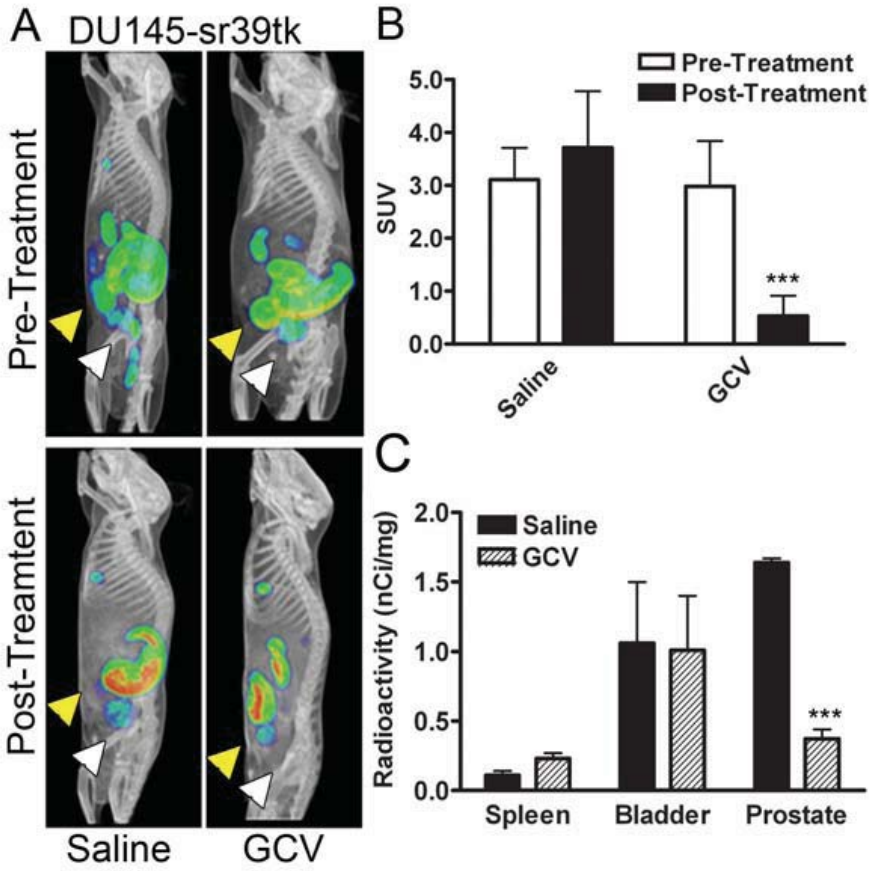
Supplemental Figure 1



Supplemental Figure 1: Gancyclovir-mediated ablation of sr39tk expression in orthotopic DU145 tumors confirms tumor specific signal. Mice were implanted orthotopically with DU145 cells stably expressing sr39tk, then treated with saline (n=5) or with Gancyclovir (GCV, n=5) to ablate sr39tk expression. All PET images were obtained using 200 µCi ^{18}F-FHBG i.v. and 3 hour tracer uptake with a 1 mL saline injection i.p. **A.** At day 21 post-implant, mice were imaged for pre-treatment tumor signals, and started on either Saline or 65 mg/kg GCV i.p. per day. Treatment was continued daily for 7 days. On day 28, mice were imaged for post-treatment tumor signals. Yellow arrows indicate bladder position and white arrows indicate tumor position. **B.** Quantification of the pre- and post-treatment ^{18}F-FHBG uptake in the orthotopic tumor. SUV: Standard Uptake Value. **C.** *Ex vivo* quantification of ^{18}F-FHBG uptake in the spleen, bladder, and prostate tumors. Units are nanocuries per milligram of assayed tissue. For panels b and c, p-values were obtained by Student's Two-Tailed T-Test, with the sr39tk/ GCV treated group compared to the sr39tk/Saline group. *** indicates p-value<0.001.