6); (b)(7)(C) used to call. And he wanted to meet and catch up. I always thought they were, you know, relationship-building meetings so that was the gist of it.
Q In July of 2014, did you tell (b)(6); (b)(7)(C) that the company was performing 70 to 75 percent of its tests at Walgreens on finger stick?
A Was performing? I don't recall saying that.
Q Did you tell (b)(6); (b)(7)(C) that the company was capable of performing 70 to 75 percent of this tests at Walgreens on finger stick?
A I don't recall specifically. It's possible that I said that, but I don't recall specifically.
Q Would that be a true statement at that time?
A The number probably was even higher, but I would say, yes, that would be a true statement.
Q Is that because, again, we talk about those bordering patterns yesterday.
A Correct.
Q So in other words, Theranos could do 70 to 75 percent of finger stick at the time, but may not actually because of the --
A Ordering patterns, yes, correct.
Q Or volume, other the reasons you gave?
A Example I gave of 40 patients, yes.

Q Did you tell (b)(6); (b)(7)(C) in July of 2014,
0746
that Theranos needed to have nine to ten patients per day before Walgreens would roll out to other locations?
A I don't recall. I don't recall the context either.
Q Did you tell (b)(6); (b)(7)(C) that -- that you would need to have finger stick on nine out of ten patients at Walgreens before they roll out to other location?
A That was actually -- I don't know if I recall I said it to him or not. At one point, that was our internal goal.
Q When was that your internal goal?
A In the first half of 2014. I think I also shared with you the example of scaling at Walgreens around finger sticks and sending the venipuncture patients in 24-hour stores. So that's what -- what our internal goal and that's what I was referring to.
Q Did you tell -- did you tell (b)(6); (b)(7)(C) in September of 2014, that Theranos was -- that -- that Walgreens had committed to 500 stores in fiscal year 2015?
A Walgreens had committed? I don't recall the exact words. But again, I would like to see the context of what that was.
Q Did you tell (b)(6); (b)(7)(C), in September 2014,
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that Theranos was close to break even?
A No.
Q Would that have been true at the time?
A No. Again, with that explanation that I gave earlier, if you include the innovation payment then maybe, but otherwise not.
Q Right.
So other than that sort of one payment that you -- set aside a deferred revenue that you were unsure how it was going to be treated, it would --
A Correct, yes. Because I think (b)(6); (b)(7)(C) knew we were in 40 stores, we just launched the 41st store in September 2014.
Q Do you recall having conversations with individuals from BDT Capital in September or October of 2014?
A Yes. I think we talked about that earlier.
Q Did you tell anyone from BDT that Theranos's machine costs 30 to 45 -- 35 to $40,000 compared to a million dollars for their competitor suppliers?
A There's a greater context behind that. If I made that statement, there's an explanation behind it.
Q Why don't -- do you recall making that statement?
A I don't recall it.
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Q What was -- what was the greater explanation of that statement be?
A We used to compare the capability of our device and what are the different tests we can do. And so if you were to assemble the lab to be able to do a test that we were able to do on our device, the cost would be much higher. But I don't think I said million. It may have been target number, like, it'd be huge like a million dollars or something like that.
Q Were there other numbers that you used rhetorically when you were talking to BDT or other potential investors?
A I don't recall. But -- sorry. I think -- I don't remember if I said million dollars or not, but I would say if you were to assemble the lab with all these equipments, it would cost a lot more money.
Q Was that an aspirational statement or a factual statement at the time?
A I believe that to be a factual statement.
Q Did you tell anyone from BDT that all --
A Sorry. If I made the statement, it would be factual, yeah.
Q Did you tell BDT that Theranos can run all their blood tests on one machine using the chemicals at one consumable cartridge?

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A Run all of their tests.
Q All of Theranos' tests on one machine using one consumable cartridge?
A No.
Q Would that have been an accurate statement at the time?
A Without additional context, I would say no.
Q Did you tell BDT that Theranos was vertically integrated?
A It will be the similar answer that I gave earlier, that if you are assuming that we're talking about the big components, the chemistry binders, some of key reagents, device, manufacturing of the device, consumerables, the CTN, the answer would be yes. But if you include the smallest possible thing, like salt and CPUs and other things, the answer would be no.
Q Did you tell anyone from BDT that --
A Sorry. I don't recall.
Q Did you tell anyone from BDT that Theranos buys aluminum, plastic and then develops the hardware from there?
A I don't recall saying that to BDT.
Q Did you ever hear Elizabeth Holmes say something like that?
A To BDT? I don't recall.

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Q Do you recall her saying that to any other investors?

A I don't recall saying to any other investors.
Q In October 2014, was Theranos trying to get a government contract for Ebola testing?
A I don't know if we were trying to get a government contract. I think we had submitted our Ebola assay to FDA for EUA, emergency use authorization clearance, but I don't recall if there was a contract that was entered into or not.
Q Did you ever tell BDT, or any prospective investors, that Theranos is about to sign $120 million contract for Ebola?
A With who?
Q With the government.
A No. I don't recall saying that.
Q Would that have been a true statement at the time?
A I don't recall. I mean I -- I don't think so.
Q Do you recall Elizabeth Holmes ever describing a potential government contract for Ebola testing?
A No.
Q Did you ever tell BDT that KPMG was Theranos'
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auditor?
A I don't recall.
Q Did you ever hear Elizabeth Holmes say that?
A To BDT again? I don't recall.
Q Did you ever tell BDT that the audits have details in their footnotes on certain nonpublic contracts so that there was some sensitivity to sharing them with BDT?
A The audited financials?
Q Correct.
A I don't recall saying that.
Q Were there audited financials in October 2014?
A No.
Q Did you ever hear Elizabeth Holmes make that comment?
A No.
Q Did you tell BDT that Theranos gets to decide on the timing of the Walgreens rollout?
A I don't recall.
Q Would that have been a true statement at the time?
A Yes. We had the -- we had control over the rollout, if we wanted to proceed or not. But obviously there were things Walgreens controlled also.
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Q What were those things?
A Construction on the stores. We were at -- that was a time frame and when we were renegotiating the contract. So things would have changed on what was

in the control and what was not. But in general, at that point, either training the technicians or building out the stores for us would be the fundamentally -- fundamental things.

Q When discussing the model with BDT, did you tell BDT that you were fairly confident in the 2014 numbers because you were already in October?

A I don't recall.

Q Do you recall Elizabeth Holmes saying anything like that?

A I don't recall either.

Q Did you -- did you tell BDT that for 2015, you might -- you think there might be plus or minus 30 percent variance from what the model was reflecting due to execution risk?

A I don't recall saying that.

Q Do you recall Elizabeth Holmes saying anything like that?

A I don't.

Q Do you recall telling BDT that the model should reflect 135 Safeway stores for January in

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northern California?

A The model? I don't recall saying that.

Q Was Theranos planning on opening 135 centers at Safeway in January 2015 as of October 2014?

A No.

Q Did you tell BDT, in October of 2014, that Theranos was currently picking up samples and running them -- running them -- picking up sample from hospitals and running them in a CLIA lab?

A No.

Q Would that have been a true statement at the time?

A Can you finish the sentence? The question was hospitals and what?

Q Sorry.

I want to be clear. In October 2014, did you tell BDT that Theranos was picking up samples from hospitals and running them in its labs?

A No, I don't recall saying that.

Q Would that have been an accurate statement at the time?

A Not to my knowledge, no.

Q Was Theranos picking up samples from hospitals in October 2014?

A Not at that point.

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Q When did it start?

A I don't think we ever did.

Q Did you ever hear Elizabeth Holmes say something like that?

A No. I don't recall.

Q Did you ever tell any investor or potential

investor that, in October 2014, that Theranos was 30 days away from an announcement of a contract with the Department of Defense and expecting to launch in airports in November?

A No.

Q Would that have been a true statement at the time?

A No, not to my knowledge.

Q Did you ever hear Elizabeth Holmes say something like that?

A No.

Q Did you ever tell anyone from BDT or any other potential investors that Theranos expected to receive $50 million from its upfront contract at airports?

A I don't recall saying that.

Q Would that have been a true statement at the time?

A Not to the best of my knowledge.

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Q Did you ever hear Elizabeth Holmes say anything like that?

A I don't recall that either.

Q Did you tell any -- anyone from BDT or any other potential investor that, historically, Theranos had generated 30 to $60 million revenue from pharmaceutical services?

A No, I -- I don't recall saying that.

Q Would that have been an accurate statement at the time?

A No. Not to the best of my knowledge, no.

Q Did you ever hear Elizabeth Holmes say something like that?

A I don't recall her saying that.

Q Do you recall discussing the Fortune article with BDT?

A No, I don't recall.

Q Did you ever hear Elizabeth Holmes say she did not regret the Fortune article to individuals from BDT?

A No, I don't recall.

Q Do you recall meeting with individuals from the Fremont group in 2014?

A Not specifically. If I -- if you place a

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name, maybe I'll be able to narrow it down.

Q I guess, do you remember anyone affiliated with Battelle's private family office meeting with individuals from Theranos in the fall of 2014?

A I don't recall.

Q Do you know -- do you know anyone named (b)(6); (b)(7)(C)?

A I heard the name, yes.

Q Have you met (b)(6); (b)(7)(C)?
A I don't recall.
Q Do you know anyone named (b)(6); (b)(7)(C) or (b)(6); (b)(7)(C)?
A I heard the name (b)(6); (b)(7)(C).
Q Who is (b)(6); (b)(7)(C)?
A He was one person who had visited us. I forgot which group he was with. And I -- I think I shared model with him. I have kind of a vague memory, but I don't remember specifically. I don't think I spent much time with him.
Q But you -- you think you shared the model with him?
A I have a vague memory, but I could be wrong about that.
Q Did you tell (b)(6); (b)(7)(C) in October 2014, that you felt good about the 2014 projections?

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A 2014 projections? I don't recall saying that.
Q When -- do you remember discussing model with (b)(6); (b)(7)(C)?
A I think I discussed the model. If I gave it to him, I would always give him the background to it, but I don't remember specific comment like that.
Q Do you remember saying that you felt confident in the 2014 numbers that the model reflected?
A I don't recall saying that.
Q Did you tell (b)(6); (b)(7)(C) that Johns Hopkins refused all of Theranos's SOPs?
A Refused?
Q Reviewed. I'm sorry. Let me rephrase the question for clarity.
Did you tell (b)(6); (b)(7)(C) that Johns Hopkins reviewed Theranos's SOPs?
A I don't recall saying that.
Q Did Theranos -- did Johns Hopkins review Theranos's SOPs?
A There were many SOPs in patient service center when we launched with Walgreens that -- that Johns Hopkins had reviewed and approved.
Q And did they continue to review and approve them throughout the course of --

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A No, they did not continue. When we started out, I don't remember how many SOPs were there, but there were quite a few that they had reviewed and approved.
Q Did you tell (b)(6); (b)(7)(C) that Theranos's goal was to have 30 patients per store per day at Walgreens?
A I don't recall saying that, but it wasn't in the model. So --
Q Did you tell (b)(6); (b)(7)(C) that Theranos would be in 70 retail locations by the end of the year?

A I don't recall saying that.
Q Do you recall telling (b)(6); (b)(7)(C) that Theranos could be in as many as 300 locations by the end of the year, 2014?
A I don't recall that.
Q Did you tell (b)(6); (b)(7)(C) that you -- you were planning on starting on the Safeway rollout in January of 2015 -- let me rephrase that.
In October 2014, did you tell (b)(6); (b)(7)(C) that you were planning on rolling out at Safeway in January of 2015?
A Don't recall that.
Q Do you recall saying that you were planning on rolling out in 300 Safeway locations in January 2015?

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A I don't. I don't recall that.
Q Do you recall meeting with individuals from the DeVos family?
A I recognize the name, but I don't know if I met with (b)(6); (b)(7)(C) or not. I don't recall.
Q Did you ever speak with anyone from their family office?
A I think I had a phone conversation with somebody. I don't remember who it was, though.
Q Do you recall telling -- does the name -- name (b)(6); (b)(7)(C) refresh your recollection?

A No.
Q (b)(6); (b)(7)(C)?
A Honestly doesn't.
Q Do you recall telling (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) that Theranos uses its own analyzer equipment?
A I don't recall that specific comment.
Q Do you recall telling (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) that Theranos manufactures its own analyzer equipment?
A I don't recall, but that would be a conversation we would have with them because we did.

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Q Did you ever tell them Theranos manufacture all of its own analyzer equipment?
A No, I would not.
BY MS. CHAN:
Q Did Ms. Holmes make that statement?
A Not to the best of my knowledge.
BY MR. KOLHATKAR:
Q Did you tell (b)(6); (b)(7)(C) that Theranos has no debt?
A Who is (b)(6); (b)(7)(C)?
Q (b)(6); (b)(7)(C)
A I don't recall saying that.

Q Would that be a true statement in -- in the fall of 2014, that Theranos had no debt?
A I think in general that would be true because we didn't borrow money, and -- in general. Except for, I mean, we must have discussed the null with Walgreens with them. But in general, we -- we -- we didn't like borrowing money to grow our business except for minor leasing from machines here and there. So I think in general, it would be true.
Q You understood that the note to be -- was a form of debt?
A It was form of debt to be converted into equity, but it was -- there was a specific reason why

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that note existed. It wasn't strictly that we were borrowing money from Walgreens. It was more like they had given this note to us so they can convert it to equity. If not, we return it back.
Q Do you remember explaining that to anyone from the DeVos family office?
A No. I don't recall explaining that.
Q Do you recall telling (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) that you expected to be in 300 Safeway locations in 2015?
A I don't recall.
Q Did you tell (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) that Theranos had more than $500 million in demand for the C-2 round?
A In demand?
Q In other words, there was more individuals expressed an interest to -- to provide Theranos with more than $500 million?
A I don't particularly remember that.
Q Did Theranos turn down any investors for the C-2 round?
A I think BDT had approached us to invest. And they wanted to do a structured deal and we didn't want to do that. So we just -- we had a discussion at the board meeting where I -- we discussed that, we

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recommended we not pursue that. And we put an end to that.
Q And were there -- were there any other investors that Theranos declined to work with for that C-2 round?
A I don't remember. We engaged with investors very selectively. So if we talked with investors, it was some purpose in mind already. So I would say, in general, no, but there may have been others.
Q Do you recall any -- Theranos turning down any money from any private equity companies for C-2 round?
A I don't recall. I'm not sure how to -- how private equity -- BDT was only one. I don't know if

that was a private equity or not, but otherwise I don't recall any others.
Q Did you ever hear Elizabeth Holmes state that Theranos was turning away private equity money for the C-2 round?
A I don't recall her saying that.
Q Do you recall -- or we talked a little bit yesterday about Madrone and (b)(6); (b)(7)(C) Do you recall -- generally recall that?
A Yes. Walgreens. Yes.
Q Did you tell (b)(6); (b)(7)(C) that Theranos runs

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every test with the same platform?
A I don't recall saying that.
Q Did you tell (b)(6); (b)(7)(C) there would not be a need for a different machines or collection tubes on the Theranos platform?
A Say that again. I'm sorry. I missed that.
Q Did you tell (b)(6); (b)(7)(C) that there would not be a need for different machines or collection tubes on the Theranos platform?
A No, I don't recall saying that.
Q Would that have been a true statement?
A I actually don't understand the comment, which is why I don't recall saying it. Yeah. I don't understand what the whole sentence means.
Q I guess, would it be a true statement in September 2014 that Theranos ran every test on the same platform?
A Technically speaking, yes. But same platform doesn't mean same machine. We had a platform in our lab that we were using, which is why I think this is kind of a confusing statement.
Q What did you understand "platform" to mean?
A Platform, in general, means as set of technologies. So not necessarily, for example, IOS is one platform. And it runs on multiple devices. So

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it's a very vague statement, in my opinion.
Q Did you understand that Theranos platform to include unmodified commercial devices?
A In my mind -- in our minds, yes.
Q Did you explain that to any investors?
A No. I think I shared that we -- there was a trade secret that we were not sharing.
Q The use of unmodified devices?
A Sorry. Unmodified?
Q Yeah.
A No. I mean, when we talked about it, like I said yesterday, it was an uninteresting fact, but otherwise, no. In general, no.
Q So, in your mind, was Theranos's use of unmodified third-party analyzers part of the Theranos platform?

A No.
Q Did you tell (b)(6); (b)(7)(C) that Theranos expected to be in 300 Walgreens stores by the end of 2014?
A 300 stores by end of 2014? I don't recall.
(SEC Exhibit No. 260 was marked for identification.)
BY MR. KOLHATKAR:
Q I'm going to hand you a document I'll mark as Exhibit 260.
A Thanks.
MR. COOPERSMITH: Before we go further, how much further? I -- I just think that we're getting a little tired here and it's been a long day, two days. So I mean, are we talking five minutes, ten minutes?
MS. CHAN: Off the record.
MR. COOPERSMITH: It's fine.
MR. KOLHATKAR: Let's go off the record at 5:59 just so we can give the court reporter a break.
THE VIDEOGRAPHER: Okay. Off the record.
(A brief recess was taken.)
MR. KOLHATKAR: Back on the record at 6:06 p.m.
BY MR. KOLHATKAR:
Q Mr. Balwani, we didn't have any substantive discussions during the break; is that correct?
A That's correct.
MR. KOLHATKAR: Mr. Balwani, given the time, we're going to adjourn testimony today pending a future date after discussion with counsel. Thank you very much for your time these last two days. We really do appreciate it.
THE WITNESS: Thank you also for your time.
MR. KOLHATKAR: Off the record at 6:07 p.m.
THE VIDEOGRAPHER: Off the record.
(Whereupon, at 6:07 p.m., the examination was concluded.)
* * * * *

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PROOFREADER'S CERTIFICATE

In The Matter of: THERANOS, INC.
Witness: Ramesh Sunny Balwani
File Number: SF-04030-A
Date: Thursday, August 10, 2017
Location: San Francisco, CA

This is to certify that I, (b)(6); (b)(7)(C)
(the undersigned), do hereby swear and affirm that the attached proceedings before the U.S. Securities and Exchange Commission were held according to the record and that this is the original, complete, true and accurate transcript that has been compared to the reporting or recording accomplished at the hearing.

_____ _____
(Proofreader's Name) (Date)

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THE UNITED STATES SECURITIES AND EXCHANGE COMMISSION

In the Matter of:)
)
THERANOS, INC.) File No. SF-04030-A

WITNESS: Ramesh "Sunny" Balwani
PAGES: 769 through 957
PLACE: 44 Montgomery Street, Suite 2800
San Francisco, California
DATE: Thursday, September 7, 2017

The above-entitled matter came on for hearing, pursuant to notice, at 12:28 p.m.

Diversified Reporting Services, Inc.
(202) 467-9200

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APPEARANCES:

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Also Present:
(b)(6); (b)(7)(C) VIDEO OPERATOR

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C O N T E N T S

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P R O C E E D I N G S

THE VIDEO OPERATOR: Here begins DVD No. 1 in the

Volume 3 testimony of Ramesh Sunny Balwani in the matter of Theranos, Inc., in the U.S. Securities and Exchange Commission, File No. SF-04030-A.

Today's date is September 7th, 2017. Time on the video monitor is 12:28.

Video operator today is (b)(6); (b)(7)(C) employed by Behmke Reporting and Video Services, Inc., 160 Spear Street, Suite 300, San Francisco, California.

MR. KOLHATKAR: Great. And we are on the record at 12:30 p.m. on September 7th, 2017.

I'm Rahul Kolhatkar. With me are Michael Foley, Marc Katz, and Monique Winkler. Joining us in a minute will be Jessica Chen. We're all officers of the Commission for the purposes of this proceeding.

We are today resuming the examination of -- of Sunny Balwani, which was adjourned on August 7th -- I'm sorry -- on August 10th, 2017.

Would counsel please identify themselves.

MR. COOPERSMITH: Yes.

Jeff Coopersmith from Davis Wright Tremaine representing Mr. Balwani.

MR. McKAY: John McKay, also Davis Wright Tremaine, representing Mr. Balwani.

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MR. TOPINKA: Jim Topinka, same firm.

MR. KOLHATKAR: Testimony today is pursuant to a Commission subpoena, which I've marked as Exhibit 268.

(SEC Exhibit No. 268 was marked for identification.)

Whereupon,

RAMESH "SUNNY" BALWANI,

was re-called as a witness and, having been previously duly sworn, was examined and testified further as follows:

EXAMINATION

BY MR. KOLHATKAR:

Q Mr. Balwani, have you had a chance to review Exhibit 268?

A Yes.

Q Do you understand that you're appearing here today pursuant to Exhibit 268?

A Yes.

Q Mr. Balwani, do you understand that you remain under oath?

A I do.

MR. KOLHATKAR: I'd also like the record to reflect that a copy of the formal order of investigation in this matter, as well as the supplemental formal order, are available to counsel and the witness during the course

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of this examination.

