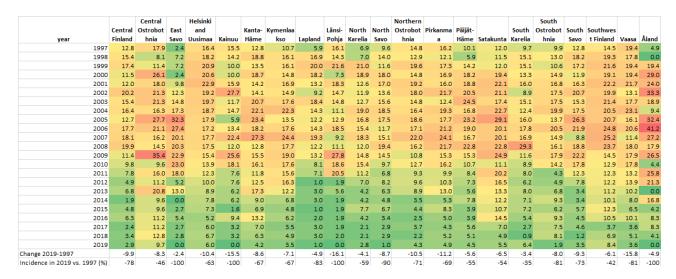
## Supplementary Table 1. Non-surgical treatment incidence per 10<sup>5</sup> person-years

		Central		Helsinki								Northern					South				
	Central	Ostrobot	East	and			Kymenlaa		Länsi-	North	North	Ostrobot	Pirkanma			South	Ostrobot		Southwes		
year	Finland	hnia	Savo		Kainuu	Häme	kso	Lapland	Pohja	Karelia	Savo	hnia	a		Satakunta		hnia	Savo	t Finland		Åland
1997	3.2	6.5	2.4	4.3	1.4	2.3	3.3	8.9	3.6	8.3	1.4	3.6		5.3	1.6		3.1	5.3	2.8	1.6	9.9
1998	5.3	22.8	0.0	8.5	7.1	8.3	5.4	13.9	5.4	8.4	10.6	6.8	3.7	13.6	3.1	5.3	5.0	6.4	6.9	5.4	14.7
1999	5.3	16.3	0.0		10.0	7.5	4.7	9.0	3.6	4.2	7.3	1.8		7.1	4.7	6.2	3.7	1.1	7.7	5.4	19.4
2000	10.0	13.1	9.7	9.9	1.4	7.5	5.4	2.0	7.3	4.2	6.8	12.0	7.3	8.8	5.2	8.9	5.0	5.4	8.7	4.6	0.0
2001	6.8	13.1	9.8	8.0	11.6	6.7	10.1	11.2	3.7	5.6	7.3	5.9		8.2	6.3	4.4	0.6	6.5	6.5	3.1	9.6
2002	15.0	13.1	14.7	9.8	13.1	8.2	3.4	7.2	7.4	9.8	8.8	8.7	9.2	9.4	3.7	4.4	5.6	1.1	5.4	5.4	4.8
2003	6.7	8.2	4.9	8.0	11.7	6.7	6.8	5.1		9.8	4.9	7.9	4.6	5.8	5.3	8.0	2.5	2.2	7.2	7.7	4.7
2004	11.8	14.7	14.8	9.3	7.4	8.8	11.5	9.2	5.5	10.5	9.2	5.5		7.6	11.6	6.2	6.2	6.6	8.5	7.7	9.4
2005	14.2	3.3	14.9	12.5	16.3	13.9	5.4	5.1	1.8	14.7	10.7	7.8		12.2	12.7	15.1	8.1	8.8	10.1	6.9	4.6
2006	11.6	14.6	5.0	14.6	23.8	12.3	11.5	13.3	3.7	11.9	8.8	9.1	9.6	8.7	12.2	8.0	8.7	3.3	6.9	18.3	4.6
2007	14.1	16.2	15.1	13.5	12.0	16.5	8.1	11.2	5.5	11.2	4.9	12.0		6.9	9.5	14.2	9.9	11.0	9.2	11.4	13.6
2008	24.4	14.5	22.8	18.0	10.5	20.6	15.6	13.2	5.6	9.1	13.6	15.2	11.1	16.0	8.5	16.0	11.8	7.7	14.1	11.3	9.0
2009	16.8	16.1	15.3	16.8	13.5	17.6	12.2	12.2	7.4	4.9	12.1	19.3	14.1	15.3	11.7	10.7	17.3	12.2	17.6	8.9	17.7
2010	16.2	20.9	28.2	15.6	16.6	16.8	12.9	16.2	11.1	11.9	8.2	20.5	13.1	17.5	12.2	13.3	8.0	11.1	18.0	13.3	13.1
2011	22.5	11.2	28.3	22.8	21.3	18.8	9.5	20.2	16.8	28.1	24.7	21.9	19.4	21.4	23.4	23.1	20.4	15.6	22.3	13.2	17.2
2012	17.1	17.6	18.1	28.8	30.6	25.6	19.7	46.4	43.0	33.7	26.1	34.2	21.6	20.2	17.5	41.0	25.9	30.2	18.1	23.4	29.9
2013	32.0	38.3	31.3	30.4	24.6	22.8	23.1	31.2	33.9	36.5	29.9	31.1	24.9	21.8	31.4	36.5	32.1	24.7	25.4	32.0	33.9
2014	32.5	44.7	28.9	27.1	27.9	24.9	29.3	37.3	28.5	37.2	28.4	28.4	29.4	26.3	28.2	25.0	29.0	31.5	31.0	21.7	54.7
2015	34.3	23.9	34.5	25.5	25.0	32.5	33.6	38.3	30.6	24.6	24.0	26.4	27.4	28.6	23.0		26.0	33.9	23.9	21.7	12.5
2016	45.8	22.3	48.2	27.2	25.2	31.9	36.5	25.2	25.0	26.1	23.6	30.0		32.5	21.4	20.7	22.4	31.8	30.0	26.0	33.3
2017	34.1	41.6	37.9	26.7	31.8	22.3	21.5	27.3	38.8	32.5	26.0	26.1	27.0	28.6	29.6	35.2	29.9	40.1	27.9	33.2	28.9
2018	25.4	40.1	27.6	26.8	30.5	37.7	30.1	30.3	29.4	34.1	30.4	26.9	25.7	39.3	27.6	28.1	41.9	26.6	23.5	36.9	49.1
2019	35.4	45.1	36.7	25.1	35.6	28.7	31.8	29.4	37.6	32.1	31.0	24.0		26.5	22.9	35.5	32.7	38.6	22.9	27.4	32.6
Change 2019-1997	32.2	38.6	34.3	20.8	34.2	26.4	28.5	20.4	34.0	23.7	29.6	20.4	21.6	21.1	21.3	32.9	29.6	33.3	20.2	25.9	22.7
Incidence in 2019 vs. 1997 (%)	1004	592	1440	481	2432	1169	853	230	954	285	2043	564	905	396	1366	1237	955	623	724	1666	230

