

Supplementary materials

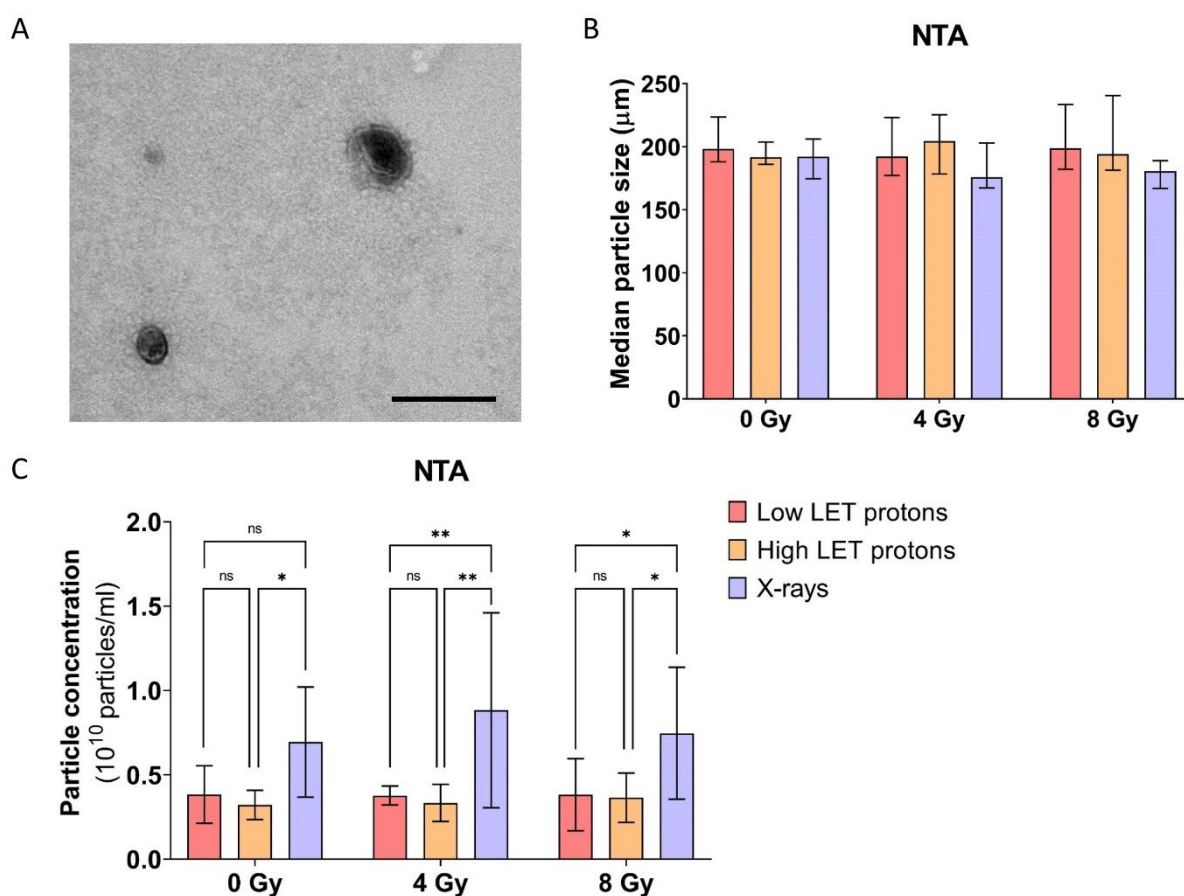


Figure S1. EV characterisation by particle concentration, size, and morphology using (A) negative staining in transmission electron microscopy, nanoparticle tracking analysis characterising the particles based on (B) median size and (C) particle concentration. Data are presented as mean \pm 95 % CI. Asterisks are shown between groups that demonstrate statistically significant differences through two-way ANOVA. * < 0.05, ** \leq 0.01, ns = not significant. Scale bar is 200 nm.