BY MR. KOLHATKAR:

Q Since we adjourned on August 10th, other than your conversations with counsel, have you had any

conversations with anyone about the substance of your testimony before the SEC?
A No.
Q So, Mr. Balwani, when we met last time, we discussed Theranos's relationship with Walgreens and the innovation fee.
Do you recall that generally?
A Yes.
Q I wanted to just ask you a couple more questions about that to -- to help clarify the -- your understanding of the innovation fee as of 2014.
A Okay.
Q So I'll hand you what's previously been marked as Exhibit 49.
Do you recognize Exhibit 49?
A I do.
Q What is it?
A This is the master services agreement executed between Theranos and Walgreens, actually amended and restated, in 2012, June 2012.
Q Okay. So it was amending an earlier agreement

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that Theranos had previously had with -- with Walgreens?
A Correct. We had an original agreement I think we had signed in 2010, sometime in -- during the summer. And this was amendment to that.
Q Did you review Exhibit 49 at or around the time Theranos entered into this amendment?
A Yes, I did.
Q And -- and -- and last time I think we were talk -- we -- we met, we talked about Theranos's right to retain the innovation fee.
A Correct.
Q And I understand your general testimony to be that, subject to a couple of exceptions, the hundred million dollar innovation fee paid by Walgreens was nonrefundable.
MR. COOPERSMITH: And just for the record, the transcript's going to speak for itself. You know, if you're trying to get him to repeat what he said earlier, he -- he may not be able to remember exactly what the question was or what he said.
MR. KOLHATKAR: Sure. I -- I -- sure. I guess --
BY MR. KOLHATKAR:
Q What -- was it your general understanding, after Theranos entered into Exhibit 49, that any innovation payments made to Theranos were nonrefundable?

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A It was not necessarily the 2012. It was also the amendment that we signed end of 2013. Taking those together was nonrefundable.
This part of the innovation piece, even this contract calls out was nonrefundable. But I'll have to look at the exact language on those two.

Q Okay. So my question to you is: What part of I guess Exhibit 49 helped you develop the opinion that -- that part of the innovation fee was nonrefundable?

A Well, there are two things. First of all, I negotiated this contract with Walgreens. I was the lead point from Theranos. And the intentions of both parties was that it's nonrefundable. So that's how we entered in this -- these -- these discussions that the hundred million dollars was nonrefundable.

And we were structured such a way that Theranos receives the payment over time, having achieved certain milestones. But the language in this contract and the amendment put together made it -- it -- it captured that intent.

Q I guess can you explain the distinction between Theranos might receive the payment and earn it over time?

A Sure. This contract in 2012 split the payment

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I believe in two or three payments. I forgot exactly what was in this contract in 2012. And there were certain milestones we had to hit -- I think pilot -- success of the pilot was one of those -- and some other details around the innovation payment that triggered additional payments.

So initially I think the first payment was going to be for $25 million, if I recall. And then there were additional trigger points that would allow us to receive the payment. Because if you haven't received it, obviously there's nothing -- you haven't earned it.

And then the language in the contract was that, once we had received the -- the payments, it -- it -- it discussed how -- what the payments was for.

And based on those discussions in the contract and also what was in the amendment, it -- on -- signed on December 31st, 2013, you know, we structured those two documents such that we get to keep the payment, and the payment became nonrefundable to Walgreens.

Q Could we turn to Section 6 of this contract. It is -- begins on the page ending in Bates WAG-TH 55 and onto 56.

A Yes.

Q And there -- do you see the section that's entitled "Section 6, Innovation Fee"?

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A Yes.

Q And I think the -- the sections you reference in terms -- that you just referenced in terms of the schedule of payment being laid up -- at upon certain milestones, is that captured by 6(a) here?

A Seems like it, yes. I mean, I'll have to read the whole thing. But from just looking at quickly, seems like it, yes.

Q Why don't you take a minute and review --
A Sure.
Q -- Section 6 just to yourself. And let me know when you've had a chance to read it.
A (Examines document.)
Okay. You want me to read the whole page or just the first top section?
Q Why -- why don't you read the whole -- the whole section on the --
A Okay.
Q -- which continues onto the next page.
A (Examines document.)
Okay.
Q You've had the opportunity to review Section 6?
A Yes.
Q And so I guess my question initially was: Does 6(a) capture sort of the earning events that you

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described in your earlier answer?
A Seems like it, yes.
Q And is it fair to say that --
MR. COOPERSMITH: Well -- well, I think that question may have misstated. It doesn't really say "earning events." It's distribution events.
MR. KOLHATKAR: Sure. I appreciate that correction.
BY MR. KOLHATKAR:
Q So does Section 6(a) capture the distribution events --
A It does.
Q -- in the contract?
And -- and is that essentially that there were $25 million paid up front?
A There -- it was not up front. It was at the completion of due diligence items, as it says over here.
Q And --
A So --
Q -- did those due diligence items take place?
A Yes.
Q Did -- the Section 6(b)(5), the Facilities Visit section, describes -- describes the potential for a facilities visit.
Do you see that?
A I do.

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Q Did that visit take place?
A I don't recall if that particularly took place or not. I don't.
Q Was it your understanding that it took place at the satisfaction of Walgreens such that they made the initial $25 million payment?
A It was my understanding that if there was anything else standing that they wanted out of this section, they would have brought it to us. But the fact that they triggered this $25 million payment to us meant

they were satisfied.
Q The -- the -- the Section 6(a)(2) refers to a second $25 million distribution.
Do you see that?
A I do.
Q Was that -- was that to take place upon Theranos reaching ten patients per store during a pilot?
A That's what it says here, yes.
Q And then again, the -- the -- the Subsection 3 there has the -- sort of the last distribution clause.
Do you see that?
A I do.
Q And were those -- was the timing of the -- the second and third distribution sort of what was renegotiated in that 2013 contract?

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A I don't think it was just the timing. I think there were other key provisions of the contract that were also renegotiated in the amendment that we signed on December 13th of 2013.
MR. McKAY: You said 13th.
THE WITNESS: Sorry. December 31st, 2013.
BY MR. KOLHATKAR:
Q The --
A It -- it was not just the timing of those two payments.
Q Understanding it's not just the timing of those two payments that was renegotiated as part of the 2013 amendment.
A Right.
Q Was the timing of these two events renegotiated as part of --
A I mean, I don't think I would describe it as renegotiating the timing. It was basically we had renegotiated key terms of the contract. As part of that, Walgreens accelerated those $75 million not tied to these milestones anymore.
So they were not tied to these milestones at all. It was basically completely new language and new understanding that the companies arrived at.
Q If you look at Section 6(c), it states: "If

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Theranos realizes at least 1.75 billion in net revenue domestically from laboratory services it provides at all of its laboratory locations that utilize the Theranos system within 12 months of the date that Theranos tests are available in at least 1,000 locations, Theranos will earn 50 million of the innovation fee."
Do you see that?
A Yes.
Q What did that provision mean to you at the time Theranos entered into Exhibit 49?
A So there was a lot of background to why we structured this contract the way we did and especially

this whole payment section here.
If you look at the language towards the top that you had earlier read -- or actually we pointed out, was that the innovation payment grant -- in this agreement is in exchange for exclusivity, price protection, first announcements rights, infrastructure costs, and so on, so forth.
So there was lot of value that we were going to give to Walgreens in exchange for innovation payment.
Now, the question was how does the innovation payment show up on the contract. For reasons that were clear to Walgreens -- and I didn't quite fully understand why -- they wanted to structure the contract

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in such a way that it reads this way, which is basically that, even though if you read the contracts in entirety, and especially after the amendment -- but you're saying ignore the amendment for now, correct?
Yeah. So at this point, the way this contract read, you know, we had two milestones that we had to reach in order for us to earn. And if not, then there was this clause that says it's going to get triggered. And I think I mentioned that there were some exceptions to that innovation payment -- that this clause will trigger that -- will say that we will trickle back dollar for dollar some amount back to Walgreens.
Now, if this is all you read, then you will miss the other point here, which is that this contract also talks about what happens during the -- if the contract terms.
And the way this was structured this way was on purpose, that if that section ever got triggered, which is that if we for some reason got the thousand stores -- first of all, our understanding was, if you get the thousand stores, things are going extremely well, and Walgreens is making lot of money in 500 stores, 600 stores, 700 stores before we hit thousand stores.
But once we get the thousand stores, and for whatever reason we are not making the revenue numbers

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that are targeted over here, then things have not gone well.
Theranos had the right at that -- at that point to term the contract or not renew the contract. And if we don't renew the contract, this payment is nonrefundable in that -- under -- under those circumstances.
So that was kind of the way we structured is that -- the contract was that way.
Q So just so I understand your answer to the question, I think the question was: Does that sentence in the first -- first sentence of Section 6(c) refer to the first event, Theranos would have to -- the -- the first event that Theranos would have to achieve before

it earned $50 million of the innovation fee?
A And my answer to that is you cannot read one sentence from this thing and miss out lot of the other details that went into the contract that basically gave me the -- the reasons that this money was nonrefundable.
If you -- you -- it's not possible to read just one line and ignore lot of the other things that have entered into the contract and why the contract was structured this way.
Q So why don't we turn the page to the -- to the page ending WAG-TH 57.

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A Mm-hmm. Yes.
Q And the -- the second-to-last sentence of -- of Section 6(c) states: "If the aforementioned milestones are not realized, Theranos will refund the entire innovation fee dollar for dollar back to Walgreens on a per-test-consumed basis with at least 50 million being credited in the first 12 months after program launch."
Do you see that?
A I do.
Q And is that the section that you were referencing that related to sort of the trickle-back of the fee?
A Yes.
Q And is -- what I understand your testimony to be that -- today that that sentence wasn't an avenue to refund the innovation fee?
A The -- in that one sentence, if you read it without the benefit of everything else in the contract, implies that, if we have not succeeded -- first of all, this gets triggered only if we are in thousand stores and we have not reached 2 -- $2.5 billion.
If that happens, that means things didn't go very well, the way we planned. So there are things that will trigger it.
The discussion we were having with Walgreens

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was why would we hit thousand stores if things were not going well, right? I mean, if you are in 500 stores, things are going well, only then you would go to 600 stores or 800 stores or thousand stores.
So the -- the -- the point here was: By this time, we are in a thousand stores. For some reason, things with Theranos have not gone well, even though we are in thousand stores -- and we actually did math around what would be the revenue if we are in thousand stores.
So the -- the expectation was we will, you know, easily surpass those revenue numbers.
But assuming that was not the case. The language here basically said, if that happens, you trickle back. However, in that case, Theranos had the right to not renew the contract.

And if you look at the contract language, when the contract is not renewed and it expires, this money becomes nonrefundable to Walgreens.
Q So just so I understand, it's -- it's your view that Section 6(c), the -- the refund events, only take place if Theranos was at a thousand stores to begin with?
A That's what our expectation was. That's what our understanding was, yes.
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Q And just sitting here today, is that how you read Section 6(c)?
A Yeah, that's how I read it.
Q So you mentioned the termination provisions of the contract.
Is that -- is that what appears on the page ending WAG-TH 66?
A Well, I -- I will have to read it. But this contract was pretty complex. So I don't think it was a clear section I'd remember where it was. But if it is here, then it'll be here.
Do you want me to read the whole thing?
Q Why don't you read Section 24, which begins on WAG-TH 66 and continues onto WAG-TH 67.
A Sure.
Q And let me know when you've had a chance to review it.
A (Examines document.)
Okay.
Q Is this the section that -- is Section 24 the section you're referring to that relates to the termination of the contract?
A I think so. But there may be more in the contract that refers to it. But from reading it, seems like this is the section.
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Q Okay. And -- and can you explain to me which part of Section 24 relates to the innovation fee being nonrefundable?
A Well, it's -- if you look at the survival of provisions, the innovation --
Q Sorry. Sorry. Just for the record, you're pointing at --
A Sorry.
Q -- 24(f)?
A D -- oh, 24(f). Yeah. Sorry.
Q Okay. Sorry I interrupted you.
A No problems.
MR. McKAY: There is no (e), apparently.
MR. KOLHATKAR: I -- I see that.
THE WITNESS: Yeah. So (f) here is the one where it says the innovation payment doesn't survive. And that's by design.
BY MR. KOLHATKAR:

Q Where do you see the innovation?
A No, no. It's not there. If -- it lists everything that survives in terms of term. And the innovation payment that was delivered back to -- was given to Theranos is not -- it doesn't survive. It's nonrefundable for that reason.
Q Because it's not listed in the survival of
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provisions?
A Correct. Exactly right.
Q If you look at the section before Section 24(d) --
A Right.
Q -- it says: "Obligations upon termination."
A Right.
Q It says -- the little (i) then (1), it says: "In the event Walgreens terminates this agreement pursuant to Sections 24.b or 24.c or Theranos terminates this agreement pursuant to 23.b" --
A Right.
Q -- "then within 180 calendar days of -- of the termination date Theranos will refund the innovation fee as detailed in Subsections (b) and, as applicable, (c)."
Do you see that?
A I do.
Q Does that not contemplate returning the innovation fee in the event of termination?
A I mean, not the way I read it. And again, I was sitting there negotiating the contract. And this is -- that was not the intent of this provision to capture that.
Because if -- again, I'll have to go through and timeline, the whole thing. But if Walgreens
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terminates the contract and they have given us the innovation payment, then why would we refund it, given all the valuable goods and services that we already provided to them?
BY MS. CHEN:
Q Did you communicate your understanding to anyone at Walgreens?
A Every single person. Every single person from Walgreens -- this -- this is their language. They created this complicated structure around this contract. We would have preferred a simple language.
As -- if you look in 2015, we actually wanted to simplify the language. But Walgreens did this so that their -- they had Medicare lawyers looking at this thing. They wanted to make sure that this hundred million dollars was not seen as a kickback or ant -- you know, antikickback laws.
So they structured it such a way that -- that satisfies their requirement, which apparently it did, and it satisfied our requirement and our understanding

this hundred million dollars, once we hit the milestones, is nonrefundable to -- to Walgreens.

And there were not just one or two people. An army of Walgreens lawyers and executives worked with me and negotiated this thing.

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The other thing, if I may add to this one, is in 2015, late 2014, I had a conversation with (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) and they confirmed it.

They said, you know, there's -- a contract is ironclad. That money is nonrefundable, you know. But we would like to renegotiate to see if we can provide you some other services and goods and -- and discuss -- you know, when we were negotiating the landlord-lessee model in 2015, to discuss that.

BY MR. KOLHATKAR:

Q So in that last answer I think you mentioned that, once you hit the milestones, it's nonrefundable.

Was a -- was hitting a thousand stores not one of the milestones for the innovation fee?

A No. This is in 2012. Once we modified the contract in December 2013, that obviously changed the terms of the contracts very significantly. So -- which is why I'm talking about both of them combined together for the 2014 time frame.

Q Who's your lead point of contact in the 2012 amendment for negotiating Exhibit 49?

A There were a large number of people who came and went at Walgreens. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)

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(b)(6); (b)(7)(C)

Then there were a large number of business executives who were involved. I think -- and I'm going to forget names because they used to have so many people come and go at Walgreens. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)

After that I believe we had another guy who came. (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) I forgot his name.

Q Do you recall any -- I'm sorry if I interrupted

you.
A No. It's --
Q Anyone else that you recall that --

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A Well, there were many more. I'm just trying to think people off my head, yeah.
Q Is it fair to -- those are the most prominent people in your mind?
A (b)(6); (b)(7)(C)
(b)(6); (b)(7)(C)
Q So with respect specifically to the 2012 amendment, Exhibit 49, do you remember who from Walgreens suggested the language as you described it in -- in -- in Sections 6 and 24?
A Oh, I wouldn't know who from Walgreens suggested it because -- when the contracts came to me, it came from either (b)(6); (b)(7)(C) -- in 2012 or from (b)(6); (b)(7)(C) That's right. (b)(6); (b)(7)(C) I said.
But he would -- he would tell me that he got feedback from dozens of people at Walgreens. I mean, so they -- it's a pretty sophisticated company who use -- they had lot of people looking at these contracts. Every single line they come renegotiate it because some

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other executive had jumped in at the last minute.
So -- but he was a point person.
Q So for -- for --
A So where the language came from, I don't know.
Q But -- but in terms of who communicated to you, it would be --
A (b)(6); (b)(7)(C)
Q
A
Q Okay.
A Most likely, yeah. And it could have been (b)(6); (b)(7)(C) too. He was also involved. But (b)(6); (b)(7)(C) was the one who was working with me on the language of the contract.
Q What about on the Theranos side; other than yourself, who was involved in -- focused specifically on the language of the contract?
A Well, I used to run everything by Elizabeth back then. Because we were small company in 2012, 50, 60, 70 people, something like that.
So I used to always, you know, tell her what was going on in the contract. I would show her the language. But then I would be editing it.
And then I believe we also ran it by our

outside counsel, who looked at the contract language to
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give us advice on -- on different issues, different matters.
Q And without inquiring about the nature of the advice, who was outside counsel for?
A I believe (b)(6); (b)(7)(C) was the outside counsel.
Q Any particular partner or lawyer there?
A I wouldn't remember the names. You know, it's been seven years, six years, five years.
MR. KOLHATKAR: Okay. You could put Exhibit 49 to the side.
THE WITNESS: All right.
MR. McKAY: Just slow down a little bit.
THE WITNESS: Oh, sure.
MR. KOLHATKAR: I'm going to hand you what's been previously marked as Exhibit 265.
MR. COOPERSMITH: Thanks.
BY MR. KOLHATKAR:
Q So I think in one of your answers a minute ago you -- you -- you referenced the 2015 negotiations.
So I've handed you what's been marked as Exhibit 265. It's Bates-stamped THER-0982058. I'm not going to ask you to review it in full. But if you could review the cover e-mail at least and let me know when you've had a chance to read it.
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A (Examines document.)
Okay.
Q Do you recognize Exhibit 265?
A I do.
Q What is it?
A In 2015 we had started to renegotiate our agreement with Walgreens. And seems like this is one of the drafts of that -- that process.
Q And is it an e-mail that -- that you sent to Ms. Holmes forwarding a message from (b)(6); (b)(7)(C)?
A Yes.
Q And does (b)(6); (b)(7)(C) attach a proposed draft of that contract?
A Seems like it, yes.
Q And -- and if you look at the -- your -- the second paragraph of the e-mail from yourself to Ms. Holmes, did you write: "The innovation payment language is closer to what we had wanted"?
A Seems like it, yes.
Q Okay. So I want to turn to the innovation language. It -- it looks like there are basically two copies of the contract attached. One's a redline, and one's a -- a clean copy.
If we could look at the -- the clean copy at the page Bates-ending THER-0982063.
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A Sorry. 63. Okay.
Q It looks like -- the innovation fee is now Section 5 of the -- of the contract, and it goes on on the next page.
Do you see that?
A I see it.
Q Could you read Subsections (a) and (b), and let me know when you've had a chance just to review them to yourself.
A (Examines document.)
Okay.
Q Do you recall reviewing this draft contract at the time?
A I probably did, yes. I don't recall it, but I'm pretty sure I did.
Q Can you tell me what about this proposed language for the innovation fee is -- is closer to what you had wanted in 2015?
A I wouldn't be able to recall that, what I had said to her -- what I -- what we had in my mind -- I -- in my mind or what we had discussed. But, I mean, I can respond to what's here. But I don't recall.
Q I guess what was -- do you recall what you had in mind in terms of what you had hoped to see in terms of language for the innovation fee?

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A No. I mean, the -- the negotiating process with Walgreens was a pulling hair process. And you will go back and forth with them and negotiate a thousand things and then land on something.
So I wouldn't recall every single detail about what I expected in certain draft. I'll have to look at all the communication and my notes to be able to do.
Q Generally did -- do you have a recollection of what your hope was in terms of the innovation fee in that contract negotiation?
A Yeah. I mean, I -- I think, first of all, it's important to draw a line between the word -- use of word "innovation fee," the way we had used the word "innovation fee" in the original contracts through December 2013 when we signed the amendment and -- and what was -- what we were negotiating here.
This is something that we hadn't signed, as you know. This is 2015 negotiating draft.
So internally we were using this innovation fee as a label towards the money that we had earned to see how now we can incent Walgreens to do things that were favorable to us in a certain way.
So we were going to use this money now to create some incentives to -- for Walgreens to be able to give us some terms.

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For example, we were negotiating the economic terms of the deal. The original deal we were paying

them $10 per transaction. And the new one I wanted to pay actually zero. But we were still negotiating. We were going back and forth between 4 and 6. Ultimately I -- I -- my intent was to bring it down to zero.

Q Why did you use the term "innovation fee" to -- to refer to that latter point?

A It's just a label we use towards the money that we had earned. Now we were going to use it for our business in however way wanted. And because, at least in my mind, we had earned it from Walgreens, I was going to use it now to see if we can, you know, use that money to build out stores at Walgreens or incent them to give us something that we wanted, incent them to give us some -- some terms that otherwise they may not have agreed to.

So it's just a -- it's like referring to money as, you know, kid's college fee but then using it to buy a car will do it. But it's like -- it's a label that we were using internally.

It's not like a jersey that we had retired forever in -- in January of 2014 that we will never use this term again. It was more loosely referring to the money that we earned from Walgreens and how we can use

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it now as we were sitting on the table and negotiating the contract.

Q If you take a look at the proposed Subsection (b) there, 5(b) on THER-0982064 --

A Mm-hmm, yes.

Q -- it's still includes language about opening a thousand locations and certain amounts of net revenue.

Do you see that?

A I do.

Q In your view, was this language no longer applicable in 2015?

A No. In my view, we were negotiating. And in 2015 -- like I said, Walgreens, it's a contract negotiation -- negotiating organization. These guys negotiate contracts with the most aggressive companies in the world: pharma companies, insurance companies, hospitals, tobacco companies, alcohol companies, sugar providers. I mean, these guys know how to negotiate a contract. And I learned a lot from these guys.

So at this point I was keeping things in play so that I can get things from them and show them carrots so I can say, "There's something in for you."

So but this is a negotiating process. Doesn't mean I had agreed on this language or any language. As a matter of fact, this is a draft they sent me in

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February of 2015. Even through September of 2015 we still hadn't agreed on a contract. We were still going back and forth.

So like I said earlier, my -- my intent was

that, if we were going to incent them by saying, "Okay. I -- you know, here's some money we can give to you," which they, I understood, needed badly, "then here are some concessions I would need from you."

And like I said, the per-patient fee that I brought down from $10 to $4, I was going to get it down to $0.