## Supplementary Table 2. Surgical treatment incidence per 10<sup>5</sup> person-years



## Supplement Table 3. Total incidence per 10<sup>5</sup> person-years

		Central		Helsinki								Northern					South				
	Central	Ostrobot	East	and			Kymenlaa		Länsi-			Ostrobot	Pirkanma			South	Ostrobot				
year	Finland	hnia	Savo	Uusimaa	Kainuu	Häme	kso	Lapland	Pohja	Karelia	Savo	hnia	a		Satakunta	*****	hnia				Aland
1997	16.0		4.8		16.9	15.1	14.0	14.8	19.6	15.3	11.1	18.5	18.6	15.4	13.5	12.4	13.0	18.2	17.3	21.0	
1998	20.7	31.0	7.2		21.3	27.1	21.4	30.8	19.7	15.3	24.6	19.8	15.8	19.5	14.6	20.4	18.0	24.7	26.2	23.2	14.7
1999	22.7	27.7	7.2	29.5	19.9	21.0	20.8	29.0	25.3	25.1	18.9	21.4	23.8	21.2	16.7	21.3	14.3	18.3	29.3	24.8	
2000	21.5	39.2	12.2	30.5	11.5	26.2	20.2	20.2	14.5	23.1	24.8	26.8	24.1	27.1	24.6	22.2	19.9	17.3	27.8	24.0	
2001	18.7		19.6		27.5	20.9	27.0	24.4	21.9	18.2	24.3	25.1	22.9	27.0		20.4	17.5	22.8	28.7	24.7	33.7
2002	35.2	34.3	27.0		40.8	22.3	18.3	16.4	22.1	21.8	22.4	26.7	30.9	29.8		13.3	23.1	21.7	25.3	18.5	
2003	22.1		19.7	27.7	23.5	27.4	24.4	23.5	27.7	22.5	20.4	22.7	17.0	30.3	22.7	23.1	20.0	17.5	28.7	25.5	23.6
2004	28.1	31.1		28.0	22.1	30.9	33.9	23.5	16.6	29.5	27.7	21.8	26.9	24.4		18.7	26.2	24.1	29.1	30.8	18.7
2005	26.9			30.4	22.2	37.3	18.9	17.3	14.8	31.6	28.2	26.4	27.1	35.3	41.8	31.1	21.8	35.1	30.8	23.0	
2006	29.3	35.8	32.4	31.8	37.2	30.5	29.1	27.5	22.1	27.4	20.4	26.2	30.8	27.7	32.3	25.7	29.2	25.2	31.6	38.8	45.8
2007	32.1	32.4	35.1	31.2	34.4	43.8	32.6	30.5	14.8	29.5	19.9	33.9	32.0	23.5		31.1	24.8	19.8	34.3	22.7	40.8
2008	44.3	29.1	43.0		22.5	33.4	33.3	25.4	16.7	21.1	33.0	31.3	32.9	38.8		45.3	27.9	26.6	37.8	29.3	26.9
2009	28.2	51.6		32.1	39.1	33.1	31.2	25.3	35.3	19.7	26.7	30.1	29.5	30.7	36.6	22.2	35.3	34.4	32.1	26.8	
2010	26.1		51.2	29.5	34.8	32.9	30.5	24.3	29.7	27.4	17.9	33.1	29.2	28.3	23.3	22.2	22.2	28.9	30.9	31.1	17.5
2011	30.4	27.2	46.3		28.9	30.6	25.1	27.2	37.3	39.3	31.4	31.2	29.3	29.8	43.5	31.2	24.7	27.9	34.6	26.5	43.1
2012	21.9	28.8	23.3	38.8	38.2	38.1	36.0	47.4	44.9	40.7	34.3	43.8	31.9	27.5	34.0	47.2	30.8	38.1	30.3	37.3	51.2
2013	38.8	59.1	44.3		30.8	40.1	35.4	34.3	39.5	40.7	36.1	40.0		27.4	44.6	44.5	38.8	28.1	36.5	42.2	33.9
2014	34.4	54.3			34.1	33.9	36.2	40.3	30.3	41.4	33.2	31.9	34.7	34.2	40.5	32.1	38.3	34.9	41.1		71.5
2015	39.2	33.5	37.1	32.7	26.6	39.4	38.4	39.3	32.5	32.3	30.8	30.8	35.7	32.5	33.6	31.3	32.2	39.6	36.2	28.1	16.7
2016	52.0		53.5		34.6	45.0	42.7	27.3	26.9	30.3	26.9	32.5	33.4	36.4	35.9	26.1	31.7	36.4	40.5	36.0	
2017	36.5	52.8	40.6		34.9	29.2	24.9	30.3	40.7	34.6	28.9	29.9		34.2	36.6	37.9	37.4	44.7	31.6	36.8	
2018	28.8	53.0			33.7	44.0	35.0	33.4	31.3	36.2	33.3	29.1	30.9	44.4		29.0	50.1	27.7	30.5	41.9	
2019	38.3	54.8		31.1	35.6	32.9	35.3	30.4	37.6	34.9	32.0	28.3	28.9	31.0		41.9	34.5	42.1	31.3	31.0	
Change 2019-1997	22.2	30.3	31.9		18.7	17.8	21.3	15.5	18.0	19.6	20.9	9.9		15.6		29.5	21.5	23.9	14.1	10.1	17.8
Incidence in 2019 vs. 1997 (%)	139	124	670	50	111	118	152	105	92	129	188	54	56	101	109	238	166	132	82	48	120

