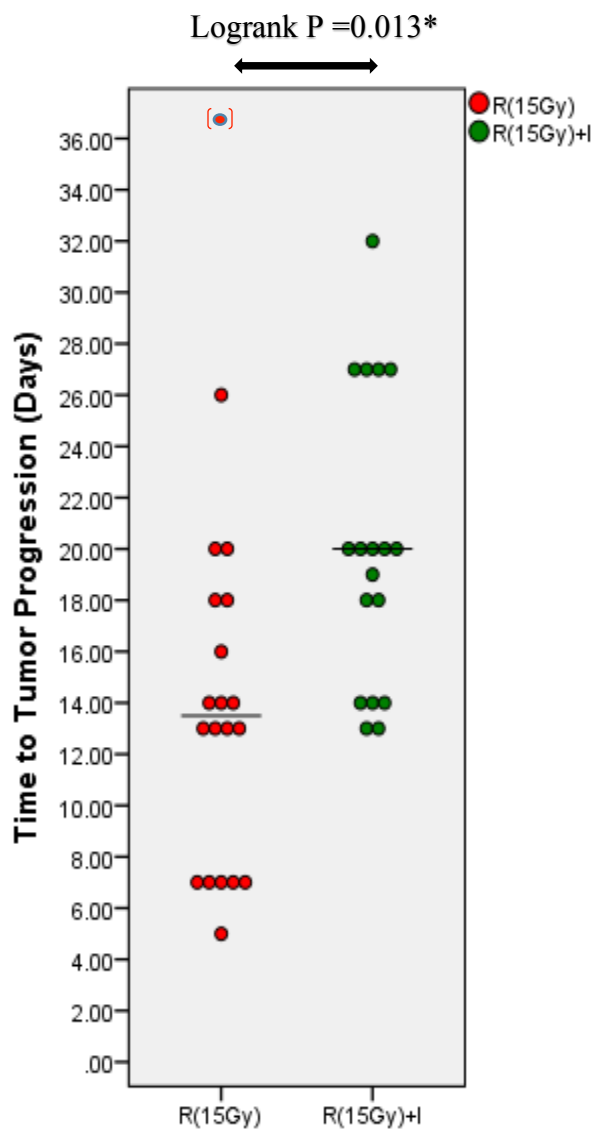
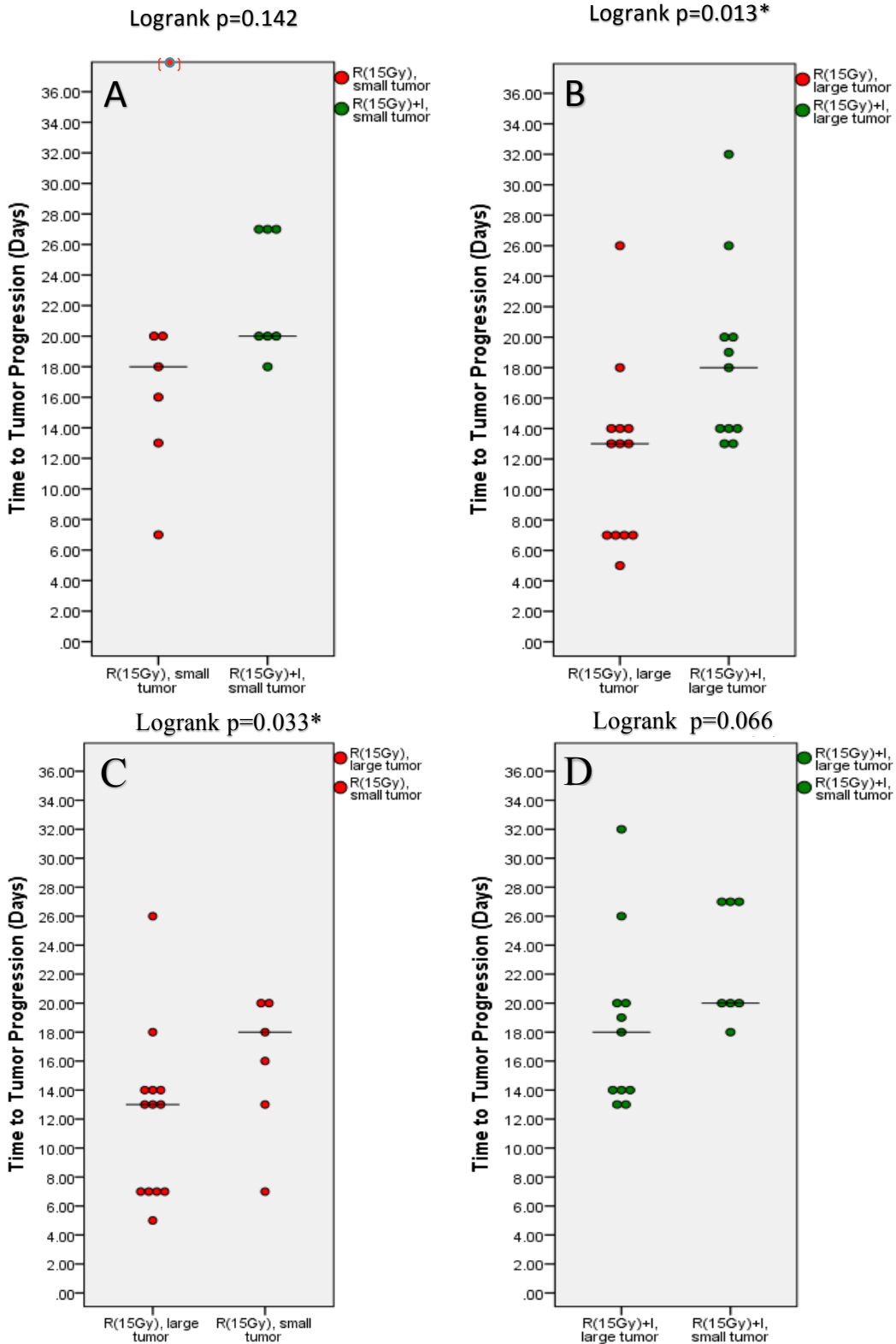


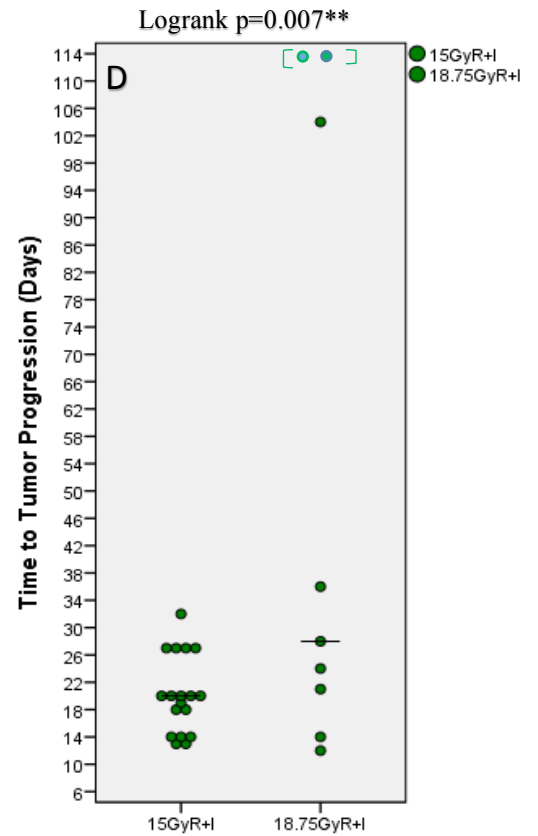
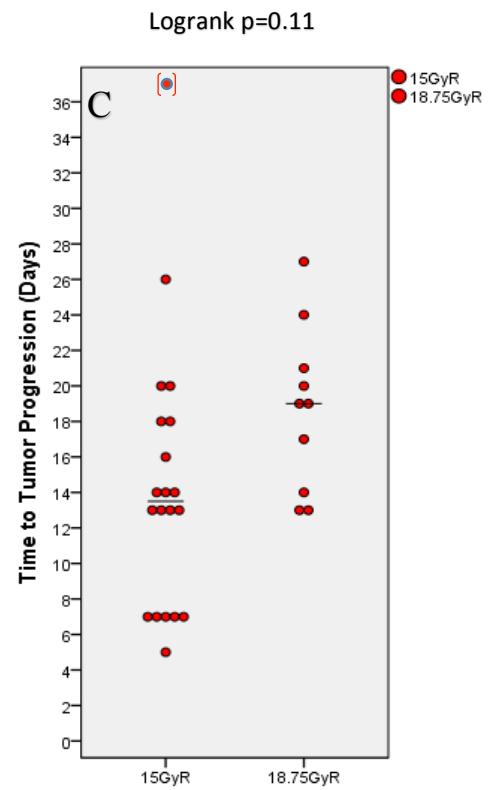
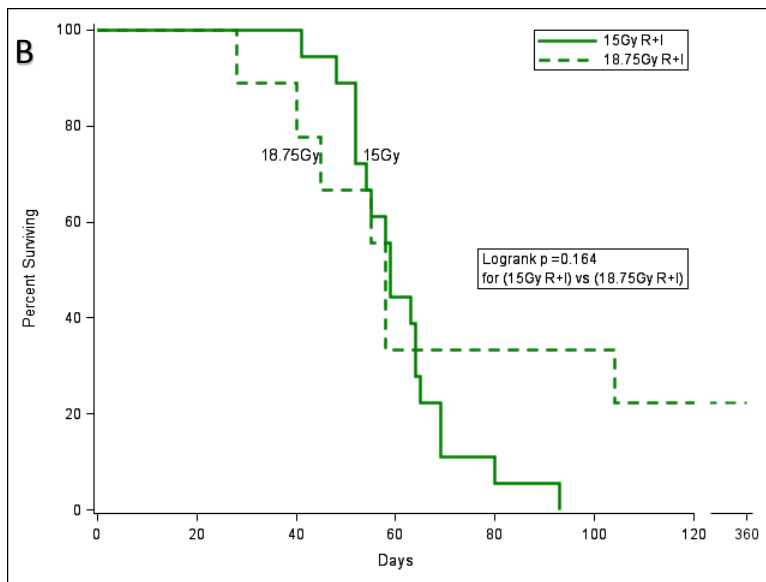
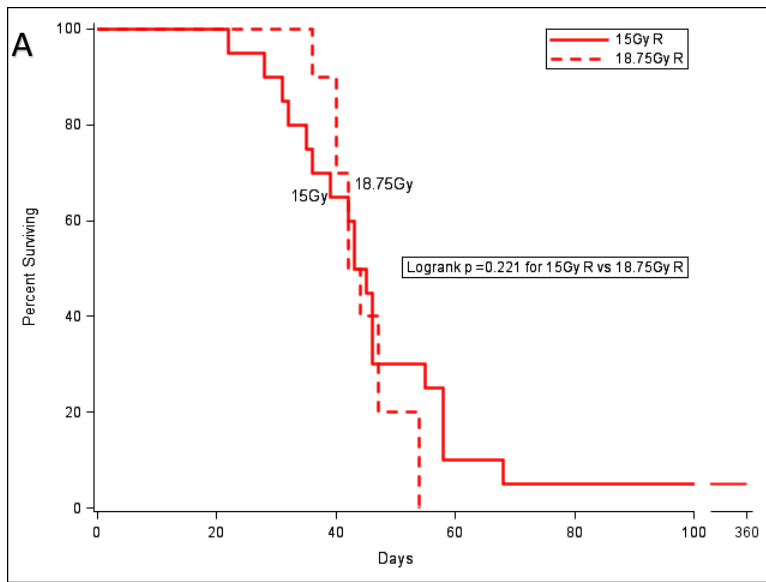
**Supplementary Figure S1. Comparisons of the survival plots of *RT-only*, *RT plus IT*, and *RT-only* vs *RT plus IT* for small [S] ( $<10^6$  photons/min) and large [L] ( $>10^6$  photons/min) tumors: *RT plus IT* is more effective than *RT-only* for large tumors; *RT plus IT* applied to small tumors is more effective than *RT plus IT* applied to large tumors. S1A. 15Gy *RT-only* (Dashed Red) vs 15Gy *RT plus IT* (Solid Green) for large tumors. S1B. 15Gy *RT-only* (Solid Red) vs 15Gy *RT plus IT* (Dashed Green) for small tumors. S1C. 15Gy *RT-only*, large tumors (Dashed