Q The -- did you view Walgreens' proposed contract language here as a suggestion that they didn't believe the innovation fee was completely earned by Theranos?

A No. That would be false. They knew we had earned it. That was what we negotiated. And like I said, it was not one young MBA from Walgreens who negotiated this contract; they had an army of people who negotiated the contract.

Walgreens had the -- has the habit of coming back and asking you for your first child if they could have it. So no. Just because Walgreens said they -- that, you know, they wanted this money back and that thing back doesn't mean it's theirs.

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Q Who at Walgreens -- I -- I think you mentioned this in a prior answer as well.

Who -- who at Walgreens told you that Theranos had earned the hundred million dollar innovation fee?

A I think I answered the question earlier. Every single person at Walgreens back then when I spoke with, even in 2015 when [b)(6); (b)(7)(C)] came and visited us, they said, you know, "We have looked at this contract. It's ironclad. You have earned it. It's nonrefundable to Walgreens."

Q Do you recall when in 2015 [b)(6); (b)(7)(C)] [b)(6); (b)(7)(C)] said --

A Summer of -- summer of 2015 when I was negotiating this contract with them.

BY MS. CHEN:

Q Did you have any communications with them prior to 2015 about this point?

A Yeah. I mean, all along since 2012 when we signed the amendment and 2013, 2014, this thing about this is refundable to them and if X, Y, Z happens then they could just ask for a refund was not on the plate. This was not -- this is what we had negotiated.

If you read the language, what they wanted from us was not to go to CVS. They wanted us to stay away from CVS and -- and others. They also pushed for

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Walmart and Target and others.

And if you read the language around the original exclusivity, they didn't say we are giving them exclusivity around fingersticks or around software or around this and that. It was exclusivity that was the prime key value to them.

So every single person on the other side at Walgreens knew this is what we were negotiating for.

Q So the language that's under -- I guess this is 5(b) in Exhibit 265 -- it seems --

A That's --

Q -- identical to the language that's in 6(c) on Exhibit 49.

If Walgreens thought that innovation fee was nonrefundable, why -- and that was your understanding as well, why -- why would -- why wouldn't this language have been kept --

A Because --

Q -- from the last amendment?

A I'm sorry. I didn't mean to interrupt.

Because they are Walgreens. They would ask you for everything they have given you back and some if they could. This is how they negotiated. They are retailers cutthroat business, 4 percent margins. This is how they negotiate.

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So this draft came from Walgreens to us. This is not me saying, "Yeah, good idea. Just put this language in there."

If -- if it -- if it were up to them, they would have a -- if you look at the redline, they probably have removed a whole bunch of things that were favorable to Theranos from this contract and kept stuff that's favorable to them. This was their habit. And this is why a contract with Walgreens took, you know, months.

And any time I had to go and negotiate a contract with Walgreens, I mean, I used to pray that I can get out from that meeting safe. Because these meetings took a long time. And these guys knew -- and their thing was they would put everything in the contract; we will negotiate with one guy -- let's say I will sit down with -- (b)(6); (b)(7)(C) will negotiate something. We will agree. We redline it. We remove it.

Goes back to Walgreens. They'll sit on it for a month and come back. And the same language is there again. And they say, "Oh, this other executive thought this was important to us. So let's renegotiate."

That's why it took so long. And that's why they will put it back -- any time -- even if I removed

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it ten times, they will put it back. Didn't mean we agree to that.

BY MR. KOLHATKAR:

Q Did Walgreens' auditors at Deloitte ever contact Theranos to analyze the collectability of the innovation payment?

A I don't recall if they contacted us directly. I think there was one or two conversations we had had

early on, maybe in 2011 or '12, around that issue. But I don't remember the exact specifics. If I see some documents, I'm sure it will refresh my memory.
Q Do you recall any -- just from your memory, if you provided them with any information?
A You know, I don't think we provided them anything, but I could be wrong about that. I will have to kind of look at my communications with them.
Q Were you aware in 2014 that Theranos had retained KPMG to conduct a review of its 2012 and 2013 financial statements?
A I don't know exactly the -- whether this was we retained them in 2014 to conduct '12 and '13 statements. But I do believe we had retained them to do audit of our financials for 2012, '13, and beyond. So but I don't know if that was -- that happened in 2014 and if those were the only two purposes.

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Q But you did understand KPMG was auditing Theranos's financials; is that -- at -- at --
A We want -- we wanted them to audit our financials, yes.
Q And whether or not they completed it or not, they were engaged to -- to start that work.
A They were engaged to start. I don't know if they even started their work.
Q Were you aware that KPMG believed that the initial innovation fee payment should be accounted for as a customer deposit on Theranos's balance sheets and should not be recognized as revenue?
A I don't think KPMG got deep enough into any of those details to be able to form their opinion. And -- and so answer is, if this was their opinion, I would have known about it. But I don't think this was their -- their formal opinion.
Q In other words, you were not aware of that opinion from KPMG?
A That's correct.
BY MS. CHEN:
Q With respect to Deloitte, why would they be asking for evidence of collectability of the innovation fee if the innovation fee wasn't supposed to be collectible by Walgreens?

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A You mean --
MR. COOPERSMITH: Do you have a time frame as to when you're saying Deloitte was asking the question?
BY MS. CHEN:
Q Well, Mr. Balwani, you recall that there were discussions sometime in 2011 or 2012.
That was what you said in your testimony, correct?
A No, no, no. What -- I was responding to the questions if I recalled a Walgreens auditor asking us

for something. And I -- my response was I didn't know it was Deloitte or who the auditor was.

My recollection is I think we had a discussion with Walgreens around that, but I don't remember the specifics of what it was. And I certainly don't know why Walgreens' auditors would be asking for something from Walgreens. I -- I would not be able to comment on that.

Q So what were the discussions that you recall happening in 2011 and 2012?

A I don't. I just remember that we had a discussion around this topic. But like I said, if I saw my e-mail communication with Walgreens guys or whoever, chances are it's going to be with, you know, lawyers or accountants there. If I saw those, that would probably

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refresh my memory. I can comment on that. But it was so long ago, there's -- there's no way I remember that.

BY MR. KOLHATKAR:

Q When -- in your prior testimony we generally discussed Theranos's financial model and the potential to -- to perform services for pharmaceutical companies at Walgreens locations.

A Yes.

Q Did Theranos have a team of employees working on potential pharmaceutical services in 2014?

A No. I think I had commented that we would have to -- we had to hire somebody to lead that effort. At that point we hadn't -- I mean, before I came to Theranos, this is what Theranos did. And -- and there were people who were familiar with this business who had engaged with pharmaceutical companies before I had come on board. So in -- in a way, yes, we had those people.

But in order to fully engage with that business we had to build a team from -- again.

Q In 2014 was it anyone's job at Theranos to work on pharmaceutical services?

A Not to best of my knowledge.

Q What document would best reflect your expectations for Theranos's retail growth at any given point in time?

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A I'm not sure I understand the question.

Q So we talked, when -- when you were here last time, about the financial model.

A Right.

Q Do you recall that?

Would the financial model best reflect your assumptions about Theranos's likely retail growth at any given point in time?

A If I'm -- I'm not sure if I'm answering your question, but I'll attempt it.

The financial model I was using as a planning tool also. So all the information that came to me from

field and from the Internet, whatever I learned -- I think I mentioned that to you also -- I would put that in the model.

So in a -- in a way, the answer to that question is yes, the model did reflect my assumptions about growth. Because like I said, I was using this as a planning tool for business also.

Q Were there any other documents other than the model that you would have used to sort of plan out your expectations for retail growth at Walgreens or other retail locations?

A I mean, I think the answer to that is no. But I actually don't know what would be -- for example, if

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there's an e-mail exchange between me and Walgreens or some documents or meeting minutes from them that came, and I knew -- I was aware that document is there, would that be considered a -- a document for that purpose or not.

But I'm trying to narrowly define content that I personally proactively created. And model I think would be the one.

Q I also want to clarify a couple of points in your understanding of -- of CLIA's -- of Theranos's CLIA lab operations.

A Okay.

Q Who at Theranos made the determination of what device to use for patient testing in the CLIA lab?

A It's evolved over time. Initially in 2010, 2011 -- it was, I think -- I was not involved. It was the lab. We had one lab director with three or four individuals. They did some research on what to pick, what to use. And they had picked the original devices.

And then after 2011, from a product dev perspective, I got involved, understand how the, you know, other companies use it. And then I started playing more and more active role.

But even there my participation was from a business perspective. The technical decisions were

0812

being made by the CLIA lab directors and the scientists and engineers in the company.

Q So, you know, just using a hypothetical of a test that can be run on any of the three models --

A Sure.

Q -- you know, the TSPU, the modified or the unmodified, who would have the final say about which machine Theranos should use to test CLIA samples in the lab?

A Well, the final say is always the lab director. So lab director, if they don't sign up, that's the end of it.

Q Okay.

A But --

Q Was that true throughout your time at Theranos?
A Yes.
Q Okay. Was it your understanding in 2014 that Theranos primarily used third-party analyzers in its CLIA lab, whether modified or unmodified, for patient testing?
A That's -- that's a difficult question to answer.
Are you talking about in terms of number of devices or number of tests or --
Q In term --

0813

A -- primarily in terms of what?
Q In terms of number of tests.
A I wouldn't be able to answer. I will have to look at the data. But, I mean, the modified devices are not commercially available, as you know. I think I explained to you they were very significantly modified. So I considered them as not commercially available devices anymore once we modified them to the extent that we did.
So I would say, if you -- if you use Theranos's technology, then I would say in 2014 majority were being used on some form of Theranos's technology. But again, I could be off. I'll have to look at the data in our lab information system.
Q What -- what do you mean by "Theranos technology" in that answer?
A Well, when we modified the commercial analyzers, we modified the software, the hardware, and bunch of other things that I -- I think I had shared that with you. So that made them not commercially available anymore. Significantly modified.
And so that -- I -- I used -- I considered that as Theranos proprietary technology. We had a discussion about that around our trade secrets.
So if you put -- take that world, then I would

0814

say majority of the testing was being done on those devices on Theranos's technology. But I could -- like I said, I could be wrong. I will -- the numbers changed by month, you know, based on ordering patterns and bunch of other things.
Q In that last answer would the -- would the Theranos technology also include the -- the TSPU?
A Yes.
Q Okay. So is it fair to say that, in your view, Theranos's technology consisted of -- in the CLIA lab setting -- of the -- the TSPU and then the modified third-party devices?
A Yes.
Q Is it fair to say that the unmodified third-party devices did not -- would not be Theranos proprietary technology?

A If -- if you're talking about only in the context of the CLIA lab, the answer is yes.
Q I'll hand you what's -- you can put the other exhibits aside. Thank you.
I'll hand you what's previously been marked as Exhibit 201. And I'm not going to ask you to review this in full. But if you could review the cover page and what -- let me know when you've had a chance to understand what this document is.

0815

A (Examines document.)
Okay.
Q Have you -- do you recognize Exhibit 201?
A I could recognize by looking at the cover page, yes.
Q Do you -- do you understand it to be Theranos's responses to a set of interrogatories in the PFM litigation?
A Seems like it.
Q If you turn to the page ending in 3358, do you see Request No. 64 there?
A I do.
Q And you stated, asking Theranos to identify any commercially avail -- available machine that Theranos modified for use to process tests on capillary or other microsamples?
A I do.
Q If you look past the -- if you could -- if you turn the page to 3362.
A Okay.
Q Do you see that part of the answer lists four devices there: the Siemens ADVIA 1800, BD Biosciences LSR Fortessa, BD Biosciences FACSC -- or FACSCS --
A FACS -- yeah. FACSCanto.
Q -- Canto --

0816

A Yes.
Q -- II, and the Drew Scientific Drew-3?
A I do.
Q Is that consistent with your understanding of the third-party machines that Theranos modified in order to test capillary or microsamples of patient blood?
A In the CLIA lab.
Q In the CLIA lab.
A I think that seems right.
Q Was this also your understanding at the time these -- these devices were modified for that purpose?
A For what purpose? For CLIA lab patient sample testing --
Q For --
A -- yes.
Q In other words, you under -- there -- there are some time periods here listed for when these devices were used?

A Yeah. I mean, I don't know about the time periods, obviously. But the devices' names sound correct.

BY MS. CHEN:

Q Was it your understanding, from 2013 to 2015, that these four third-party machines were being modified by Theranos to test patient samples?

0817

A Correct.

BY MR. KOLHATKAR:

Q Were you aware of any other third-party machines that had been modified by Theranos for -- to test patient samples in the CLIA lab?

A Off the top of my head, I don't know. I can't think of any.

Q Who at Theranos would best know the answer to that question?

A Well, the lab director, but -- would know. But I think this information is in the software. Software tracks all single details. So no one person has to -- had to really memorize this information.

Q Would that software also reflect the machine in the -- in the LIS database, sort of the output?

A Yes.

Q If you turn to the next page, in -- in response to -- to (d), there's a -- there's a list of -- of tests that were available to be run on the modified ADVIA 1800.

Do you see that?

A I do.

Q Could you take a minute and just read the list to yourself, please.

A Sure.

0818

(Examines document.)

Okay.

Q You've had a chance to review pages 36 -- 3363 through 3366?

A Yes.

Q You see that it lists 49 tests there?

A Yes.

Q Is this list that appears on those pages consistent with your understanding of the tests that were run on a modified protocol of the ADVIA 1800?

A I -- I wouldn't remember exact tests running from what time to what time. So there's no way for me to be able to -- be able to memorize this.

Q You don't -- you don't have any personal memory of on a test-by-test basis?

A Unfortunately, no. That would be nice, but I don't.

Q What about for the -- if you look at the paragraph below the -- the last -- below No. 49, it references the fact that the BD Biosciences LSR,

Fortessa, the FACSCanto II, and the Drew Scientific were used to process complete blood count test panel?
A I see that.
Q Was that consistent with your understanding of what those three machines were used for? In the CLIA
0819
lab again.
A I think so. But, you know, I could be wrong. These are -- these are pretty arcane lab details. But I would say, from a business perspective, it looks reasonable.
Q Did you remember any other tests being run on those machines?
A You know, I think there was one test that we were -- we had validated called TBNK. I don't know if it was -- went live or not. It may actually have gone live. So -- but I may be wrong about that. So it may be something that was done in R&D.
BY MS. CHEN:
Q So if you look at 3363 to 3366, which lists the tests that were being run on the Siemens ADVIA 1800 analyzers that had been modified by Theranos, was it consistent with your understanding from 2013 to 2015 that there was a maximum of 49 tests that were performed using the modified Siemens ADVIA 1800 analyzer?
A I wouldn't remember the exact number.
Q Was that around -- about 50 tests, was that around -- does that seem about right to you based on your understanding?
A Yeah. I think my recollection is that in -- in total we had about 80 tests off -- 70 to 80 tests
0820
offered from fingerstick. So if 40 to 50 are running on ADVIA 1800, that sounds like a reasonable number.
Q Okay. And that was your understanding back in 2013 to 2015 as well?
A I actually don't know if I knew, in 2013, '14, '15, exactly how many tests were returning on what machine. But at some point over time I did acquire that understanding, that our total number was about that ballpark.
BY MR. KOLHATKAR:
Q You mentioned a total of around 80.
And I think we -- we talked about -- about a dozen being run on the TSPU; is that --
A Sounds right. In CLIA lab.
Q In -- in the CLIA lab.
Did you have an understanding in 2014 that about -- about 12 tests were being run on the TSPU in the CLIA lab?
A Again, I wouldn't be able to pinpoint dates and times, but the number sounds reasonable.
MR. KOLHATKAR: We've been going almost an hour. Why don't we take a quick break.

We're off the record at 1:46 p.m.
(Recess taken.)
THE VIDEO OPERATOR: We're back on the record. The
0821
time on the video monitor is 1:38.
MR. KOLHATKAR: So we're back on the record at 1:38.
BY MR. KOLHATKAR:
Q Mr. Balwani, just to confirm, you didn't have any substantive discussions with the staff during the break; is that correct?
A That's correct.
Q So I actually do want you to take -- take a look back at Exhibit 201 just for another minute, if you wouldn't mind.
So I just want to -- taking a look at the total number of tests here, it looks like Exhibit 201 identifies 49 tests that could be run on the -- on the ADVIA 1800; is that right?
A That's what it -- from this document, yes.
Q Again, in the CLIA lab.
A Yes.
Q And I think we had talked last time about a dozen or so being run on the -- on the TSPU; is that --
A Sounds right.
Q And then looks like the other three devices are all used to -- to run a complete blood count. So one more test on -- on the other kind of modified devices.
A Was -- complete blood count is not one test. I think it's combination of 10 or 12 tests or some number
0822
tests. It's not just one test.
Q How many tests did Theranos offer, again approximately, in its CLIA lab setting, in 2014?
A I -- I think the number changed. But it was between 150 to 200 or 210 or 220-ish. That -- I mean, I'm giving you a pretty broad ballpark here, but that's -- that's the number.
Q So if we -- if we add together sort of the -- the number of tests that are available on the TSPU, the modified ADVIA 1800, and the three other devices listed in -- in -- in response to Interrogatory 64, it's about -- it's fair to say about 73, 74 tests; is that --
A Sounds reasonable.
Q So is it -- was it your understanding in -- in 2014 that Theranos was running about half of its tests or fewer on Theranos technology?
A Yeah, I think -- maybe I should clarify. Maybe you're confusing two things here. Maybe you're not. I just want to clarify.
When I was here last time, we had walked through this concept of person digital test or how many tests in details about -- based on all you're talking about, the visits, how many tests you are doing actually, how many tests you could have done.

And I think I had gone through a pretty
0823
complicated example that probably bored everybody, but I had gone through the example.
So I just want to make sure that you're saying -- when I said earlier that we are doing majority of the tests, we are talking about the majority of the people coming in for -- on -- on whom we were doing the fingerstick as a test, or are you saying what percentage of individual line items test that were on a menu were being done on fingerstick versus how many could have -- we could have done.
So I -- there are three different things there at least.
Q I think I -- my -- my question's maybe simpler than -- than --
A Okay.
Q -- than any of those.
In terms of the tests available on Theranos's menu in 2014 --
A Just the items -- test items.
Q -- test items, 150 to 200 and --
A Yes.
Q -- 10, was it your understanding in 2014 that -- that about half or less were -- were being run on Theranos technology?
A That would be about 70 to 80. So about that
0824
number, yes. That would be correct.
Q In the CLIA lab setting at the --
A Correct. Yes.
Q And you understand that in 2014.
A In terms of individual tests? Again, I think I answered that also. At what point in 2014 I knew exactly what numbers. It may have changed. But in general I knew that we were performing about 70 to 80 tests from nanotainers -- let's call that -- that microvolume or nanovolume. And then our total menu on the website, what -- that we offered to the public was between 150 to 200.
During what time in 2014, it may have changed. But that's my recollection.
BY MS. CHEN:
Q And the remainder of the tests were being performed on unmodified third-party machines or were being sent out to reference labs; is that correct?
A I would say that's correct, yes.
But again, just to clarify, that does not correlate to the volume, right? And I think I went through the example that you could have, you know, four groups of patients, you know, come in with 90 percent of the tests we could have done from fingerstick. But if one of the tests triggers renal puncture, everything
0825

moves to renal puncture.
So now in that case, you know, you did zero tests on fingerstick, right?
So I -- if you want, I can rehash that example.
BY MR. KOLHATKAR:
Q I think I under -- my question wasn't about sort of the frequency of the tests or --
A The visits.
Q -- or the visits --
A Yeah.
Q -- themselves.
A Yeah.
Q The --
A But -- even to -- just to be clear, again, from our perspective, that's a more important measure. Because it's the number of patients you touch that matters, not necessarily that's on your menu.
Q In -- in 2014 did you have a sense -- I'll -- I'll strike that.
In your earlier testimony we also briefly discussed that you attended a meeting at Johns Hopkins.
Do you recall that generally?
A I -- I attended -- I recall attending a meeting at Johns Hopkins.
Q Okay.

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A Yes.
Q When do you recall -- when -- when do you recall attending a meeting at Johns Hopkins?
A I think it may have been earlier in the process, between 2010 and 2012 time frame. I don't know which -- which -- which year, which month.
Q And do you recall bringing a -- an earlier version, a 3.0 or a 3.5 version, of the TSPU to that meeting?
A Yes.
Q Who else attended on Theranos's behalf?
A I believe myself and Ms. Holmes for sure. I don't know if he brought somebody else to carry around our stuff or attending the meeting or not. I don't remember.
Q Where did the meeting take place?
A Maryland, at Johns Hopkins' campus.
Q Who attended on the -- on -- on behalf of Johns Hopkins?
A They had I think at least three or four experts. One was their chief lab director -- not just lab director, but I think he was head of all the labs at Hopkins. I forgot the names. It's been a while.
Then they had another guy who was an expert in, you know, microsamples and diagnostics technologies.

0827

And they had couple other MDs, I think. They had four or five people, if I'm not mistaken.

