Supplementary Information

Biodegradable Polymeric Nanoparticles Show High Efficacy and Specificity at DNA Delivery to Human Glioblastoma *In Vitro* and *In Vivo*

Hugo Guerrero-Cázares,^{a,\ddagger} Stephany Y. Tzeng^{b,c,\ddagger}, Noah P. Young^{b,c}, Ameer O. Abutaleb^a,

Alfredo Quiñones-Hinojosa,^{a,d,*} Jordan J. Green^{a,b,c,d,e,*}

Department of Neurosurgery^a, Biomedical Engineering^b, Translational Tissue Engineering^c

Center, Institute for Nanobiotechnology^d, Ophthalmology^e, Johns Hopkins University School of

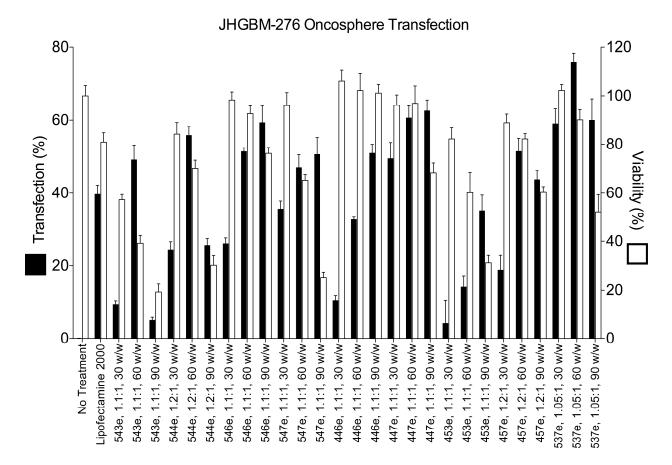
Medicine, 400 North Broadway, Baltimore, MD 21231

[‡] These authors contributed equally.

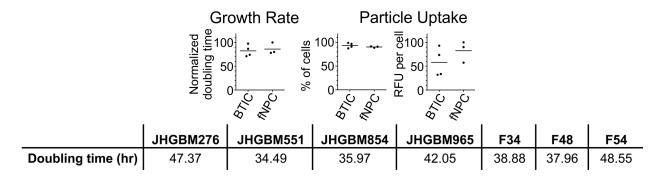
Corresponding authors:

Alfredo Quiñones-Hinojosa, 1550 Orleans Street, CRB II, Room 247, Baltimore, MD 21231, Tel.: +1 410 502 2869, e-mail: aquinon2@jhmi.edu

Jordan J. Green, 400 North Broadway, Smith Building, Room 5017, Baltimore, MD 21231 Tel.:+1 410 614 9113, e-mail: green@jhu.edu



Supplemental Figure S1. Top PBAEs for transfection of JHGBM551 cells are also effective in other primary human cultures. JHGBM-276 oncospheres were transfected with the same ether-purified polymers as JHGBM-551.



Supplemental Figure S2. Mechanism of specificity for GBM cells. The growth rate of the primary cultures are not statistically significantly different between BTICs and fNPCs (two-tailed Student's t-test, p>0.05). Particle uptake measured by the fraction of cells with internalized fluorescent particles (%) or the amount of fluorescent particles internalized (RFU, relative fluorescence units) was also not significantly different between BTICs and fNPCs.