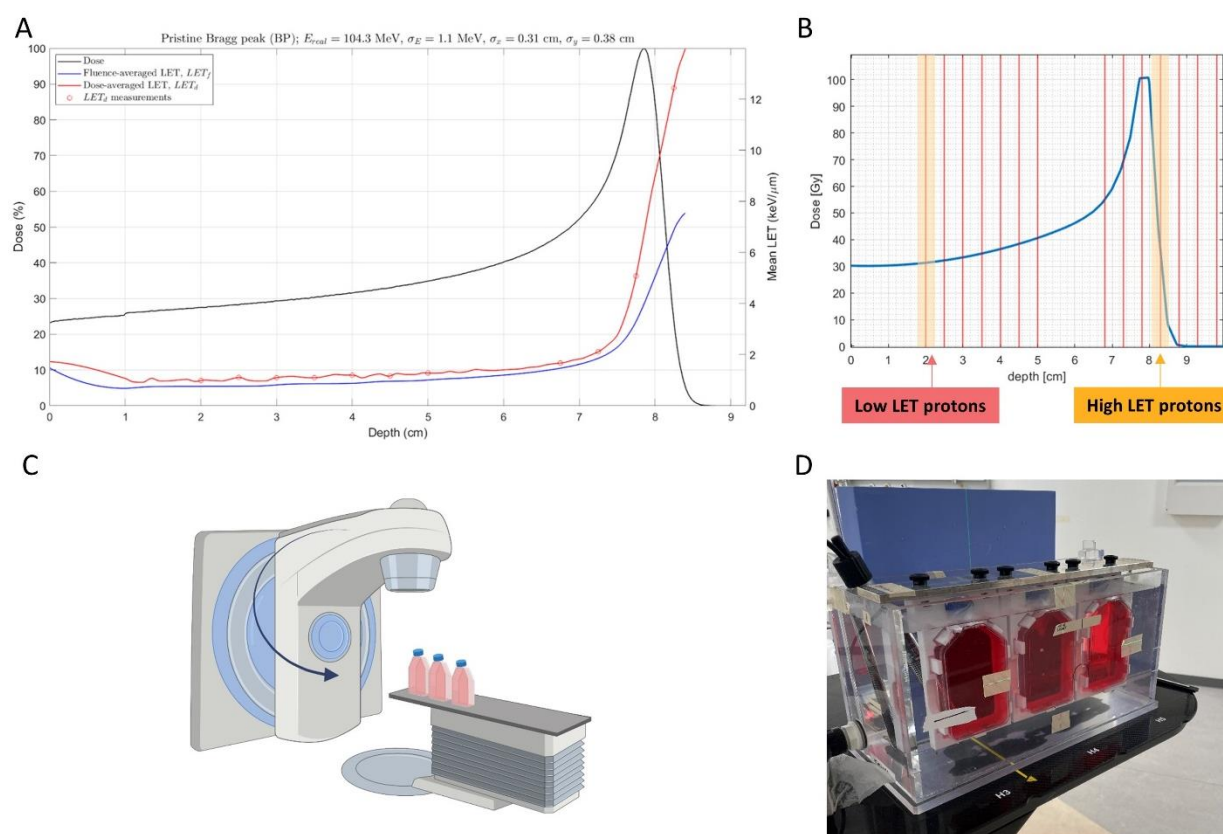


Figure S2. (A) Bragg peak in our experimental setup with dose (black line) and linear energy transfer (LET) (red line) where the LET increases at the distal end of the Bragg peak. (B) The two different chosen positions for proton irradiations shown in the Bragg peak from A. Position 1 is in the entrance plateau of the pristine Bragg peak where the LET is approximately 1 keV/μm, while position 2 is at the distal end of the Bragg peak where the LET is approximately 12.4 keV/μm. See Table S1 for simulated LET-values. (C) X-irradiation set-up. (D) Proton irradiation set-up.

Table S1. Simulated LET-values. Chosen positions for irradiation was at depth 2 cm, and 8.25 cm.

Depth (cm)	LET _d (keV/μm)
2	0.9878
2.5	1.1082
3	1.1007
3.5	1.1011
4	1.1977
4.5	1.1675
5	1.2812
6.75	1.6725
7.25	2.1148
7.75	5.0812
8.25	12.4439