Q What was the purpose of that meeting between Theranos and Johns Hopkins?
A Well, Walgreens had asked for the meeting. They had arranged the meeting. We didn't ask for the meeting. They had wanted us to meet with Hopkins so Hopkins can ask us questions; do the due diligence on our architecture, our technology; and assess the potential of what we were doing and -- and what we could do. So it was a Walgreens meeting.
Q Did you provide any information to Johns Hopkins before that meeting?
A I don't recall.
Q Do you know who provided information to Johns Hopkins after that meeting?
A We may have. I wouldn't remember. It's been a while.
Q What do you recall from that meeting with Johns Hopkins?
A It was -- I think it was a positive, friendly meeting. We spent -- I don't know how long we spent, but felt like a long time there answering the questions, show them the architecture, show them the consumables. I showed -- I think we showed them even the fingerstick
0828
process, but I'm not sure if we actually had performed a fingerstick or not. They were more interested in the science and data. And we discussed that in detail.
Basically whatever questions they had around our technology and architecture, we answered those questions.
Q Did you show them -- was there like a PowerPoint that Theranos had prepared for that meeting?
A I don't remember if we had a PowerPoint. I know we had brought our data. So I don't know if that was in slides or hard copied. I -- I don't remember that.
Q Did you understand that meeting to be for the purpose of Johns Hopkins validating Theranos's technology?
A That's what was communicated to us by Walgreens, is -- is my recollection, yes.
Q And under what standard did you understand that validation to take place?
A I don't know. That was a Walgreens-Hopkins discussion that I don't think I -- I participated in. So what was their arrangement, what were they validating, what were the terms, I -- I wouldn't know that.
Q Did you receive a copy of a report completed by
0829
John Hopkins from that meeting?
A I recall us getting a final copy that actually -- I don't think even Hopkins shared that with us. I think Walgreens gave us a copy of that report.

That's my recollection. But I could be wrong on that.
But Walgreens gave us a copy of the assessment and the summary of the meeting.
Q Did you represent to investors that Johns Hopkins had validated Theranos's technology?
A I don't recall what was in the report. Was the report that we had showed to investors. So I don't know what was the language in there that I used.
Q Did -- separate from -- did -- did you -- you provided that report to investors?
A I think the report was part of the slide deck. Or during the meetings we usually would -- you had -- had the report handy.
So if that discussion came up, we will show them the whole report. Because there were certain passages in the report which we liked. So --
Q What validation work did you understand Johns Hopkins had done on the -- on Theranos's technology?
A Well, they had validated our architecture. They looked at the data. They looked at how we had designed the device. They looked at the architecture of

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our consumables. They looked at how our consumables and our fingerprick, you know, match or mate with each other, and how we collect the sample.
None of those are small, trivial issues. So they saw the architecture of how we had solved it. And we were planning on solving other things in the future. So we had a fairly detailed discussion around tech with them around that.
Q And what -- what about that led you to the understanding that they had validated that -- that -- that architecture?
A Again, I think I -- I -- I don't know if I used the word or not. What was -- whatever it was there in the Hopkins letter is what I probably used. So if I see the letter, I'll probably be able to tell what was there if I -- and if it says "validated" -- "validation," then I would probably have used the word "validation."
Q What did you understand "validate" to mean in terms of assay technology in 2013 or earlier?
A Well, I mean, I think I had shared with you Theranos did a really broad set of things. It was a pretty broad set of technologies. And Hopkins looked at, you know, one time point of that technology of what we were doing.
So I didn't necessarily attach a specific

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meaning to the word "validation." The point was we had met with Hopkins; Walgreens had hired Hopkins to look at our technology, look at our architecture and -- so that Walgreens reaches a certain level of satisfaction, which is what they did.
It was Walgreens I think that even came up with

the word "validation," if -- if it is not our word. If it was in the report, then it's probably either Hopkins or Walgreens came up with that word.

But I didn't necessarily attach any specific meaning to the word "validation." It was more that Hopkins guys have seen it, and they -- they did that on behalf of Walgreens.

BY MS. CHEN:

Q What do you mean by "architecture"?

A So if you look at how out TSPUs and our entire technology stack is built, it is extremely different from how the traditional labs have -- have evolved. We actually literally put it on -- on its head.

What we did was, if you look at a traditional lab or traditional lab industry, either you have CLIA waived devices, which are near patients, so glucose meters and such, and all you have these devices that are in a central lab location, whether it's high complexity or moderate complexity.

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But those devices require oversight, human oversight. The reason is, as these devices perform QC and QA, the software, which is attached -- physically attached to the machine, displays that information, and the human has to decide whether the device is good to process patient samples or not.

So there's a lot of manual oversight that is -- goes over the device that happens in the lab, which is why a -- trained professionals are required.

Our patents and our breakthrough -- and I believe it's a very significant breakthrough -- was we split those two things. Because there's this thing -- this thing called Internet and Cloud. We said, "Why don't we that?"

Now, to get credit, this is something that Elizabeth and other engineers at Theranos had done before I came to the company in 2010. But what they did was they split the -- the unit which processes the sample and generates these signals from the software that provides the oversight. And they put it on the Cloud.

And the device now can be anywhere in the world. But the central lab can still have oversight over it as if the machine is running right in front of them in the lab.

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And that's also covered in our FDA clearance. This is why our first clearance from FDA was so significant. Because it covers the entire infrastructure. It covers not just the patient -- the sample collection, but running the sample in the field.

Actually, the other thing that was really unique about our architecture was, now that you have split the TSPU from this rigorous oversight of a central

lab, you can put it near a patient. You can put it near CLIA waive facilities. So clinics, even people's homes, technically speaking, at some point.

And a person who can just do a fingerstick and who's trained -- and I think a requirement was, in order to get CLIA waiver, you have to prove that even a person with 7th grade education can operate and run this device, which is obviously not the case in a central lab.

So -- and 7th grade education person can collect the sample, put the cartridge. And the machine and the software and the entire architecture is robust enough to say yes, the sample was run successfully, or no, it was not, and tell you why it was not. Now, the QC may have failed, or the calibrators may have failed, or something else may have gone wrong.

I think I had mentioned last time that, in the

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traditional CLIA waived devices, if you insert let's say a glucose meter cartridge, if you had left that cartridge in the sun in your car for like a day, the machine won't tell you that your results are wrong. Because the chemistry's probably off because of heat, and you're supposed to keep it in a certain temperature-controlled zone.

In our case, all of that intelligence was built in the cartridge so that, when we ran the cartridge, we could see if the calibrators are giving us the known values or not. It goes to the Cloud.

The CLIA lab can say, "Yeah, the cartridge looks okay. The reagents look okay. We got the right answers. Therefore, the patient results is good," just like they would have done in a central lab location.

So we file a patent on those things because this changes the game for the -- the lab. Because now what you have is a central lab which has all of this -- this word that we had used, TVA, Theranos Virtual Analyzer. So this analyzer piece of software which usually sits physically on the machine is now running on the Cloud.

And the CLIA lab people are sitting literally in front of the computers looking at all this data coming in from the field. And these devices could be

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anywhere in the field, right? And it could be, you know, literally Walgreens locations, doctors' offices.

And if anything goes wrong, proactive we know on those dashboards something went wrong, so don't rely on the result.

So what this gives -- allows us to do is you have a convenience of a CLIA waived device, like glucose meters, and ease of use also, but the oversight of a central lab that comes with all this infrastructure, architecture that we built. And that was the innovation

here.
Q So the architecture is the connectivity to the Cloud?
A Is -- well, connectivity is the enabler. And that certainly is a big component of that.
But the other architecture also is you insert the cartridge, the device -- most of the devices that you run in the central lab have these protocols loaded on them, assays cleared on them, and the protocol's already baked in. You cannot really change the protocols.
In our case, the way -- because we were always connected to the Cloud, when you insert a cartridge -- let's assume you have built a brand-new cartridge that has a different combination of tests that requires a
0836
brand-new protocol.
You insert that in the device anywhere in the world. The device is going to call back home lab saying, "I've never seen this cartridge. What do I supposed -- what am I supposed to do?"
The -- the central lab will send the protocol to the device saying, "Here's the protocol you need to run, including the oversight and the QA and the QC and the calibrators." And then you generate the data, and then you send to the Cloud.
So the Internet is enabler. But the fact that we can modify the architecture, modify the protocols, "modicy" the -- modify the movement of the device is the -- is the big breakthrough here.
Q So when you say that Johns Hopkins was able to see the architecture that's Theranos had built, what -- what did you show Johns Hopkins about the architecture?
A Well, we walked through this entire example. And I don't know if we ran the test there or not. We had left this device at Walgreens location also. Walgreens had our TSPU I think for six months or nine months or however long.
So I think some of the Walgreens executives also brought their data, that had -- we ran a vitamin D test. This is what --
0837
THE REPORTER: I'm sorry. That brought their data --
THE WITNESS: And -- and showed it at Hopkins that we ran vitamin D test or whatever test they ran. And they were able to explain to them how it happened and how it worked from Walgreens' perspective.
So I don't remember exactly what we discussed. Like I said, it was a meeting more than five years ago or six years ago. But this is the architecture that we would discuss with them.
BY MS. CHEN:
Q Did you conduct a demonstration while at the

Johns Hopkins meeting?
A Like I said, I don't know if we actually did or not. But we left the device with Walgreens. And I believe they used to show this device to people who were under NDAs with us. So I wouldn't be surprised if they saw that at Walgreens.
Q Did you provide one of your analyzers to Johns Hopkins for their review?
A Outside of this meeting?
Q Yes.
A No, I don't recall that.
Q How long was the meeting?
A Don't remember. It was few hours for sure. We
0838
had specially flown for this meeting. So I'm pretty sure it was a long meeting.
Q And then before you ended up showing or sending the summary of that meeting to investors, did you ask Johns Hopkins whether that would be appropriate to do?
A We had asked Walgreens, and Walgreens was fine with it. That's how we got the report, is what my recollection is.
Q So Johns Hopkins had -- had no knowledge that you had shown the report to --
A I don't know what Walgreens --
Q Let -- let me just finish --
A Sorry.
Q -- my question.
So Johns Hopkins had no knowledge that you had shown the report or the summary to investors?
A I don't know the answer to that question. Because we got the report from Walgreens because Walgreens was the client for Hopkins. It's possible Hopkins knew about it. I just don't know the answer to that question.
Q But you didn't have any communications with Johns Hopkins about the summary after that meeting?
A Me personally?
Q Yes.
0839
A No.
Q And you're not aware of anyone at Theranos having any discussions with Johns Hopkins after that meeting?
A I don't recall that.
BY MR. KOLHATKAR:
Q Did you ask Walgreens specifically if you could provide the Johns Hopkins report to potential investors in Theranos?
A Yeah. We had an NDA in place with Walgreens that governed what we could share with investors or not. So we didn't have to go one incidence at a time to ask Walgreens what we could do with the content, which -- just like Walgreens was not doing the same with us.

When we provided to -- something to them, any entity that was covered by the NDA, Walgreens was responsible for it.

So it -- it is possible that we talked to Walgreens about it. I just don't know the answer because the answer is we didn't have to necessarily ask them permission by -- case-by-case permission.

Q If I understand your answer, you don't recall a specific conversation asking for permission, but you wouldn't need to because of the NDA?

A Correct.

0840

Q The -- the device that was -- Johns Hopkins never reviewed Theranos's modifications of commercially available devices; is that fair?

A That's correct. We would not show those to those -- to them.

Q And so whatever validation work Johns Hopkins did at that meeting was for a device that ultimately was used for about 12 tests in the CLIA lab; is that fair?

A Initially, yes. The goal of that meeting at that point was we were focused more at that point on Phase II, which is why I -- I was saying that I don't recall if the meeting happened in 2010, '11, or '12.

If it happened before 2012, in all likelihood -- June 2012, in all likelihood we were talking about Phase II, which was TSPU phase. So it would make perfect sense that that's what we were focusing on.

Q You never showed anyone from Johns Hopkins the 4 series device; is that fair?

A I don't recall. Hopkins actually had visited us later. So they may have seen 4 series devices. I -- I don't recall that.

Q What -- what do you recall about the later Hopkins visit?

A I don't recall specifically. I just remember

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that we had some communication with Hopkin -- with Hopkins. And there's one or two individuals who were interested in -- in either consulting, or we wanted them to work with us. I -- I vaguely remember. They -- either we visited them or they visited us.

So -- but my point is I don't know whether we showed 4-S to them or not. I don't know the answer.

Q At this meeting that you recall from sometime before 2013, you don't recall bringing a 4 series?

A In this meeting, the -- the one that you referred earlier?

Q Correct. At Johns Hopkins.

A Yeah. No, we didn't bring 4 -- 4 -- any 4 series device in that -- in that meeting.

Q I'm going to hand you a document that's previously been marked as Exhibit 264.

A Could I put this away?
Q You can put that away.
Just for the record, 264 is a document Bates-stamped THPFM 696484.
Let me know when you've a had chance to just flip through 264.
A Okay. I have.
Q Do you recognize Exhibit 264?
A Yes, I do.

0842

Q What is it?
A This is a e-mail exchange -- actually, you know, there's a jump in the dates. This is an e-mail exchange between me and a few individuals at Walgreens. Initially seems like it started (b)(6); (b)(7)(C) in 2012, November of 2012. And then -- and make sure.
Actually started in October of 2012. And the last chat here is November of 2012. And then somebody else from Walgreens picked it up in September of 2014, two years later.
Q Okay. And it -- and -- and looks like you sent it on to Ms. Holmes on September 11, 2014?
A Yes. That's correct.
Q And -- and she responded on the 23rd of September.
Do you see that?
A Yes.
Q The subject line is "Innovation Payment Letter."
Do you see that?
A I do.
Q I'd like you to turn to the -- the -- the page ending 696487. There's a message from (b)(6); (b)(7)(C) to you dated November 5, 2012.
And you see Point 1 (b)(6); (b)(7)(C) states: "If we

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can -- if we get to the point where we still need this letter, but the innovation payment amount has reached 50M or higher, will you be able to provide a letter that covers the full 50M? Not an issue right now, but just want to put this on your radar in case the situation arises."
A I see that.
Q Do -- do -- do you have a -- a recollection of what (b)(6); (b)(7)(C) was referring to?
A You know, this may be -- I think we had earlier discussion around this topic where their auditor's asking them for some letter. And this may be that conversation that I was referring to. And (b)(6); (b)(7)(C) was the account -- accountant -- the point person back then. So that seems like it.
Q Okay. So -- so you understood this to relate to that conversation earlier about communication either with Walgreens or its auditor about the -- the

innovation fee?
A With Walgreens. I -- I don't think I communicated with the auditors. That's not my recollection. This is -- these are all Walgreens people.
Q And then did you -- do you see the e-mail, if you look at the page ending 696486, November 15, 2012
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e-mail from (b)(6); (b)(7)(C)
It says: "Deloitte finally got back to us this afternoon. They indicated that they would want to confirm the terms of the line of credit directly with Fidelity."
A Yes.
Q Do you see -- what -- do you have any recollection of what line of credit they wanted to confirm with Fidelity?
A I don't. I -- I don't recall that.
Q Okay. If you take a look --
BY MS. CHEN:
Q Well, just going back to that same e-mail. If you look at the next sentence -- or the next -- let's see. The sentence that starts: "Once I have that."
It says -- this is (b)(6); (b)(7)(C) writing to you: "Once I have that, I will forward it to you so you can see exactly what they would be asking Fidelity and assess whether you still want to take this approach to cover off the collectability of the innovation fee."
So do you understand that to be referring to Walgreens needing to prove -- or Walgreens asking Theranos to prove to its auditors that Walgreens would be able to collect the innovation fee back from Theranos?
0845
A This is what his e-mail is implying, yes.
Q Okay. Do you -- do you recall those discussions happening around this time in 2012?
A I think I answered that earlier, that I have vague recollection that they had wanted some kind of letter for their auditors, and we had a discussion around that. But I obviously didn't recall this e -- specific e-mail.
BY MR. KOLHATKAR:
Q If you turn to the first page of Exhibit 264, the message from (b)(6); (b)(7)(C) to you dated September 11, 2014.
Do you see that?
A I do.
Q This would be after the -- the -- both the 2012 amendment and late 2013 amendment had been signed; is that correct?
A That's right.
Q And in your view, by this time Walgreens had expressed the -- the -- the view that the -- the

innovation fee was -- was paid to Theranos and nonrefundable, right?
A That's correct.
Q If you take a look at his message, he references: "Schedule B, Section 6(b)(VI) includes the
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following sentence: Further, the parties shall agree upon the appropriate measure in order to measure -- in order to measure collectability as it relates to the initial $25 million payment."
A So just to clarify, he's referring to the 2012 contract language, is -- is my guess here.
Q Why -- why is that your guess?
A Because I don't recall we went into this level of detail in the 2013 amendment. And the 2013 amendment actually changed the economics and the dynamics around the innovation payment very significantly. So that's why, is my guess. But I -- we have the contract there. If you want, I can look it up.
Q I -- my -- my question is: Did you have any understanding of why he was asking about the collectability of the payment, you know, now late in 2014 long after the 2013 amendment?
A Yeah. I mean, I -- I -- my -- first of all, I didn't provide him anything that he wanted because he knew he was not entitled to it. Walgreens, if they were entitled to anything from us, $400 million would have not let me sleep until they got it.
So I don't recall giving them anything -- even his last sentence I'm reading -- reading and smiling here: "While the innovation fee -- fee has been paid,
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the concept of the fee being earned is still at play within the contract. As such, I would like to take the position," blah, blah, blah.
He couldn't take that position. He knew that. And -- which is why I didn't respond to him. And to the best of my knowledge, this was -- this -- we dropped the -- the issue here, and they didn't come back and ask me for anything.
Q Why -- why did -- why did -- why did you believe he could not take the position that the fee was outstanding?
A The reason I think I answered the question is that our understanding from signing the contracts and having worked with them for a long time was that that money was earned by Theranos. It is nonrefundable to Walgreens.
Now, I mean, I knew these guys in September of 2014 were going through a very difficult time at Walgreens. They were not even letting people travel to save money. They had identified a billion dollar hole in their financials, and they were trying to plug that hole any way they could. They told me that. This is

how I know.
And their first move was to see if they could move the headquarter from U.S. to Monte Carlo to save
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them a billion dollars in taxes. They would avoid the U.S. That didn't work out very well. But they were trying, spinning the wheels, to see if they could recognize some -- some of their money on their books somehow.
So that what my -- that was my guess, that this is why he was trying to see if they could show something on their books probably. He's not asking for money back; he was just trying to be able to show us that they have this hundred million dollar outstanding, which they knew they didn't.
So I don't know how -- what they did with it. But that was kind of my guess on what -- on why he was pursuing this line of reasoning.
Q Around this time in late 2014, did anyone else from Walgreens take the position that the concept of the innovation fee being earned is still at play?
A I don't recall if I saw -- I mean, it wouldn't surprise me. I mean, it -- Walgreens will give a hundred bucks, take you for a shower, and then they will say, "Give me my hundred bucks back now."
So wouldn't surprise me if Walgreens took the position. The question is: Do they have -- did they have the ground to take the position? The answer is no.
Q I guess my question is simpler: Do you
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remember anyone at Walgreens taking that position?
A No. I said I don't recall any.
BY MS. CHEN:
Q Why didn't you respond back to (b)(6); (b)(7)(C) to let him know that your understanding was different and you didn't -- you did you not agree with his position?
A That's because I worked with Walgreens for six years. I knew it was a waste of time. If -- there was not -- something was not refundable to them, there's no reason to get into a debate with them. If they thought that we owed them something, let them come back and prove it to us, which they didn't.
BY MR. KOLHATKAR:
Q You can put Exhibit 264 to the side. Thank you.
When we met last time, I -- I asked you a couple of questions about whether you had any phone calls or communications with Theranos's insurers.
Do you recall that generally?
A Yes. I think we had a conversation, yes.
Q Have you refreshed your recollection on that -- on -- on that call since -- since that --
A No.
Q In October of 2014, did you tell Theranos's

insurers or potential insurers that Theranos would break even in 2015 on a hundred million dollars in revenue?

A I don't recall that.

Q Did you tell insurers or potential insurers in October 2014 that you expected Theranos to break even by mid 2015?

A I don't recall. I would -- saying that. I -- I would have to see my notes.

Q In October 2014 did you have an expectation that Theranos would break even by mid 2015?

A I don't recall in this moment. But if I saw the model, and the exemption's there, I would be able to answer that question.

Q In other words, like the retail rollout, the model would best reflect your assumptions about the timing of Theranos' break-even status?

A Yeah. And if there were any changes that I had to make to be able to see where I would be in mid 2015, the model will tell me that.

Q Did you tell Theranos's insurers or prospective insurers that you expected Theranos to ramp revenue in January with $20 million expected per quarter?

A I don't recall saying that.

Q Did you tell Theranos's insurers or prospective insurers that you expected to add 400 Walgreens in the first part of 2015?

A I don't recall. The -- again, the model will probably tell me more.

Q Did you share Theranos's financial model with its insurers or prospective insurers?

A Don't recall so.

Q Did you tell Theranos's insurers or potential insurers that Theranos would have -- would be opening multiple labs in early 2015?

A Again, specifically, I don't recall saying that.

Q Was it your understanding that Theranos was planning on opening additional labs in early 2015?

A Not early. In 2015. We had a plan.

Q What was the plan in terms of which labs to open?

A The Arizona lab opened in 2015. And I believe we were opening the central Pennsylvania lab. And we had also talked to Walgreens about potentially either New York or California. We were still going back and forth on that.

Q Both the Arizona lab and the planned Pennsylvania lab were -- were going to start out as moderate complexity labs; is that correct?

A That was our intent. But I think the certificate of one may have been filed as a high

complexity. I'm just pointing out a technicality. But the intent was to start them out as moderate complexity. Correct.

Q Did you tell Theranos's insurers or potential insurers that Theranos would spend less than $2 million to get each of its new labs up and running?

A I don't remember specifically if I said that during that meeting.

Q Did you have a sense in October of 2014 how much it would cost to open an additional lab?

A Yeah. I mean, in order to bootstrap a new lab, it doesn't take that much money. So 2 million sounds like about a reasonable number.

Q Did you tell Theranos's insurers or potential insurers that Theranos would be using its manufactured devices at the labs it was planning on opening?

A I don't recall saying that.