Red) vs 15Gy *RT-only*, small tumors (Solid Red). S1D. 15Gy *RT plus IT*, large tumors (Solid Green) vs 15Gy *RT plus IT*, small tumors (Dashed Green).**



**Supplementary Figure S2. Dot plots of time to tumor progression for the data shown in Figure 1.** Time to tumor progression is defined as the number of days (D) from the time of tumor irradiation (D8) to the time the tumors begin to inexorably progress. 15Gy *RT-only* (Red Dots) vs 15Gy *RT plus IT* (Green Dots) (All tumors).



**Supplementary Figure S3. Comparisons of time to tumor progression of large ( $>10^6$  photons/min) and small ( $<10^6$  photons/min) tumors with respect to *RT-only* and *RT plus IT*: small tumors treated with *RT plus IT* produce the longest TTPs. S3A. 15Gy *RT-only* (Red) vs 15Gy *RT plus IT* (Green) for small tumors. S3B. 15Gy *RT-only* (Red) vs 15Gy *RT + IT* (Green) for large tumors. S3C. 15Gy *RT-only*, large tumors (Red) vs 15Gy *RT-only*, small tumors (Red). S3D. 15Gy *RT plus IT*, large tumors (Green) vs 15Gy *RT plus IT*, small tumors (Green).**



**Supplementary Figure S4. Comparisons of survival (A,B) and time to tumor progression (C,D) for *RT-only* (Red) and *RT plus IT* (Green) treated mice at 15 Gy and 18.75 Gy: The higher radiation dose increases TTP and long-term survival for a subset of mice also treated with immunotherapy. S4A. 15Gy *RT-only* (Red) vs 18.75Gy *RT-only* (Red) for all tumors. S4B. 15Gy *RT plus IT* (Green) vs 18.75Gy *RT plus IT* (Green) for all tumors. S4C. 15Gy *RT-only* (Red) vs 18.75Gy *RT-only* (Red) for all tumors. S4D. 15Gy *RT plus IT* (Green) vs 18.75Gy *RT plus IT* (Green) for all tumors.**