Supplementary Figure Legends

SUPPLEMENTARY FIGURE 1: Set up for proton irradiation. A phantom tank was filled with sterile normal saline (A). The phantom was positioned at isocenter. The custom slide holder (B) was inserted in the saline phantom perpendicular to the axis of a laterally directed proton nozzle (C). The slide holder was then attached via a movable arm (D) to an electronic scanner (E) that allowed the slide holder to be shifted distally and proximally in 1 millimeter increments.

SUPPLEMENTARY FIGURE 2: Set up for photon irradiation. A water tank (A) was filled with normal saline. Solid water phantom blocks (B) were used to bring the surface of the cultured microcscope slides to isocenter of linear accelerated (C) at a depth of 10 cm.