Q Did you tell Theranos's insurers or prospective insurers that Theranos saved money by making and building its own equipment for use in those new labs?

A I don't recall saying that sentence.

Q Did you tell Theranos's insurers or prospective insurers in October 2014 that Theranos was projecting 150 to 200 million dollars in revenue by the end of 2015?

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A I don't recall that specific.

Q We -- we talked at some length about Theranos providing lower price lab testing for -- for consumers.

How was Theranos able to provide lower cost blood testing?

A Well, that's a -- that's a complicated question. The short answer to that is through use -- use of a lot of software and integrating a lot of different moving pieces.

However, lab business is a volume business. So if you open a lab and one customer shows up, you know, you lose money. And you need a certain volume to be able to -- to -- to make -- make a profit.

But I would say a combination of how we thought about the lab from ground zero, bottom up, about how the lab is going to come together, the integration of different pieces of software.

For instance, in our patient service centers at Walgreens, if you go to a typical lab, Quest Diagnostics, LabCorp, hospitals, you know, takes anywhere from 30 minutes to two hours, depending on how long, you know, you have to wait.

At Theranos we were able to use our software to reduce our average visit time. I think it was below ten minutes. And -- and people that we had already seen and

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met, their visit time was two to five minutes.

That allowed us to reduce the labor that was

required in the patient service centers from, you know, four to one person. One person could serve 40, 50 patients.

So you can see how that -- and then there was a lot of intelligence that went into the software to be able to speed things up. We had also integrated that process with the mobile app for consumers that we had launched. And were making it better and better.

That allowed people to, from home, tell us they're on their way and -- and upload their order by just taking a picture of the order, so by the time you come to the store, we have trans -- electronically converted that into electronic order.

If you have insurance, we can -- we could also check eligibility for you and tell you if anything's due or not.

And so basically, by the time you get to the Walgreens locations or other stores, all of the hard work is already done. And so you could get in and out in couple of minutes.

So all of those innovations -- and there were many more. I could tell you how we integrated our call center, patient center center. Coming together allowed

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us to reduce the cost.

Q I guess on a per-test -- we talked a lot about Theranos and when it would break even overall.

On -- on a per-test basis, was Theranos breaking even on its -- on its lab testing services at Walgreens?

A Is a difficult question to answer. Because, like I said, if you -- it's like opening a restaurant, right? If one customer shows, you serve them the most expensive dish in the restaurant, chances are you're still not going to recover the cost for the whole restaurant.

So on per-test basis, you can only start to make money once you've hit a certain volume. Especially on the batch processing machines. If you open a bottle of reagent that is required to run hundred samples and you only get 30 samples, your cost goes triple.

Now, assuming that that's not the case, we actually got hundred samples to run, our prices for reagents, the machines, through software in the field was pretty, you know, aggressive.

So I think we -- at -- at -- at a certain volume, we would have absolutely hit those numbers.

Q So as -- I understand your answer to be so -- and think about it I guess in terms of variable costs.

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If you'd hit a certain amount of volume, you felt comfortable that your pricing would have -- would have covered the cost of physically running the task?

A Had high confidence. Yes, sir.

Q Did you conduct any analysis to see if it was -- if that was actually happening in 2014?
A Yeah. No, I -- I did the analysis all the time. We actually -- I had commissioned a small project where we looked at every single tiny detail of -- of our operation in Arizona, for example. Because that's -- was our first market.

And all the way from how much we are spending on gas and car washes and how much we pay for food and drivers, I had a full detailed analysis. The volume was not there yet for us to be making money in 2014 in Arizona.

But there are also many different elements of variable costs. For example, if you look at the variable cost of doing just a test in the lab, it's just a reagent. Because the machine has already been QC'd. The person is already there.

I had shared with you our contract with Siemens even, even with the third-party vendors. We had negotiated really good prices. So for a test like CBC, which we billed at I believe $6, and other labs bill at

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anywhere from $12 to a thousand dollars, our cost was 18 cents for the variable, for the reagent.

So even if you added labor and machines and this and that, you know, we were in a competitive position even compared to other labs. But because we had software, even if, for example, larger labs, instead of 18 cents they had a deal at 16 cents, I was pretty confident of our software was -- was much superior that, once you hit a certain volume, we'll be able to get better margins than them. I had high confidence.

Q In other words, so your confidence -- the confident in 2014 that Theranos would be able to maintain -- achieve profitability maintaining that low price point --
A Yeah.
Q -- once volume was attained?
A Yes. Yeah. Exactly.
Q Did you review the materials provided in binders to [redacted] before they were sent to him?
A No, I did not.
Q I'll hand you a document that's been previously marked as Exhibit 150.

If you could just take a minute to read it. It's just two pages. And let me know when you've had a chance to review Exhibit 150.

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A You want me to read the whole thing?
Q Sure.
A (Examines document.)

Okay. Not the attachments, right? Okay. It's just business cards. Never mind. Yeah.

Q You've had an opportunity to review Exhibit

150?
A Yes.
Q Did you review Exhibit 150 at or around the time it was sent to (b)(6); (b)(7)(C) ?
A No, I did not.
Q Had -- have you review -- ever reviewed a similar letter sent to other potential investors?
A I have not.
Q If you see the -- I think it would be the third paragraph down. Begins: "Theranos is a sensors and software company." Sorry. I think one paragraph down from where you're indicating.
A Yes, I see that.
Q Have you used that phrase to describe Theranos before?
A Yes.
Q What -- what are you -- what -- what is -- what did you mean by that when you used that phrase?
A I think I mentioned that last time briefly that

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we used to view ourselves primarily as a software company. And sensors basically is a way you sense information.

So for us, diagnostics equipment and labs is sensing information from human blood to start with. But we had ambitions beyond just, you know, lab testing. We viewed ourselves more as a software company looking at data and mining data and coming up with patterns. Kind of like Google does, you know, with Google Maps and such. Just like, you know, smart phones become sensors, but the data goes to Google Cloud, and the Cloud churns the data and -- and create -- finds -- using -- uses algorithms to find patterns.

So we used to define our mission to -- to investors as sensors and software company. So we use that quite a bit, actually.

Q And so you heard Ms. Holmes use that phrase as well?
A Yeah. And I use that too.
Q If you look two more paragraphs down, it says: "Theranos has not only reduced to practice and patented its comprehensive technological and operational infrastructure over the past ten years, but has also had regulatory certifications to operate commercially, including as a CLIA-certified laboratory, the regulatory

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certification for labs since 2011."
A Yes, I see that.
Q How had Theranos reduced to practice and patented its comprehensive technological and operational infrastructure?
A I think I -- I -- I briefly walked through our architecture around our technology, around how we had done things which are radically different from how the

lab industry had evolved.
So even the simple process of collecting fingersticks -- which people just think a fingerstick you just take and ship at somebody. It's not that simple.
There are entire industries who do nothing but do collection devices. And we came up with CTNs and filed tremendous amount of patents around just that one process.
So this entire technology stack, all the way from software doing eligibility checks for you to e-mail integration to a patient's mobile phone, you know, capturing that information, sending the data back to -- the samples traveling, tracking the samples, coming to the CLIA lab, the entire infrastructure we already had in place by then.
Q And Theranos's operational infrastructure at

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this time in the CLIA lab included unmodified commercially available devices; is that correct?
A It included that, yes.
Q And it included third-party devices that had been modified and not patented for that purpose, right?
A Correct.
Q So part of its operational structure had not been patented at the time; is that correct?
A That's correct.
Q So in terms of -- what do you think is being described here in terms of the comprehensive technological and operational infrastructure?
A Only I don't -- I don't know what she was trying to refer -- what she had in mind here. This is a pretty broad statement. So she could be describing maybe just the -- the fingerstick collection process, or she could be describing our lab -- entire lab infrastructure. I don't know.
We did have a lot of patents on even our software that was in the CLIA lab that had nothing to do with fingerstick. So I don't know what she's referring to here specifically.
I'm assuming Elizabeth wrote this. Yeah. So I don't know.
Q At the time -- and I guess that's a fair

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question.
You see Ms. Holmes's signature at the bottom of the page there.
A I do. I see her --
Q Would you understand it to be her practice to read letters like this before she signed letter?
A And I know she didn't read my e-mails. So if she had wrote it, then my guess is she must have -- must have read it. Or if she sent it -- sorry. If she sent it, my -- you know, she probably must have read it.

Q The -- other than the CLIA certification, what regulatory certifications had Theranos achieved to operate commercially by December 2014?
A I don't recall top of my head. I was not involved with that part of the business, so --
Q If you turn to the next page, the first -- or I guess the second paragraph there: "Theranos has grown from cash from its contracts for some time."
A Where you are you again?
Q The first sentence of the first kind of long paragraph there.
A Yeah, I see that. Sorry. Yeah.
Q Had Theranos grown from cash from its contracts for some time by December 2014?
A Again, I don't know what she means here. But

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we did get cash from -- you know, we had these hundred million dollars that, you know, we got from Walgreens. We had gotten I think some money from Safeway. I -- I don't remember the details of that.

And then but prior to that, the company did get cash from contracts that had been pharmaceutical companies and DOD I think. So we did get cash from those contracts.

Q Those weren't the only basis of capital that Theranos was using to grow at that time.
A No. Equity obviously, yeah.
Q Did you ever use that phrase: "Theranos has grown from cash from its contracts"?
A I don't recall. It would depend on the context. But I -- I don't specifically recall me using that.
Q If you look at the next paragraph down, it says: "As the company is -- as the company gains visibility, we have had interest from a large number of funds in acquiring an equity stake in Theranos."
A Yes.
Q What -- what large number of funds expressed an interest in acquiring an equity stake in Theranos by December 2014?
A Well, I recall at least three meetings that I

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attended. And there may have been more, but three that I was involved with. I recall BDT for sure. And I think I mentioned that to you last time.

I also recall -- I'm going to get these guys wrong -- either Morgan Stanley or JPMorgan. They had visited us once, and they had expressed strong interest. They were really wanting to participate and -- and -- and be involved with the company.

And I also think I had met with Goldman Sachs. But I could be getting the timings wrong. I don't know which -- when I met them. So I remember at least those three meetings that I attended. Like I said, there may

be others that -- that others had attended, Elizabeth and others.

Q At -- at this time had -- in December 4th, 2014, had Theranos turned down BDT's proposed investment?

A Yeah. I mean, in October of 2014, we had a brief discussion at the board meeting where we said, you know, we're not going to pursue this. Even though BDT kept selling it, obviously, to us. But we had decided we are not pursuing this path.

Q Did you communicate the -- the -- the fact that you're not going to pursue the BDT investment to BDT?

A You know, I was involved in one meeting in

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which I said what they was -- they were proposing was not something we would be interested in.

But then we were engaged with them because they were also our consultants. So there was little bit of overlap between what they were telling -- talking to us as consultants versus what -- in the same meetings they were try to sell really hard that they -- we should let them invest using the structured deal that they were proposing.

So I recall my conversations in those meetings saying, "Structured deals, not very attractive. We're not going to proceed with that. Unlikely."

So -- but I don't know.

Q And what was the purpose -- so after October 2014, what was the purpose of your participation in any meetings with BDT in either November or December or January?

A Yeah. I recall we had paid them what I -- what I thought was significant amount of money for consulting services.

One thing that they were helping me with was cleaning of the model. I had given them a copy of the model. These were financial wizards, bunch of MBAs. I was MBA, too, but they were -- they were more MBAs. And they were helping me clean up the model.

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I also spoke with them around, you know, just thinking out loud about different strategies. And I believe Elizabeth was spending quite a bit of time in the meetings that I had participated around how to structure the company for the long-term.

You know, as we -- as the company generates more cash, how we should start buying the existing investors. Should it be dividends? Should it be in a stock repurchase? Some of those discussions had already started happening around that time, and BDT was involved in those. And they were advising us on lot of those matters.

And also I think we had discussions with them around stock options and how to structure stock options,

RSUs, how to put limits on when an employee leaves, what happens, and so on, so forth.

Q But to the best of your memory, by December 2014, you had affirmatively communicated to BDT you were not interested in any structured investment from them?

A Yeah. I mean, I recall that was my conversation. But obviously, like I said, even after that when I met with them, they would used to continuously -- especially (b)(6); (b)(7)(C) used to say, "This is a great deal." He continually -- continuously pushed.

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And we -- you know, I was polite. I would listen. I would smile. And then we'll talk about what I was interested in the meeting.

Q Do you know if Elizabeth Holmes communicated the same to -- to BDT after that October board meeting?

A I don't know what she communicated. She spent more time with these guys than I did. So I don't know.

Q What was her purpose in meeting with BDT after that time, if --

A I think everything that I just shared right now is what she was discussing with them about structuring the company, what to do once the -- when the company's cash flow positive. When the cash -- cash comes in; how to buy back stock; how we should give dividends out for the long-term, five, ten years.

But these are the conversations we were having with these guys. They were advising us of that. At least in the meetings that I was, that's the meeting I know. Meetings that I was not part of, I don't know what they were discussing.

Q In the meetings that you were a part of, did you ever hear her express to BDT that she was not interested in a structure deal?

A Yeah. I mean, I was -- she was in the meeting in which I made that comment, so --

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Q My question's a little different: Did you ever hear her make a similar comment at that meeting?

A I don't recall. I mean, I -- I know I made that comment politely. You know (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) So I liked engaging with him. I was learning a lot from him (b)(6); (b)(7)(C) But I made that point.

Q You can put Exhibit 150 to the side.

THE WITNESS: Am I doing okay?

MR. KOLHATKAR: I'll hand you what's previously been marked as Exhibit 266.

THE WITNESS: Thanks.

MR. KOLHATKAR: For the record, 266 is a document that's been previously marked and Bates-stamped as THPFM 3891168 through 3891189.

THE WITNESS: Okay.

BY MR. KOLHATKAR:
Q Do -- do you recognize Exhibit 266?
A I do.
Q What is it?
A This is a document that we had received from BDT -- well, I'd received from Elizabeth Holmes. But we -- as a company we received from BDT, I think -- I'm trying to see the date here -- end of December or 12/19/2014.

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Q And did you review the -- the attachment to the e-mail on or about December 19, 2014?
A Yeah. I think I -- if I recall correctly, I had taken two passes at this. The first time when I saw this attachment, I opened it up, and I just took my mouse and scrolled back and forth to see how long it is before -- whether I should read it now or later.
And I noticed that it was not DRM'd, which -- it was not encrypted. And I looked at all of the sections that were here, I mean, just highlighted -- I highlight all the section.
And I don't remember if I talked to Elizabeth about it or if I talked to one of the product managers who was also involved at -- as an interface point with BDT guys.
I said, "Look. These guys have put a lot of confidential information here that is not DRM'd. And so we need to reach out to them and tell them to, first of all, protect it. But the more importantly, I don't know where they maintain their e-mail servers. They could be running on Google. Somebody could be scanning this document because it's not encrypted. So we should tell them to remove it from -- from the e-mail servers."
So that was my first conversation.
Q Do you remember who the product manager or

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project manager was that you were --
A Yeah, I was --
Q -- you were interfering with?
A If I -- I'm sure there's more e-mails around this time frame around BDT. But more likely than not it's going to be (b)(6); (b)(7)(C) But it could be with Elizabeth Holmes also. I mean, I just don't remember if I had that conversation.
It's more of a operational conversation. So chances are I probably didn't call Elizabeth saying, "Hey, DRM this document." Probably some PM, but -- because it required following up with these guys.
But I may have talked to Elizabeth depending on time of the day. Actually, you know, it's late in the night. So I don't know maybe if I talked to her or not.
Q When was the second time you reviewed the document?
A Yeah. I think right after that, within a day

or so, maybe at the same day, I reviewed the document. And I -- I didn't read the whole thing, but what I read was there were so many errors in this document that then I went to talk to Elizabeth either on the phone or in person.

And I said, "I don't know who authorized this document, a document like this. If you needed it or if

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we as Theranos needed it, our team should have produced it."

And she says, "Oh, no. I didn't know anything about the document either."

And I said, "Well, there are at lot of errors here. Do you want me to spend time on this now?"

She goes, "Don't waste your time on this. This is not going to be used. And I'll talk to (b)(6); (b)(7)(C)"

And that was my conversation. So I -- that was the end of it.

Q When do you recall that conversation taking place?

A I think either it was the same day or couple of days after that. Because I -- I usually -- if you don't follow up with something like this immediately, then it kind of sits in my inbox for a while.

Q Did -- it was your -- it -- it was your understanding that Ms. Holmes had reviewed the document when you spoke with her about it?

A No.

Q Why not?

A She didn't know what was in the document. I -- I -- I told her, "There are errors."

She goes, "Okay."

I said, "Do you want me to edit it?"

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She goes, "Don't waste your time on it."

Q Did you describe the nature of the errors?

A Yeah. I -- I think I remember two or three things here which -- which stuck with me that -- that I shared with her.

Q What stuck out in your mind?

A The first one was they had used the name "Project Test" as a code name for Theranos to obscure this document or the company they're talking about. Except that, when I read it, they had Elizabeth Holmes' name everywhere, "Walgreens" everywhere. And looking at the picture -- if you go to page number end -- ending with 1179, they actually have a picture of Theranos there with "Theranos" written right at the top.

Q And you remember viewing that picture in December 2014?

A Yeah. Because to me, this was a typical document that only -- excuse me for saying this -- only MBAs can produce because it was so silly that they were trying to obscure something, yet Theranos is right

there.
So that was the first thing. I said, "You know, this is pretty silly."
And I think the other thing -- I'm probably -- it's going to take me some time to find it, but they had
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either claimed that we had invented nucleic acid amplification or sequencing. I forgot which ones. Clearly we didn't. Because that's like saying we invented a PC or iPhone.
And I said, "So how" -- so those are the two things. There may be -- there were other things that I noticed back then, but those two kind of stuck with me because they were entertaining.
Q So if -- if BDT was serving as Theranos's consultant for the model and business strategy at this point, why would you spend time reviewing this in December 2014?
A Because I think they sent this to us in 2014.
Q Sure. But I had understood your earlier testimony to be that, by this point in time, you were, you know, being polite but turning down their investment --
A Right.
Q -- over and over again, right?
A Right.
Q In your initial review, did you understand this document to relate to a potential investment?
A No. When I first opened the document, I didn't know what it was, obviously. That's why you open it. And -- and it actually says "Company Overview," and I
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didn't know what was the purpose behind it. So I probably didn't even notice the -- the title. But I just opened it to see what it was.
And it was only when I spoke with Elizabeth later, when I gave her my feedback, that she said, you, know -- I had a -- even a -- like two-second conversation with her about that.
Q After that conversation you had with her where -- where you described that there were errors, did you -- did you follow up with her after any subsequent meetings she had with (b)(6); (b)(7)(C) or anyone at BDT?
A I don't recall, no.
Q Did -- did you bring this up in any later meetings with BDT?
A I don't recall. I don't think I met with BDT in 2015. But I may have. But I -- I don't think I then brought this up.
Q I guess why wouldn't you bring -- why -- why -- why wouldn't you bring it up if you had conversations or meetings with them after? Siemens.
A Yeah, sure. Sorry. Didn't mean to interrupt.
My assumption was Elizabeth must have spoken

with them, which is why they didn't bring it up. And I thought the hot -- document was so silly that it was embarrassing. So I didn't want to bring it up for that reason also.

But I actually don't think I met with them, is the first thing, after this -- this time frame.

Q I guess were you concerned that the people you had hired to be your consultants had produced, in your own words, a silly document like this?

A You know, I was irritated. But I didn't ask them to produce this document. Obviously nobody was going to use this document without my permission. So, you know, I didn't pursue it. I -- I kind of let it go.

Q Sure.

But I guess at some -- some point you were -- you were -- you were paying them for their advice, right?

A Yeah. But I think we didn't renew our consulting with them.

Q When did that -- when -- when did you decline to renew your consulting agreements?

A I think I just kind of dropped out around this time frame. I -- I don't -- I don't remember what was the term of the contract, maybe three months or six months. But after that we didn't renew -- we didn't do any work with these guys.

Q Just taking a look at the -- the first page of the document, of Exhibit 266, you see (b)(6); (b)(7)(C) sends it to Ms. Holmes and copies (b)(6); (b)(7)(C) (b)(6); (b)(7)(C)

Do you see that?

A Yes, I see that.

Q Do you know who (b)(6); (b)(7)(C) is?

A Probably their guys. I don't know.

Q Or (b)(6); (b)(7)(C) ?

A I mean, he had two or three people with him who were, like I said, M -- you know, MBA types who would be on -- on -- with him. But I don't remember if those are the people or not.

Q Do -- do -- do you remember who those people are?

A No, I don't.

Q You recognize (b)(6); (b)(7)(C) though?

A I recognize (b)(6); (b)(7)(C) yeah.

Q You see that he's asking to -- he -- he's -- you see his initial message says: "Elizabeth, attached is the preliminary draft of our company overview that we would plan to send to the preapproved co-investor targets."

Do you see that?

A Yes.