## Supplement Table 4. Non-surgical proportion

		Central		Helsinki								Northern					South				
		Ostrobot	East	and			Kymenlaa		Länsi-		North	Ostrobot				South			Southwes		
year	Finland	hnia	Savo		Kainuu	Häme	kso	Lapland	Pohja	Karelia	Savo	hnia	a		Satakunta		hnia	Savo	t Finland	Vaasa	Åland
1997	20	27	50	21	8	15	24		18			20		35	12	21	24	29	16	7	67
1998	26	74	0		33	31	25		27	55	43	35		70	21	26	28	26	26	23	100
1999	23	59	0		50	36	23	31	14	17	38	8		33	28	29	26	6		22	
2000	46	33	80		13			10		18		45		33	21	40	25	31	31	19	0
2001	36		50	26	42	32	38		17		30	24		30	22	22	4	29	23	13	29
2002	43	38	55	34	32	37	19		33		39	32	30	31	15	33	24	5		29	13
2003	30		25	29	50	24	28	22	47	44	24	35		19	23	35	13	13	25	30	20
2004	42	47	46	33	33	29	34		33			25		31	34	33	24	27	29	25	50
2005	53		32	41	73	37	29		13		38	29		34	30	49	37	25	33	30	13
2006	40		15	46	64				17		43	35		31	38	31	30	13	22		10
2007	44	50	43	43	35	38	25		38		24	35		29	32	46	40	56	27	50	33
2008	55	50	53	51	47	62	47	52	33		41	48		41	27	35	42	29		38	33
2009	60	31	40	52	35		39		21			64		50	32	48	49	35	55	33	40
2010	62	68	55	53	48	51	42	67	38	44	46	62	45	62	52	60	36	38	58	43	75
2011	74	41	61	65	74	61	38	74	45	71	78	70		72	54	74	83	56	64	50	40
2012	78	61	78	74	80	67	55	98	96		76	78		73	52	87	84	79		63	58
2013	83	65	71	77	80	57	65	91	86	90	83	78		80	70	82	83	88	69	76	
2014	94	82	100	78	82	73	81	93	94	90		89		77	70	78	76	90		73	76
2015	88	71	93	78	94	82	88	97	94	76	78	86	77	88	68	77	81	86	66	77	75
2016	88	67	90	84	73	71	85	93	93	86	88	92	85	89	60	79	71	88	74	72	80
2017	93	79	93	82	91	76	86	90	95	94	90	88	86	84	81	93	80	90	88	90	78
2018	88	76	91	80	90	86	86	91	94	94	91	93		89	85	97	84	96		88	92
2019	93	82	100	81	100	87	90		100	92	97	85		85	81	85	95	92	73	88	100
Change 2019-1997 (%-points)	73		50		92	72			82		84	65		51	69	63	71	62	57	81	33
Proportion in 2019 vs. 1997 (%)	363	209	100	288	1100	482	278	61	450	68	643	332	545	147	600	296	297	212	354	1093	50