Q Had Theranos preapproved co-investor targets

for BDT at the time?
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A I don't personally recall that.
Q Do you -- do you see -- next line down it says: "Hopefully you will find it a reasonable start to an info doc that appropriately describe the company."
Do you see that?
A I do.
Q After your review, did you believe it was a document that reasonably described the company?
A I don't think so.
Q Did you --
A Wait. Sorry. Which is why I went to Elizabeth making that exact point.
Q Did you raise the point about co-investors or preapproved co-investors to Elizabeth when you -- when you spoke with her about it?
A No, I didn't. Because I Knew (b)(6); (b)(7)(C) was always pushing to sell his investment. And I believe around this time he had said that he had $500 million ready to wire in 24 hours or two days in December and then another 200 in January of 2015.
But we had decided we're not going to -- to do a deal with them, so didn't spend much time on it.
Should I put this away?
Q No. I'd like to actually discuss a couple of things in it.
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If you -- if you turn to page ending in 1172.
A Okay.
Q Second-to-last paragraph there on the -- it says: "In conjunction with its execution of -- of its seven-pronged strategic plan, the company is currently negotiating the terms of a contract with the U.S. government to provide testing for Ebola within U.S. airports alongside the U.S. military and aid agencies in West Africa."
A I see that.
Q Was that a true statement as of December 2014?
A No, it was not.
Q Had there --
A And -- and I don't think we made -- and I had made that statement either.
Q Had Theranos taken any steps to contract with the government to provide testing services for Ebola at airports in late 2014?
A No. We -- we had started discussing -- we had submitted our Ebola test to FDA for -- for emergency use authorizations. And we had some unique capabilities around what we were doing -- again, CLIA, we were point of care and all those things -- that we thought, you know, this is going to open some interesting possibilities that others just can't do.
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So we had discussed on what kind of things we would be able to do if we get clearance and if we decide to pursue this path. But I -- to the best of my knowledge, we were not negotiating anything with U.S. government at that point.

Actually, there's another point here. It says: "In conjunction with execution of seven-pronged strategic plan."

You know, I own the strategic plan for the company. I've never used a seven-pronged strategic plan. I don't even know what it is.

Q Sure.

If you -- if you read the paragraph before --

A Yeah.

Q And may -- you can just take a minute and read it to yourself. It looks like it outlines seven points there.

Let me know if that's consistent with your understanding of the company's strategic plan.

A (Examines document.)

You know, they -- they capture the key ideas that we had discussed. But I don't think I said the company had a seven-pronged strategic plan or that we even said, "Oh, yeah. Let's discuss our seven-pronged strategic plan. That's something that I would not

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use -- I've never used that.

BY MS. CHEN:

Q Did you ever hear Ms. Holmes say that -- say to BDT that the company was currently negotiating the terms of the contract with the U.S. government to provide testing services for Ebola?

A No. I did not hear her say that.

BY MR. KOLHATKAR:

Q Did you ever hear her say that to any other potential investors in Theranos?

A No.

Q Did you ever say that to any other potential investors in Theranos?

A No, I did not.

Q Turn to the next page. Again, the second-to-last paragraph states: "Samples for all tests are run on one proprietary diagnostic machine, an unprecedented capability of testing and a significant technological competitive advantage versus peers."

Do you see that?

A Yes.

Q Was that statement true in December 2014?

A Let me read this one more time.

(Examines document.)

Well, it depends on how you read it.

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Technically speaking -- actually, no. The word "all" would throw it off. So no. The answer is all tests,

no. Not true.
Q Did you ever tell BDT that samples for all tests are run on one proprietary diagnostic machine?
A No.
Q Did you ever tell any other investors that?
A No.
Q Did you ever hear Ms. Holmes make that statement to BDT?
A Nope.
Because the universe for all tests is 4,000-plus testing, including sequencing and lot of complicated stuff that people do. So there's no way anybody in the company would make this statement.
Q Would you ever make the statement that the samples for the most common tests are all run on one proprietary machine?
A So, technically speaking, the TSPU was capable of doing just that. Not the most common. Some depending on how we laid out the cartridge. So that, of course, is possible. That was the whole value add of the company.
Our TSPU, in one sample from one cartridge, was able to do hematology, immunology, general chemistry,
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and nucleic acid amplification test.
Q And here you see that -- that sentence is written in the present test, right? "Are run on one proprietary diagnostic machine."
A Yeah, that's wrong.
Q In other words, at that time samples for the most commonly test could not all be run on one Theranos TSPU.
A No. They could be is the different thing. I think you're saying they are being run.
Q Were not being run.
A Were not being run, yes.
Q If you turn to the -- to --
THE WITNESS: Is it possible to take a break, or should we --
MR. KOLHATKAR: Sure. Take a break.
Why don't we go off the record at 2:49 p.m.
THE VIDEO OPERATOR: Going off the record. The time on the video monitor is 2:48.
(Recess taken.)
THE VIDEO OPERATOR: We're back on the record. The time on the video monitor is 2:57.
MR. KOLHATKAR: So we're back on the record at 2:47.
BY MR. KOLHATKAR:
Q Mr. Balwani, just to confirm, you -- we didn't
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have any conversations with the SEC staff during the break; is that correct?
A That's correct.
Q So when we -- when -- before the break we were

talking about Exhibit 266. And I'd like to resume by taking a look at the page ending in 1174. And if you look at the second paragraph under "Test Accuracy," it includes a -- a quote there from what appears to be a validation study published by Johns Hopkins in 2010.

Do you see that?

A I do.

Q Are those consistent with the -- the quotes you recall from -- from that Hopkins report?

A Yes, they are.

Q And do you agree that it was a validation study by -- published by Johns Hopkins in 2010?

A I think -- again, I was not focused on the word "validation study." It was certainly a meeting we had with Johns Hopkins. So I don't know what "validation study" would actually entail. I don't want to necessarily agree to something without knowing what -- how to define "validation study."

Q If -- if you look at the next paragraph in brackets there, it says: "Test is in the final stages of preparing a work paper to be published with Stanford

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University, Johns Hopkins, and three other highly regarded institutions validating the company's technology and processes."

Do you see that?

A Do.

Q Was Theranos in the final stages of preparing a work paper like that in December of 2014?

A I wouldn't know. This is something that the chemists or engineers would probably be doing. I usually didn't spend any time on publishing.

BY MS. CHEN:

Q Who would have been in charge of the work paper that would be published by these institutions at Theranos?

A It would depend on which area of the testing. If it is -- but -- so, in general, it would be either (b)(6); (b)(7)(C) (b)(6); (b)(7)(C) and few others. I think I mentioned some names last time I was here.

But those are the technical leads who would spend time with the researchers figuring out what the protocol would be, what testing would they use, and so on, so forth. I -- I never participated in those meetings.

Q Would they initiate a research study with one

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of these institutions without you knowing?

A It would probably be either -- gone through either Elizabeth or the product managers. But if it is just a simple study, yeah, I don't think I would be involved with that.

Q Do you -- did you make a statement to BDT that

Theranos was working on preparing a work paper to be published with Stanford University, Johns Hopkins, or three other -- three other highly regarded institutions validating the company's technology and processes?
A I did not.
Q Did you ever hear Ms. Holmes make that statement --
A No.
Q -- to BDT or any other investor?
A No.
BY MR. KOLHATKAR:
Q If you look at the section under "Select Clinical Correlations" at the bottom of the page there, it says: "The company has validated all of its tests versus traditional laboratory and reference methods to demonstrate their accuracy. Two examples -- Two example correlations are provided below."
And then there's a chart for calcium and a chart for cholesterol.

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Do you see that?
A I do.
Q Did you provide these charts to BDT?
A I think they may have been included in the discussion slide deck that we had discussed last time. And they probably just cut and paste two -- two graphs here, would be my guess.
Q Do you recall reviewing that discussion slide deck with individuals from BDT?
A It is possible I discussed parts of it. Like I mentioned last time, the slide deck was pretty comprehensive. So we never ever got -- at least I never ever got a chance to walk through the entire deck with anybody on the planet.
So it is possible that I -- when I met with them, I walked them through a few concepts, few slides.
Q Did you send the slide deck to BDT?
A Either I sent it or I may have given it to the product managers to encrypt it and send it to BDT. So it'd be one of those two.
Q Is the statement that the company has validated all of its tests versus traditional laboratory and reference methods to demonstrate their accuracy, was -- was that an accurate statement as of December 2014?
A No. I think the statement is way too broad.

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So I would say no. You can -- you'll always find exceptions to that. So "all" -- the word "all" is -- is a very broad word. So I would say no.
Q Do these charts compare the accuracy of Theranos's methods to traditional reference methods?
A I actually don't know. Because R squared -- I don't know -- this is a -- a topic that's above my pay grade. So the technical people will be able to tell you

whether R squared is accuracy or specificity and other things. I don't know how they correlate.
Q I guess, if you compare the axes on these charts, one says "Theranos," one says "Bioassay."
Do you see that?
A I do.
Q For calcium?
A Right.
Q What is Bioassay?
A It's probably a vendor whose assay we use to calibrate our assay.
Q And --
A I'm guessing here so --
Q And for cholesterol, the -- the axes are "Theranos Total Cholesterol," and the other axis is "Predicate Total Cholesterol."
Do you see that?

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A I see that.
Q Do you have any understanding what predicate total cholesterol is a referenced to?
A This basically says there's a predicate device whose values and Theranos's values had a R square of .9 -- I cannot read the whole thing .96 or 98, something like -- 99.
But predicate, what it was, no idea. I have no idea. There's no way I can tell by looking at this.
Q Was Theranos using the TSPU to conduct cholesterol testing in December 2014?
A No.
Q Was Theranos using the TSPU to conduct calcium testing in December 2014?
A No. And I don't think -- if these slides came from the discussion deck that says that either.
Q Why not?
A Because it would say. It says -- says "Theranos." And I didn't -- can't read what's -- what it says here on the next slide. It will say specifically -- if it was comparing a device to device, it'll say something about the device.
Even the -- the second graph that you pointed out, the predicate, it doesn't mention the device name here too. So not -- not only doesn't mention anything

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about Theranos, it also doesn't tell you whether this is Siemens or, you know, whatever else.
Q So -- so you don't view these two graphs as being misleading comparing a Theranos SPU versus a -- as a -- a predicate SPU; is that --
A I -- I'm not sure I understand your question.
Misleading in what sense? Because --
Q You don't view either of these graphs for calcium or cholesterol to reflect the accuracy of a test on a Theranos SPU versus a predicate SPU.

A I don't read it that way, yeah. For sure.
Q If you turn to the next page, under "Manufacturing," the first sentence there says: "Test currently manufacturers 100 percent of its diagnostic machines and associated consumables in a single plant in Newark, California."
Do you see that?
A I do.
Q Was that an accurate statement in December 2014?
A Well, the diagnostics machines that we were designing we were manufacturing. But even there, a hundred percent is a strong word. I think we discussed this last time that we were buying simple components from other vendors. Like chips came from Intel.

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Motherboard came from -- I forgot the name of the vendor.
So there's no way it was hundred percent being manufactured by us.
Q At the same time, Theranos was using machines that were manufactured by others as well?
A Yes. Absolutely.
Q Did you tell BDT that Theranos manufactured a hundred percent of its diagnostic machines and associated consumables in a single plant?
A The way it is written there, no.
Q What do you recall telling BDT about Theranos's manufacturing?
A Well, I don't recall any specific conversations with BDT on that topic.
Q Did you ever hear Elizabeth Holmes say to BDT or any other potential investors that Theranos manufacturers a hundred percent of its diagnostic machines and associated consumables in a single plant?
A No.
Q If you look a couple of sentences down, it says: "Unlike other sector participants, test operates a vertically integrated manufacturing model."
A Sorry. Where are you again?
Q Third full paragraph.

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A Yes, I see that.
Q And then it goes on: "The company receives raw materials, e.g., plastic, aluminum, etc., and constructs each and every component of the finished products, diagnostic machines and associated consumables."
A I see that.
Q Was that a true statement as of December 2014?
A No. And nobody made that statement either, best of my -- best of my knowledge.
Q You didn't make this statement to BDT?
A No.
Q Did you ever hear Elizabeth Holmes say it?

A No.
Q Do you have any idea how BDT got the impression that Theranos operated in a ver -- vertically manufactured -- vertically integrated manufacturing model and received raw materials and -- and construct everything from there?
A So most of this, what is written here, is -- is true. The cautionary is I'm -- I'm being careful to say each and every component. Like I said, we absolutely did not make each and every component. And nobody in their right mind would think that we were making our own chips, like CPUs and -- and some other components, which I'm sure there were smaller parts.

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So -- so -- but, in general, the statement is true that we were buying a ton of plastic and aluminum and making majority of the machines or -- or overwhelming majority of the machine. And consumables hundred percent ours, I think.
Q In terms of a vertically integrated manufacturing model, that -- that was specific to the SPU and the -- and the consumables; is that right?
A Correct. Yeah. And the nanotainers. We were making those also in-house. We were manufacturing those here in the U.S.
BY MS. CHEN:
Q Did you ever describe to potential investors that Theranos operated a vertically integrated manufacturing model?
A Yeah. That's probably right. Again, not hundred percent. But most people are reasonably intelligent to know that we are not manufacturing Intel chips here.
BY MR. KOLHATKAR:
Q Did -- did --
A But -- sorry.
Q I didn't mean to interrupt.
A But the answer is yes, we did operate a very highly integrated board manufacturing facility. Yes,

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that's true.
Q Did you ever tell investors or potential investors that Theranos was vertically integrated more generally?
A Yes, absolutely. That's true.
Q Was that true even though Theranos was purchasing and using third-party machines?
A So what? And if you look at the paragon in technology industry, the paragon of vertical integration is iPhone. They don't even make it. Foxconn makes it in China.
The purpose of a vertical integration as a stack, as an overall solution, is not that we are making every single input into the entire stack ourselves. But

the point is the solution that we deliver to the customers is fully vertically integrated.

So from the sample collection units, like T -- TSPUs -- sorry -- CTNs, all the software that they use to track it, all of that was -- all the entire stack was controlled by us. The -- it was seamless integration point.

Theranos was the one provider that provided all the services, like Apple does. So it is absolutely true that we were very tightly integrated vert -- I actually don't think any company in the world is as integrated in

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this industry. There may be few, so I don't want to say any. But most companies are not as integrated as we are.

Q The -- the Vacutainers that Theranos was using for venous draw was --

A Right.

Q -- those -- it was not manufacturing itself?

A Oh, of course not.

Q Same with the butterfly needles it was using?

A Absolutely correct.

Q Would you consider Theranos to be vertically integrated with respect to those aspects of its business?

A If you just separate out those two things, the answer is no. Just like iPhone has a touch screen made by Samsung, which is their number one competitor. So if just say Apple doesn't make the touch screen, the answer is absolutely true.

But can anybody look at Apple iPhone and the entire Apple stack and say vert -- Apple is not probably the most vertically integrated company in the world, if not, at least in the computer technology? Answer is yes. They are considered to be the high bar of vertical integration.

It's the same thing here. If you take one

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component out from our stack saying, "Did you guys make the Vacutainer?" the answer is no.

But if you look at a lot of other components in our stack, all the way from software to CTNs to our couriers -- we owned our own couriers. We control them. We had -- but clearly we're not making our own cars. We bought them from -- from Toyota.

We had a software to track all this stuff. So the end solution, just like Apple, was a fully vertically integrated solution. Our solution, I believe, was a very tightly vertically integrated solution that had components from other manufacturers. Absolutely.

Q What was the value add, in your view, of providing a vertically integrated solution to retail blood testing?

A Oh, it's tremendous. It's tremendous. First of all, the patient experience is fantastic. Had we succeeded, we would have -- it would have allowed us to lower the cost even more, literally billions of dollars from taxpayers.

Because, as the volume kicks in, it allows us to scale better. And our marginal costs at some point is basically reagents and software. And so scalability is there.

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The -- I'll give you a simple example. From the moment a patient walks in into a Walgreens location, our entire software stack knew the patient is in that location. So the labs guys, if they wanted to react to those -- those triggers, they could have done that. The labs knew the patient.

You know, Mr. Kolhatkar has just walked into the Walgreens location. These are the tests they have ordered.

So you could prepare everything up front in advance knowing what is happening. And then the payment, the insurance -- the integration that we did with insurance companies allowed our patients to integrate -- interface just with us, one company. Just like Apple does.

So the -- and -- I mean, the call center integration that we did when a person called our call center, we wrote that software. We looked at all the call center software. None of them was designed for labs because labs really is a cottage industry. It grew through mergers and acquisitions.

So there's not any good software to automate call center for labs. We wrote the software. So now, if some patient called us, we recognize the number. We will pull up the record right in front of the

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technician. And if -- or if it is a doctor calling, we could pull up all the information right in front of you, and we could say, you know, "You have three patients outstanding, you know, John, Jim, and Mary." Chances are you're calling for those three.

So the information was there. Within a split second we could pick up the phone and start interacting on why they called us.

We also integrated using voice recognition. So the doctor could say -- now, we hadn't launched this yet, but the software was ready because of this integration -- vertical integration -- that a doctor called us, and we could say, "We recognize you calling. Are you calling for Joe Doe?"

And the doctor could say, "Yes. I would like to add a test." Press the button. Don't even have to talk to a human. All of that was automated. And this get -- gets pushed to the lab, and people can process it

automatically.
Q What was important to you about Theranos vertically integrating its manufacturing process of its SPUs?
A Yeah. Well, there are very significant advantages there too. Medical device industry, unlike the PC industry, is the opposite. And the PC industry,

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the scale is there. So you could buy stuff from other vendors from China and Taiwan and Korea and -- and Japan because one manufacturer specializes in making one thing that everybody uses.

Medical device industry, there's no standardization. Even the software is not standardized. Even when you buy machines from one vendor, like Siemens -- I -- when I made the decision saying, "Okay. Siemens will be strategic partner," I thought all of the machines and software is going to be the same, so training time will be faster. It was not the case. Completely different software.

And so we worked --

Q You mean between different models of the Siemens machines than --

A Even within the different incarnations. So when you go from ADVIA 1800 to ADVIA 24 -- 2100, completely different software, right? You actually can -- a person who's an expert on 1800 will be completely confused on 2100. So even that level of integration doesn't exist in the labs.

The fact that we had entire manufacturing in-house here right in front of us also give us another advantage, which is R&D. When our R&D guys came up with the new change in our device, we could immediately see

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the impact on the overall system right there.

And actually our headquarter in Palo Alto, we actually had this picture that you see on this page, that big machine there --

Q So just for the record, you're referring to the picture on --

A 1175.

Q -- 1175?

A Yeah.

This machine is called a CNC machine. This is the machine that is used to make parts. So you take raw aluminum blocks; you put in the machine; you program it; and the machine gives you, you know, whatever you want from it, like something, speak -- speaker or a tray made of aluminum.

What we did was we actually had a machine like this sitting in our headquarter in Palo Alto. This is unprecedented. Because any time our engineers made a tiny change in our TSPUs or -- and even BCDs, we could immediately implement that right away.

We actually used to have a glass wall between the room that had this machine and our R&D guys. Because this concept that you have access to a machine sitting there right next to you is so novel that people -- even though the machine was there, they would forget about it. So we put a glass wall so they could see the machine all the time.

This allowed us to make changes rapidly. Like any time we had a -- a change to make, even when we were doing modifications to the Siemens machines or whatever, a tiny change we could just run through the entire infrastructure right there, the entire stack will get impacted, and how it would impact manufacturing.

We would actually show it to manufacturing engineers and manufacturing people saying, "Look, we are planning on taking these two parts and combining them this way. Are you able to make it? Can you scale around it?"

So this constant communication that was happening between manufacturing the entire stack and our R&D guys was just invaluable.

This is what allowed us -- or would have allowed us to move so much faster than I think most people would have ever imagined.

BY MS. CHEN:

Q Isn't -- going back to your Apple example.

Isn't -- isn't this a little bit different from Apple, though, in that, you know, half or more than half of Theranos's tests were performed using a process with components that are entirely manufactured by third parties?

A Same for Apple. Apple's iPhone is, I would say, even more than 50 percent made by third parties. The entire iPhone -- first of all, you -- you -- agree with you. I was just loosely using that as an example, not exactly hundred percent comparison.

But Apple's entire phone is made by Foxconn. Apple doesn't even own those factories. So --

Q I mean, I don't know what Apple --

A Yeah. I know.

Q -- is representing to other people about its manufacturing process.

But the fact remains that you're describing Theranos's manufacturing process as being vertically integrated.

A So --

MR. COOPERSMITH: Hang on a second.

He -- you say he is describing. You're looking at a document produced by a company called BDT.

MS. CHEN: Oh.

MR. COOPERSMITH: So let's be careful --

BY MS. CHEN:

Q I thought Mr. Balwani -- did you respond to a question earlier in which you said you had previously made comments that -- or described the company's model as being vertically integrated?

A I would say in -- but you asked me a question. I -- I -- I forgot the exact question. But my point was, in general, if I were to make a comment that our manufacturing process was vertically integrated, that would be true.

Q So have you ever made that comment or -- or statement to anyone --

A I don't know if --

Q -- at the company?

A I don't know if I've made the comment that our manufacturing process is vertically integrated, but if I did, it would be true. But I don't recall if I specifically did manufacturing.

But the other point, the broader question Mr. Kolhatkar asked was: Did you make the comment that our entire stack was vertically integrated in general. My answer to that question was, in general, that was true.

And yes, I would have made the comment. I don't know if I made this with BDT or not. But, in general, I viewed our stack as vertically integrated because that was true more than any other company I know of in this industry. So --

Q Did you believe it was misleading -- it would be misleading to make a comment or a statement to a potential investor that Theranos's manufacturing model was vertically integrated when more than half of its tests were being performed on third-party machines?

A No, not at all. If we are talking about our manufacturing, the fact that a machine we are buying from Siemens, obviously we are not manufacturing it.

But this -- if somebody made a comment that Theranos's devices are manufactured in a vertically integrated environment in Newark, the answer is true. Our devices were. And our consumables and OCTs were manufactured by us.

BY MR. KOLHATKAR:

Q What about the broader point that you -- that you talked about, that Theranos being the most -- being vertically integrated?

A In general.

Q In general.

A Not the manufacturing, just -- yeah.

Q Not -- let me --

A Right.

Q Did you have any concerns that that would be misleading, given that Theranos' was purchasing --

A No.

Q -- third-party devices?
A No. I -- I think I answered the question. I actually am very confident that not only we were vertically integrated -- very vertically integrated, I actually think there are very few companies in this industry who are as vertically integrated as us -- as us.

Doesn't mean, like I said earlier, that you cannot just take Apple phone and say, "Here's a Samsung monitor -- Samsung's touch screen. Apple didn't make it." The answer is yeah, Apple didn't make it. But the overall stack, the solution, the way iTune works, and the music -- Apple doesn't make iMusic either, right? Somebody else buys the music.

But when you use the iPhone, the overall experience is vertically integrated. And Apple is regarded as the vertical -- company that's fully vertically integrated.

So yeah. I mean, I'm comfortable with the statement that we were, in general, a vertically integrated company.

Q Did you ever hear Elizabeth Holmes use that -- that phrase to describe Theranos as well?
A In general?
Q In general, just that Theranos was vertically integrated?

A I don't recall any specific incidences. But, I mean, if she did, it'd be accurate.
Q Yeah. My question is just if you recall.
A I don't remember.
Q Okay. If you take a look at the page ending in 117.
A 1171?
Q 77. Sorry. It's pages entitled "Ebola Strategic Plan and Summary."

The last sentence of the first paragraph: "As such, the CDC asked the company whether it was capable of developing a quick response Ebola test using fingerstick technology, a design feature divide by -- desired by the medical community, given the propensity of fieldworkers accidentally -- propensity of fieldworkers to accidentally stick themselves with infected needles."

Do you see that statement?
A I do.
Q Was that a true statement in December 2014?
A The way it is written here is not.
Q What do you mean by that?
A Well, we did meet with CDC around Ebola. We actually also hosted a conference around Ebola at Theranos where we had participants from CDC. Actually,

(b)(6); (b)(7)(C) flew himself personally to attend that conference -- that meeting. I shouldn't say -- call it a conference. It was a meeting.

And -- and then there was also representatives from military, some other agencies. I forgot which ones.

So we did discuss the possibility of doing fingerstick nucleic acid amplification test for Ebola. But I wouldn't say that CDC asked the company. We actually said, "We already have an EOA." And either we had already submitted it or it was in works. So we discussed that.

Q Did you ever tell BDT that the CDC had asked Theranos whether it was capable of developing a test for Ebola?

A No, I did not.

Q Did you ever hear Elizabeth Holmes say that?

A No, I did not.

Q What about the next paragraph down: "Importantly, the company's diagnostic test is capable of detecting the Ebola virus faster than any of its known competitors."

Was -- was that true at the time?

A I don't recall at that time, which time frame

0907

exactly. But it wouldn't surprise me if actually we were. Because we had our Ebola testing -- if you did the combination of how fast we detected and how many -- how sensitive we were, I think we were -- at least in our -- in our experiments, we are the best.

So it wouldn't surprise me if we made that statement. But I don't remember specifically if I did -- made that statement or not.

Q What about the statement two more paragraphs down: "The company is currently working with the government to finalize a contract which it plans to announce in the coming months, launching in U.S. airports shortly thereafter."

A Yeah, I think I answered this question earlier. My recollection is I did not make this comment. And I don't know if anybody, best of my knowledge, was talking to the government or not.

Q At the bottom of the page, the last paragraph there, it says: "The company believes it will be able to conduct 10,000 tests per day without impacting other segments of their business."

A I see that.

Q Did you ever provide BDT with this estimate of 10,000 tests per day?

A I don't recall that.

0908

Q Would that have been a fair estimate at the time in December 2014?

A Well, I'll have to do some math. But I wouldn't be able to respond to that right -- right on the spot.
Q Generally do you have any recollection about estimating the number of tests per day Theranos could conduct for Ebola testing?
A I don't recall specifically.
Q If you turn to the next page --
A Page 78?
Q Correct. 78 and -- and 79.
If you look at the top of 78, it says -- 79. I'm sorry. The -- the -- it says that: "The contract does not limit or restrict" -- I'm sorry. Let me -- let me strike that and start back.
You understand these two pages to refer to Theranos's interactions with Walgreens? You see the Walgreens heading there?
A I see the Walgreens heading.
Do you want me to read the whole thing, or are you just asking --
Q Sure. Why don't you read from -- from "Walgreens" down to "Arizona Performance to Date" on 1179.

0909

A Okay.
(Examines document.)
And you want me to read all -- sorry -- you said all the way --
Q Just to "Arizona" maybe.
A Yeah.
(Examines document.)
Okay.
Q And if you take a look at the -- the top of 1179, do you understand these two pages to, at least in part, reference Theranos's relationship with Walgreens?
A Yes, I do.
Q If you look at the top of 1179, it says: "The contract does not limit or restrict test from opening additional locations if the company chooses to do so."
Do you see that?
A I do.
Q Was that an accurate statement in December 2014?
A I believe so, yes.
Q How so?
A I mean, we were already opening additional locations in Arizona. And we were not -- I mean, let me make sure I understand your question.
You're saying the contract with a -- Walgreens'

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contract does not limit or restrict test from opening additional locations if the company chooses to, which is true.
I'm -- I'm not sure which part of --

Q I -- I guess was -- was it just the company's choice to open up additional Walgreens locations?
A But I don't read this as saying Walgreens locations. It says "additional locations."
Q Okay. So you read this as referring to other non-Walgreens --
A Yeah. I mean, the point here will be -- again, obviously, I didn't write it. So I'm just reading what's written here.
The point is does the contract limit us from opening any additional locations. The answer is no, it didn't.
If, for instance, we had a deal with Safeway and -- I -- I think our amend -- amendment in December of 2013 said in Arizona we had to work with Walgreens if we were going to do retail pharmacies with them.
But I believe we -- it didn't limit us from opening additional locations with either Safeway or our own locations, which we started doing.
Q Did -- did you tell BDT that the contract did -- that the contract with Walgreens did not limit or

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restrict Theranos from opening additional locations if -- if it chose to do so?
A I don't recall making that specific statement.
Q Do you recall hearing Elizabeth Holmes make a similar statement?
A No, I don't.
Q You see a couple of paragraphs down it says: "As part of the agreement, the two companies will partner together to make test the largest clinical laboratory in the U.S."
Do you see that?
A Yes, I do.
Q And the next sentence says: "This deployment is on target and the two companies anticipating achieving this milestone by the end of 2016."
A I see that.
Q Did you -- did you make that statement to BDT?
A I don't recall.
Q Was Ther -- did you ever hear Elizabeth Holmes make that statement to BDT?
A I don't recall doing -- hearing that either.
Q Was Theranos projecting to partner with Walgreens to be the largest clinical lab in the U.S. by the end of 2016?
A You know, I don't know. I will have to look at

0912

the model to see how many locations we were going to be. But at some point, once we hit I think 1,800 locations or something like that total, we would have been larger than Quest. So that would have made us the largest lab.
But I don't know if this is what he had in mind or she -- whoever wrote this report had in mind. And if

that's what it's referring to and -- and who -- who made the comment and what context.

Q Did you feel, in December 2014, that Theranos was on track to open at 1,800 locations by the end of 2016 with Walgreens?

A Again, I will have to look at the model. I don't remember top of my head.

Q The model would best reflect your expectations of --

A Well, whatever assumptions I had made by December of 2014 would be in the model.

BY MS. CHEN:

Q Weren't the parties discussing modifying the contract at that time?

A Yes.

Q So why was it reasonable for you to believe that the two companies would achieve deploying nationally by the end of 2016 if the companies were in discussions to modify the contract?

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A So first of all, I don't think I made that statement, is the point I made earlier.

But going back to your point, that why -- the fact that we were modifying the contract meant we were modifying the terms of the contract, the economic terms and some other details.

But both companies had every and full intentions of working together and executing our plan in terms of footprint the way we had planned. So they -- I didn't -- had -- had no reason to believe that there was a change in that. We were modifying the terms for sure, the economic terms back and forth, but not the -- the vision of being in X number of locations.

BY MR. KOLHATKAR:

Q If you turn to the next page ending 1180, there's a section on Safeway.

Do you see that?

A I do.

Q And the second paragraph under Safeway says: "The company projects to launch wellness centers within Safeway stores in 2015 beginning in California."

Do you see that?

A I do.

Q Was -- was -- was that an accurate statement as of December of 2014?

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A I think -- again, I'm not sure about the dates here. We were negotiating with Safeway the launch and -- and -- and negotiate the lessee-landlord model. So this one here says the company projects to launch with Safeway stores in 2015.

Q That part -- that part you view as true?

A Yeah. I think --

Q Yeah.

A -- that's a fair statement.
Q What about the beginning in California part?
A That was also true, but we were still negotiating. That may have changed. But I think the expectation was that, if we had modified the contract successfully, we would have launched in California.
We had actually already started mapping which Safeway stores we were going to be in I think by that time. So that, too, probably would be true.
Q Did -- did you tell BDT that the company was planning on launching wellness centers within Safeway stores in 2015 beginning in California?
A I don't recall making that specific statement to these guys.
Q Did you ever make it to any other investors?
A I -- I don't recall that.
Q Did you ever hear Ms. Holmes tell that to BDT

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or anyone else?
A I don't recall that either.
Q If you take a look at page ending in 1183.
A Okay.
Q There is a chart that lists company projections.
Do you see that?
A I do.
Q Do you recognize these projections?
A I will have to look at the model. But my guess -- and this is just a guess -- is that this is a cut-and-paste off some piece of the model and project -- and pasted here.
Q And if you look at Q4 2014 in the -- in the -- under the company projections, it -- there -- there -- there's a list for $8 million from physicians offices, $43 million from hospital courier, and 8 million from pharma services.
Do you see that?
A I see that.
Q Did you expect in December 2014 that Theranos would generate $8 million in revenue from physicians offices?
A I don't recall. I'll have to look at the model. But if I were to guess, I think the answer would

0916

be no.
Q Why is that?
A Because I think 2014 is when we had just started the physicians office. So I don't know what revenue numbers we would have generated for physicians offices.
Q What about the -- for hospital courier services; did you expect Theranos to earn $43 million in the fourth quarter of 2014 for --
A No. No, we did not.

Q What about $8 million for pharmaceutical services?
A That, I don't remember.
Q Did you provide these projections to BDT?
A No.
Q Did --
A I provided them the model. Like I said earlier, they probably cut and paste some sections from the model into this one and put this header on here.
Q Do you think you provided them the numbers in the model of physicians offices, hospital couriers, and pharma services?
A No. When I had shared the model with them, we actually had sat down together, modified the model. And they had introduced this whole concept of quarterly
0917
revenue. So this was their idea, not mine.
Q What about annualized revenue; did you share a model with them that -- that projected revenue of over $40 million for hospital courier services in 2014?
A No, I did not -- like I said, I did not give them any projections. But whatever is in the model I gave them is -- is what I gave them. So if I had the model, I'll be able to answer that question.
Q With respect to pharmaceutical services, I had understood your answer earlier to be that the model would best reflect your assumptions for how much revenue Theranos would earn from pharmaceutical services at any given point in time; is that fair?
A I would say the model would have all the assumptions around whatever business would look like around pharmaceutical companies, yes.
Q And on what -- did you -- in December 2014, did you expect to receive $40 million in pharmaceutical services in 2014?
A I think -- first of all, I think this is not December 2014. This is just entire 2014.
But the answer is I don't know. I'll have to look at the model. But from speaking just from memory, the answer is no.
Q Why not?
0918
A Because I don't think in 2014, like I mentioned earlier, we were doing anything -- any significant work for pharmaceutical companies. It just got delayed and delayed and delayed.
Q By -- in the first three quarters in 2014, had Theranos generated any revenue from pharmaceutical services?
A Not that I recall. But I wouldn't know. I could be wrong about that.
BY MS. CHEN:
Q So if the financial model that you provided to BDT showed that Theranos was projecting to make

$40 million in all of 2014, would that not be correct?
A The financial model would have some baseline numbers that we both sat down and worked on and modified. And like I said, they made -- made some significant changes to the model.

But the assumption -- the main underlying assumption behind the model was you could just go and change the title of the months at the top and -- for example, if the model was delayed by a quarter or two quarters, even a year, you just change the headers at the -- at the top, and the model got -- got pushed out by one quarter or two quarter.

And because our model was pretty -- you know,

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and was -- it was heavier on the longer tail side, on the -- on the outside edge of the projections, if you ship -- slip the -- even by one quarter, the entire revenue for the entire year got impacted by, you know, not just quarter but 30, 40, 50 percent in some cases.

So that was kind of the -- the -- the -- the thought behind the model.

Q Okay. Maybe I don't understand your answer to my question.

So if your -- the model that you sent to BDT had $40 million being projected for 2014 for pharmaceutical services, are you saying that that would be incorrect?

A Depending on when I -- but answer will be yes, that would have been incorrect.

Q So -- but why would you be sending incorrect information to BDT?

A I think I answered this question last time. But the answer is we were using this model -- when I started working with BDT, I -- this was the -- I think -- since January of 2014, I hadn't spent much time with this model and cleaning it up and adding additional assumptions and lot of other information that we had learned between January and September of 2014.

So when I sent them the model in October or

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September of 2014, it was basically model that, you know, I don't think I had shared with anybody in a while.

And so I sent it to them saying, "Here's the model. Let's start making changes to this thing, modify it."

But it is possible that those numbers were actually there from earlier, not just updated as of October. Maybe two, three, six months from earlier. So I'm guessing here without looking at the different models.

So I just sent them a model saying, "This is the model I've used in the past as a planning tool. But we'll use this as a baseline working model."

BY MR. KOLHATKAR:
Q In that second past review of the BDT -- this -- this memo that you recalled earlier, did you recall looking at these numbers and thinking they are out of date?
A No. I didn't -- I didn't look in that much detail.
Q If you see the section under "Retail Pharmacies" under "Arizona," it says: "Test plans to add 10 to 15 additional wellness centers in Arizona."
A I see that.

0921

Q Was that true in December 2014?
A We certainly were planning to add more test centers in Arizona, yes.
Q But were there -- were there any plans to add 10 to 15 more?
A Yeah. We actually -- I mean, again, I don't know what time frame this is referring to. But in December or January, we started working pretty aggressively to add more test centers so that we could have the statewide footprint.
And I believe, in the first five or six months of 2015, we did sign 10, 15, 20 contracts for our wellness centers. But I could be off by -- by few months here and there.
Q What about for the next sentence down there, the -- the launch in major cities including New York, Chicago, and San Francisco; were those next planned areas of launch for Theranos's presence in Walgreens health clinics?
A We -- we had discussed with Walgreens what our next states would be. And like -- I think I mentioned that last time also. New York and San Francisco were on top of the list. And we were talking to them about -- about Illinois, if we should be launching in Illinois or not.

0922

So those were -- actually, those three states that were -- actually, Tennessee was a fourth one we were discussing with Walgreens.
Q The introduction to this section says -- under "Walgreens Location" it says: "Test currently has 41 wellness centers in Walgreens stores, 40 in Arizona, one in Palo Alto, CA, and plans to open wellness centers in 900 total Walgreens pharmacies by year-end 2015."
A I see that.
Q Was -- was that a true statement as of December 2014?
A I'll have to look at the model. I wouldn't remember exactly what I had in the model.
Q But -- but if the model -- your model as of December 2014 reflected that number of stores, that would reflect your best estimate of the number of stores

that you expected to grow in 2015?
A I will have to look at the model and the assumptions back at that point. So -- I mean, I would not guess what is in the model at this point.
Q Other than looking at the number of stores that are projected to roll out in the model, would there be any other information in the model that would answer -- answer that question?
A Well, it -- it depends on if I -- the

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discussions we were having with Walgreens in summer of 2014 had it all -- had updated all those -- all that information in the model by this time frame or not. I -- I'm not sure.

For example, I think we discussed that -- that, in summer of 2014, Walgreens wanted us to be in 2,000 locations. I don't think I ever entered that information in the model that we'll be in 2,000 locations in 12 months at Walgreens, even though this is what they had wanted us to do.

So I had not updated the model completely based on the conversations I was having with Walgreens at that point. So it's possible that my model -- even though I was spending time on it, but I was not spending that much time -- that it is absolutely accurate that captures all the information.

Q Turning to the next page, the Safe -- for Safeway locations, the last sentence there says: "Test plans to open 450 centers by year-end 2015."
A I see that.
Q In December 2014, did you believe Theranos would open 450 Safeway locations by the year-end 2015?
A I think I will give the same answer. I would have to look at the model and the underlying assumptions to be able to answer this question affirmatively.

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Q If you look at the -- a couple bullet points down, it -- under "Requisitions Per Day," it says: "Consistent with performance in Arizona to date" -- that's bracketed -- "the company expects each Walgreens wellness center to generate 40 requisitions per day."

Do you see that?

A I do.
Q In December 2014 did you expect the company to generate 40 requisitions per day in Walgreens?
A Our -- I think our model reflected 35, is my recollection. That was what in -- what was in the model.
Q And at the time did you expect Walgreens to -- Theranos to be able to -- to generate 35 requisitions per day at Walgreens?
A My expect -- actually, expectation was much higher. But like I said, I have a model. I had used 35 as a reasonable number. In reality my expectation was

that, given the right geography and right execution, we would have been significantly higher than 35.

Q If you look at physicians offices a little lower, it says -- under "Locations" it says: "The company is currently in 101 physicians offices and plans to be in approximately 700 offices by year-end 2015."

Do you see that?

0925

A Yeah, I see that.

Q Was Theranos in 101 physicians offices in December of 2014?

A I don't think so.

Q Did you ever tell BDT that?

A No.

Q Did you ever hear Elizabeth Holmes tell BDT that?

A Nope.

Actually, let me point out one more thing here. If you look at one line below that, "Requisitions Per Day," it says that the company -- in the middle of that paragraph: "Company assumes four of these requisitions are sent to test resulting in an average of 20 requisitions per day per office --

THE REPORTER: I'm sorry.

THE WITNESS: Sorry.

THE REPORTER: Resulting in --

THE WITNESS: Let me read the whole thing: Requisitions Per Day. The average physician office has five doctors, and the average doctor writes 10 to 15 lab scripts per day. The company assumes that about four of these requisitions are sent to test."

So if we were in those locations, we wouldn't have to assume anything; we would have that information.

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So they are kind of contradicting here -- themselves here, too, is the point I'm making here, that -- this is why we -- I'm confident I did not make that statement.

Because if I had made the statement, I would not have made the other statement about what my guess would be requisitions per day because I would have known.

BY MR. KOLHATKAR:

Q If you turn to the next page under 1185, there's a section on pharmaceutical services.

A Yes.

Q And it says, under "Pharmaceutical Services, Cartridges": "Test current runs 3,000 samples per month, 100 per day. Given current contracts, it expects this number to increase to 5,000 in the second half of 2015."

Do you see that?

A Yes, I do.

Q In -- in December of 2014, was Theranos running 3,000 samples per month for pharmaceutical services?

A No, we were not.
Q Did he ever tell that to BDT?
A Absolutely not.
Q Did Elizabeth Holmes ever tell that to BDT?
A Nope. Not to my knowledge.

Q Do you have any idea how BDT gained the impression that Theranos was running 3,000 samples per months?
A My guess is whoever wrote this looked at the model, probably picked up those numbers from the model and entered this over here. Just like they cut and paste the spreadsheet that you showed me earlier, my guess this is where it's coming from.
But I don't remember anybody saying this to them.
Q Did you ever represent to any investors or potential investors that Theranos was currently running samples for pharmaceutical companies in 2014?
A Personally, I didn't. I don't recall making that.
Q Did you ever hear Elizabeth Holmes say something similar?
A I don't recall.
Q Did you ever represent to investors that Theranos had developed proprietary devices that were conducting all of the blood tests that a central lab could conduct using a few drops of blood?
A No.
Q Did you ever hear Elizabeth Holmes say something like that?

THE WITNESS: I said no.
THE REPORTER: I didn't hear the answer. Okay.
THE WITNESS: "No." Yeah.
THE REPORTER: And then your question?
BY MR. KOLHATKAR:
Q Did you ever hear Elizabeth Holmes say something like that?
A No.
Q Did you ever represent to investors that Theranos manufactured all of its blood analyzers?
A In general, if I said that, it would be true. Like I -- we discussed earlier the analyzers that we designed, the TSPUs, we did manufacture them.
Q Did you ever represent to investors that Theranos manufactured all of the blood analyzers it was using in the CLIA lab?
A No.
Q Did you ever hear Elizabeth Holmes say something similar?
A Nope.
Q Did you ever represent to investors that Theranos was voluntarily seeking FDA approval of its

tests?
A Personally, I don't recall saying exact those words.

Q Did you ever hear Elizabeth Holmes say something like that?
A I don't recall specifically that.
Q Did you ever represent to investors that Theranos was seeking FDA approval of its tests voluntarily because it was the gold standard or highest standard?
A Again, I don't use -- I -- I don't know if I used exact those words or not. But this concept that we as a clinical lab were seeking FDA approval voluntarily was true. So we would have -- that statement saying that would not be inaccurate.

And yes, FD -- I do consider FDA as a gold standard. So again, I don't remember saying that. But if I said that, that would be a reasonable thing to say. And -- and, in my mind, that is true.
Q I guess do -- do you remember saying something along those lines to any investors or potential investors?
A No. That's the first thing I said is no, I didn't.
Q Did you ever hear Elizabeth Holmes say something along those lines?
A No.
Q Did you ever represent to investors that FDA approval of Theranos devices was not required?
A Me personally? No.
Q Did you ever hear Elizabeth Holmes say that?
A I don't recall that statement.
Q Did you ever tell investors that technology demonstrations of a Theranos fingerstick would be run on devices manufactured by Theranos?
A If that were true, then -- I mean, I don't recall saying that specifically again. Sorry. Let me answer that question first. Specifically, no.
Q Do you recall Elizabeth Holmes ever specifying that the TSPU would be the device used to run a tech demonstration?
A I don't specifically remember her in any one instance.

But like I was about to say, in general, if that were true, then that would be a true statement.
Q Did you ever represent to investors that Theranos had grown its business from contracts with the military?
A No.
Q Did you ever hear Elizabeth Holmes say something like that?
A No.

Q Following the Wall Street Journal coverage in sort -- sort of October 2015, did you receive any complaints from any investors?
A Personally, I don't know of any. I don't recall any.
I mean, sorry. Let me rephrase that.
In 2016 obviously PFM was one. But besides that, I personally did not hear from anybody.
Q Setting the PFM aspect aside, did -- did any other investors complain about the accuracy of the information you provided to them?
A Not -- not to me, no.
Q When did you leave Theranos?
A I think my last day at the company was May 19th or 20th of 2016. But I had six weeks of PTO. And I used that to be available for the company in case if there's anything they needed from me. But I did not go to the office during those six weeks.
So that would -- that took me to first week in July was my last official day.
Q Why did you leave Theranos in 2016?
A I was thinking about leaving Theranos because I was burnt out. I was working very long hours, unfortunately. And my passion is product, spending more time building products and technology and software. And more and more, as the company grew, I got less and less chance to do that.
So I started discussing that with Elizabeth that at some point either I was going to take a very long sabbatical and come back or just leave the company.
Q Did Elizabeth Holmes ask you to leave Theranos?
A No, she did not.
Q Did the board ask you to leave Theranos?
A No.
MR. KOLHATKAR: I'm going to take a quick break. Go off the record at 3:51.
THE WITNESS: Okay.
THE VIDEO OPERATOR: Going off the record. The time on the video monitor is 3:49.
(Recess taken.)
THE VIDEO OPERATOR: Back on the record. The time on the video monitor is 3:56.
BY MR. KOLHATKAR:
Q So, Mr. -- Mr. Balwani, just to confirm -- we're back on the record at 3:56.
We didn't have any substantive conversations during the break; is that correct?
A That's correct.
Q Changing topics for a minute. The -- to a couple of Theranos policies.
Did -- did Theranos have reimbursement policies

for personal expenses?
A Reimbursement policy for personal expenses.
Q Like -- like if you -- if you -- did Theranos maintain corporate cards?
A Yes.
Q And did it have policies on how the company should be reimbursed for personal use of those cards?
A Yeah. Should be only used for business purposes strictly.
Q Who -- who had to approve items expensed to the corporate card?
A It depending -- depended on the -- not too many people had a corporate card. But it would -- it would go to the manager of the person who would approve those expenses. Otherwise, the person will have to pay out of pocket.
So if somebody reported to me, charged something on the card, it'll come to me for approval. And if it is somebody reported to that person, it will go to them for approval. And --
Q And we -- we spent some time talking about the people who reported to you -- to you last time. And I want to kind of revisit that.
But do you have a general recollection of what level of seniority a person would have a corporate card?

0934

A We had -- like I said, very few people or people who had to do a lot of traveling for business. So product managers did. But they used to report to me, so I got to see their expenses.
And I think there was one or two people in supply chain who had made -- had that card. There was one -- we had general managers in Arizona who had those cards. They were using for, again, ordering food or other supplies for the office.
Q And what were the mechanics of reimbursement there?
Would the company pay the -- the -- the card; and then, if there were personal expenses on it, the employee would pay the company back? Or --
A Yes. That's -- that's how it worked. That's my understanding, yes.
Q Did the same policy apply to you and Ms. Holmes?
A Yes.
Q Who reviewed Ms. Holmes's corporate card statements?
A I don't know.
Q Not you.
A Not me.
BY MS. CHEN:

0935

Q If there was a lower-level employee who would have the corporate card and they had a -- a manager,

after that manager approved those expenses, would it then be reviewed again by somebody else?

A You know, I think, if there was a certain expense that was flagged by the controllers, the -- the people in the finance team, then it will come to me. And that did used to happen. But it wasn't often.

I mean, primarily that's because we only give cards to very few people. And the people who had it, you know, I consider them very honest and responsible people. So it was not a big worry.

Q So the managers would approve the expenses; it would then go to the controllers; the bill would be paid unless the controllers flagged an issue for you.

Is that how it worked?

A I don't know how the process worked. But I'm just describing from a business perspective that a person, A, used the card for something. Then their manager would approve it. And if it is a reasonable expense, then it would go through, theoretically speaking. But if it was something that the finance team flagged, then it'll come to me.

But --

Q Okay.

0936

A -- that's a theoretical scenario. Because most people who had cards, like I said, were either reporting to me -- I think -- or -- or Elizabeth. I don't think their direct reports are too -- there are too many people who -- whose direct reports had cards. At least I don't remember.

Q And did the employee who was -- who had the expenses, did they have to submit something on a form showing, you know, here are the charges on the card that were for business purposes, and here's the justification for it?

Was there any paperwork that employees needed to submit to the company?

A I believe so. There was expense form that employees had to submit. But I don't know how it worked in relationship to the corporate card. So those are maybe two different things.

BY MS. WINKLER:

Q When you say someone in finance might have flagged something, who would have -- who were those people in finance who would look at these things?

A (b)(6); (b)(7)(C) who used to look at it. She may have subordinates who probably looked at her -- for her. I don't know the process.

But when it came to me, it would usually be

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finance will give it to my assistant saying, "Sunny needs to look at these and approve these." It will come to me then in that case.

But like I said, in most cases the cards were

really with people who were either directly reporting to me or Elizabeth. So this additional tier was -- it didn't really exist. Because, by definition, then everything came to me or Elizabeth first. And I actually would say probably to me. Because Elizabeth was busy. They would hand off the documents to (b)(6); (b)(7)(C) and in the evening I would look at those.

BY MR. KOLHATKAR:

Q Were you ever asked to review any of Ms. Holmes's expenses on -- by the controller or by anyone in the finance department?

A No.

Q Do you know if Theranos's corporate card was used for Ms. Holmes's personal expenses?

A I would -- I -- I don't know how to describe "personal expense."

But you mean nothing to do with business, just for like our shoes?

Q Clothing, shoes, other things like that.

A I doubt it, no. I would not think that clothing and shoes was included. But -- but we did used

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to work long hours. So food would be included, groceries. They would -- because I never went home most times. My -- my refrigerator in the office. So food was delivered there. So that would be on the company card because I was in the office.

So those things would be there. But I doubt shoes and clothes would be on the card.

Q I guess do you know if -- if Theranos's corporate card was used for Ms. Holmes's personal expenses?

A Well, again, I'm making sure -- if you're describing personal expenses as nonbusiness-related shoes and clothes type of stuff, then to the best of my knowledge, the answer is no.

But obviously I didn't look at every expense report, so I don't know.

BY MS. WINKLER:

Q Do you recall any specific instances where you actually did tell one of your subordinates that, "The company is not covering this expense. You have to pay it back"?

A Yes, I did.

Q Okay.

A Yeah. That happened. Yeah.

Q Is there a particular employee that comes to

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mind?

A No particular employee. But sometimes people will go to a conference, and they'll buy a ticket a certain way. And I will reject it saying, "No. You should have bought a cheaper ticket." Or I'll give them a warning shot saying, "Next time, if you do this,

you're on your own."
But yeah. I -- I used to look at that information, unfortunately, yeah.
BY MS. CHEN:
Q Did you ever use your corporate card for personal expenses?
A No.
Q Did you have a personal assistant at Theranos?
A Yes. We both did personal -- had personal assistants.
Q Who -- who was your personal assistant?
A Initially we used to share one. Her name was (b)(6); (b)(7)(C) I forgot her last name. Then for last two or three years (b)(6); (b)(7)(C)
Q And who were Ms. Holmes's assistants?
A This lady, her name was (b)(6); (b)(7)(C) I forgot her last name -- and (b)(6); were her assistants.
Q Is this (b)(6); (b)(7)(C) ?
A Yes. Those are the right names.

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Q And then (b)(6); (b)(7)(C) is that (b)(6); (b)(7)(C) ?
A Yes. But there were other assistants also. Because obviously over last seven, eight years we had other assistants. But this is what I -- the last two or three that I remember.
Q Did you ever ask either (b)(6); (b)(7)(C) to help you with your personal errands?
A All the time. That was their job.
Q What did -- what did they do for you?
A Anything that would save me time that I can put into the company.
So there were times where (b)(6); (b)(7)(C) actually brought measurement tapes to measure my collar and my sleeves and my waist because I was running out of shirts. And she went and bought shirts for me. Obviously I paid for the shirts. But I didn't have to go to the mall. So it saved me an hour and a half.
Every day I went from home to office. And I had this addiction to Peet's coffee. And I would go and pick up Peet's coffee. But that would be 20-minute detour. So over 30 days, that's 600 minutes. Plus during the lunch I needed another cup of coffee. So it's about thousand minutes a month. That's, you know, full day or two of productive time. So I would ask my assistants to do that for me.

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Sometimes my shower would leak at home, and plumber will give me a four-hour window. I didn't want to be there. I want to be in this office. So I would send my assistant saying, "You go sit there. And if I'm needed, then call me when the plumber is there. Or you just deal with it so I don't have to deal with it."
So pretty much anything that would save me time for work I would delegate to my assistants.

BY MR. KOLHATKAR:

Q It was always your practice then to reimburse the company for whatever actual services, right, the -- the plumber in that instance or the coffee?

A Oh, yeah. Yeah. No. Those were -- that was my money. I would actually give her my card. And they -- those charges would show up on my card. I used to review my own cards too. So yeah. Absolutely.

Now, I would -- I would not charge company anything. I mean, I was -- when I joined the company, I had asked the company to pay me a dollar a year until the company went -- was breaking even. So I had no desire to take anything from the company.

BY MS. CHEN:

Q Were your assistants authorized to use your personal credit cards?

A Yes. My personal assistants knew my passwords

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to my credit cards, my airlines. They knew my plumbers. They knew pretty much everything.

Q And did you use your personal assistants to perform work -- you know, home improvement work around -- around your home --

A Yeah.

Q -- as well?

A Any project that I had that would, like I said, save me time, I would delegate to them. So I would initiate the project saying, you know, my gate is broken, for example. There was one time my door broke. It was going to be two days' worth of work.

When I was at Theranos, of the 20-plus weeks PTO that I got at Theranos, I think I took 20 days maybe at tops. So any time that I could save and put in the company, I would.

So yeah. I mean, two days sitting at home fixing a door was something I was not going to do. I would rather be at work. And then I would have my assistant go there.

Now, I'm giving you examples that kind of piling up. But, in general, I would say my personal assistant or my secretary was spending maybe 20 percent of her time on nonoffice, quote/unquote, work. But everything else was being done in the office.

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It's just that I had one point of contact who was managing my personal life so I could just delegate everything to her.

Q And that 20 percent/80 percent split between personal versus professional tasks, was that sort of similar to how Ms. Holmes was using her personal assistants as well?

A I wouldn't know, but I would guess that's about right. I mean, quite honestly, I didn't have much of a personal life. So there was not much work to be done.

The only time it was needed was when something broke. I didn't really do home improvements for the sake of doing home improvements. I didn't have the time for that. Because I would have -- home improvements require your time. But I didn't do that.

But either things broke or something is radically, you know, off, then I would delegate to my assistant, say, "You deal with it. Here's my plan. This is what I want you to do. But now go and do it." Yeah.

Q Were you aware that one of the personal assistants was doing -- was hiring contractors and interior designers for your home?

A Yeah, yeah.

Q Okay. I was just trying to square that with

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what you just said, which is that you wouldn't be doing home improvement work, but it's only if you were doing home repairs that you would ask.

A Yeah. I had a need --

Q So I was just --

A Sorry. I didn't mean to interrupt.

THE REPORTER: Sorry. Sorry.

MS. CHEN: Yeah.

THE REPORTER: Start again.

THE WITNESS: There was -- there was --

MS. CHEN: Do you need me to --

THE REPORTER: Yeah. Go ahead. Because it got cut off.

MS. CHEN: Okay.

BY MS. CHEN:

Q So I was trying to square what you just said with -- with your prior statement, which is that you would ask your assistants to help with home repairs but not home improvement tasks.

So are you now saying that your assistants also helped with home improvements --

A Yeah. I think --

Q -- work?

A -- we are using semantics here. The -- the net effect was there were certain areas of my house where

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either the furniture was broken -- I don't remember exactly what project this was. But this was certainly something that needed some upgrade. And that would have taken my time.

And the net net of this thing is my time. That was the valuable commodity here, at least I thought. And -- and so anything that would save me my time. For example, if I had a space in my room where I had no furniture, and when people came, you know, a couple of times, they had to sit on the floor and -- which was fine with me, but other people don't like it.

So I had -- you know, I had my assistant,

saying, "Go find me some furniture that I could put in the room." So I would consider that as an upgrading, a necessity that I would have spent my time.

Other examples would be, you know, my niece's birthday. You know, she's four. I -- I didn't want to spend time buying a birthday gift for her. I would give it to my assistant saying, "You go and buy something." She bought me a card. I just signed it and showed up for the birthday. So that saved me, you know, two, three hours.

So stuff like that was all delegated to her. The important thing is, it saves me time, I would ask somebody else to do it.

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BY MR. KOLHATKAR:

Q During your time at Theranos, were -- were you in a relationship with Elizabeth Holmes?

A Yes, I was.

Q I mean, just approximate just kind of start and end times for that relationship, if -- if you're able to provide it.

A Yeah. I would say 2004 is when we started. We were in a relationship. And then 2016 is when it ended. And during that time, you know, we were kind of in and out of relationship few times. But that's the ballpark.

Q And is it -- would you say for the majority of that time from 2004 to 2016 were you living with Ms. Holmes?

A Yes.

Q When in 2016 did the relationship end?

A When I left the company. We were kind of drifting apart, but we were -- we didn't have time to move out. So -- but I was still working; she was still working.

And then around May when I was leaving, you know, that became the time that -- that we stopped living together.

Q The -- did you ever disclose your relationship

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with Ms. Holmes to investors at -- at Theranos?

A I believe that some investors who had -- who were on the board, like (b)(6); (b)(7)(C) And the other -- the original board members had also included a couple of investors, like (b)(6); (b)(7)(C) and I think others. So they knew about our relationship.

Personally me talking to investors one-on-one telling them my relationship, no, I didn't.

Q Anyone in the seed two round that you can remember that you discussed it with?

A Except for (b)(6); (b)(7)(C) I don't think so.

Q Okay. Do you maintain any securities or brokerage accounts?

A Yeah, I do.

Q Just -- do you recall at what institutions?
A Fidelity and Charles Schwab.
Q Any others that you can remember off the top of your head?
A No. Those are those two.
Q What about bank accounts?
A Yes, I have at Citibank. I have one with Union Bank of California that I haven't used in 25 years. I have couple of accounts outside the U.S. with Citibank in India. (b)(6); (b)(7)(C) (b)(6); And I have an account in Singapore in -- at DBS
0948
Singapore. It's a bank -- checking account.
Q Do you maintain any foreign securities or brokerage accounts?
A Foreign securities.
Outside the U.S., you mean?
Q Correct.
A No.
Yeah, that would be foreign. Sorry.
Q Mr. Balwani, are there any answers to questions that you'd like to clarify at this time, either from today or from -- from our prior days of testimony?
A No. I think I've tried to answer the best I could.
MR. KOLHATKAR: Mr. Coopersmith or Mr. McKay?
MR. COOPERSMITH: If we could have a couple minutes off the record, then we'll -- I'll let you know the answer to that question.
MR. KOLHATKAR: Okay. Great.
MR. COOPERSMITH: Okay.
MR. KOLHATKAR: We'll go off the record at 4:13 p.m.
THE VIDEO OPERATOR: Going off the record. The time on the video monitor is 4:12.
(Recess taken.)
THE VIDEO OPERATOR: We're back on the record. The time on the video monitor is 4:16.
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MR. KOLHATKAR: So back on the record at 4:16.
BY MR. KOLHATKAR:
Q Mr. Balwani, we didn't have any conversations with the staff during the break; is that correct?
A That's correct.
MR. KOLHATKAR: Mr. Coopersmith?
MR. COOPERSMITH: Yeah. Thank you. We just have a few questions. So thanks for that opportunity.
EXAMINATION
BY MR. COOPERSMITH:
Q Mr. Balwani, first question is: Did you own stock in Theranos?
A Yes, I did.
Q And did you ever sell any of that stock?
A Never did.
Q Did you ever try to sell any of that stock?

A Never.
Q Did you earn a salary in your position at Theranos?
A Yes, I did. When I joined the company, I had requested the board to pay me a dollar a year until the company was profitable.
For some strange reason, board forced me to take some salary. So I agreed on $99,000 a year, which is what I got paid for I believe first five and a half
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years.
And in the last year, board increased that from 99,000 to 200,000 year.
Q When you say "the last year," you mean in 2015 and 2016?
A Correct. Yeah.
Q Okay. Did you ever ask for a salary increase during your time at Theranos?
A No, never did.
Q Did you -- and I think you testified about this during the first day of your testimony, Mr. Balwani, but did you provide a -- a loan guarantee to Theranos?
A I did.
Q Did you earn any interest or other compensation provided in that loan guarantee?
A I didn't earn any interest. I think company gave me some stock options or warrants at some later point, but it was minuscule.
Q Okay. Did you ask for interest?
A No, I never did.
Q During your time with Theranos, generally what was your workday like?
A From the moment I woke up --
MR. KOLHATKAR: I guess -- sorry.
Is there any -- any particular time frame for
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that question or --
MR. COOPERSMITH: During the time he was working at Theranos.
MR. KOLHATKAR: Okay.
THE WITNESS: In general, I --
MR. COOPERSMITH: In general.
THE WITNESS: -- can answer, from the moment I woke up, I was focused on Theranos and till the time I went to sleep. So it would be, you know, whenever I went to sleep basically. I didn't take much time off and didn't really take too many vacations.
BY MR. COOPERSMITH:
Q Generally when did you wake up, and when did you go to sleep?
A Depending on -- depended on when I went to sleep the night before. But I would say, you know, 7:00, 8:00-ish, 8:30 I would wake up. Within half an hour I'd be at work depending on if I'm stopping at

Peet's or not.
But -- and then I would be at the office till, you know, 9:30, 10:00, 11:00, sometimes midnight. I'd be eating all my meals, breakfast, lunch, dinner, snacks at office.
Q Okay.
A And also same on weekends. Most of my weekends
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also went into working.
Q Okay. Thank you.
When you were at Theranos, did you at times spend your own funds for Theranos business-related purposes?
A I did.
Q Did you always seek reimbursement from the company for that?
A No, I did not.
Q Did you try to even keep track of how much you were spending?
A No, I did not.
Q Do you have any -- as you sit here today, any ballpark estimate of about what magnitude of money you would have spent on the -- behalf of Theranos that you never asked for reimbursement for?
A I mean, conservatively speaking, I would say tens of thousands.
My -- my -- in my -- mentally, I had accepted the amount that -- the salary that the board had forced me to take, the 50-, 60,000 net of the $99,000 I was going to try to spend it on my business expenses. But I never, you know, tracked it.
MR. COOPERSMITH: Okay. That's all I have.
MR. KOLHATKAR: Okay. Just to clarify a couple of
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things.
BY MR. KOLHATKAR:
Q I guess what kind of business expenses did you have in mind there that you were spending but not getting reimbursed for? Just --
A Sure.
Q -- to the extent you can --
A Yeah. I mean, for example, I would buy books for my training; go to conferences, seminars. Even when I was traveling, lot of times I was using my personal card for my airline, for my food, for my hotel. Especially early on, you know, I would just use my personal card.
I would also use my miles to, you know, upgrade things. Me, when -- and I never expensed any of that to the company. And I'm sure there are other things too. Like -- I don't remember, but those would be some examples.
Q And -- and you sort of described a long period of time for your -- your average day at Theranos.

Would you say that was consistent from the time you started at Theranos to the time you left?

A Yeah. I think that's fairly consistent. Now, I'm sure there were days in between when I was sick or something. But in general, that was my day. That was my life, yeah.

Q Sure.

The -- your ownership in Theranos's stock, I apologize if you answered this last time, but do you recall how many shares you owned in Theranos --

A I don't --

Q -- at the time you left?

A -- don't remember the exact number.

Q Do you remember it as a percentage of the -- of the ownership of the company?

A I think, first of all, it was all stock options. And I think it's maybe 5 percent or 6 -- around 5 percent of the company.

Q By the time you left?

A Yes.

MR. KOLHATKAR: Mr. Balwani, I think we don't have any further questions for you at this time.

However, we may call you again to testify in this investigation. Should it be necessary, we'll contact your counsel.

We really do appreciate you taking the time to -- to answer our questions over the past -- over the several days that you've been with us. So -- so thank you for that.

And we're off the record at 4:22 p.m.

THE WITNESS: Thank you.

THE VIDEO OPERATOR: This marks the end of DVD No. 3 and today's testimony.

The time on the video monitor is 4:21.

(Whereupon, at 4:21 p.m., the examination was concluded.)

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PROOFREADER'S CERTIFICATE

In the Matter of: THERANOS, INC.
Witness: Ramesh "Sunny" Bulwani
File Number: SF-04030-A
Date: Thursday, September 7, 2017
Location: San Francisco, California

This is to certify that I, (b)(6); (b)(7)(C)
(the undersigned) do hereby swear and affirm that the attached proceedings before the U.S. Securities and Exchange Commission were held according to the record, and that this is the original, complete, true and accurate transcript, which has been compared with the reporting or recording accomplished at the hearing.

_____ _____
(Proofreader's Name) (Date)