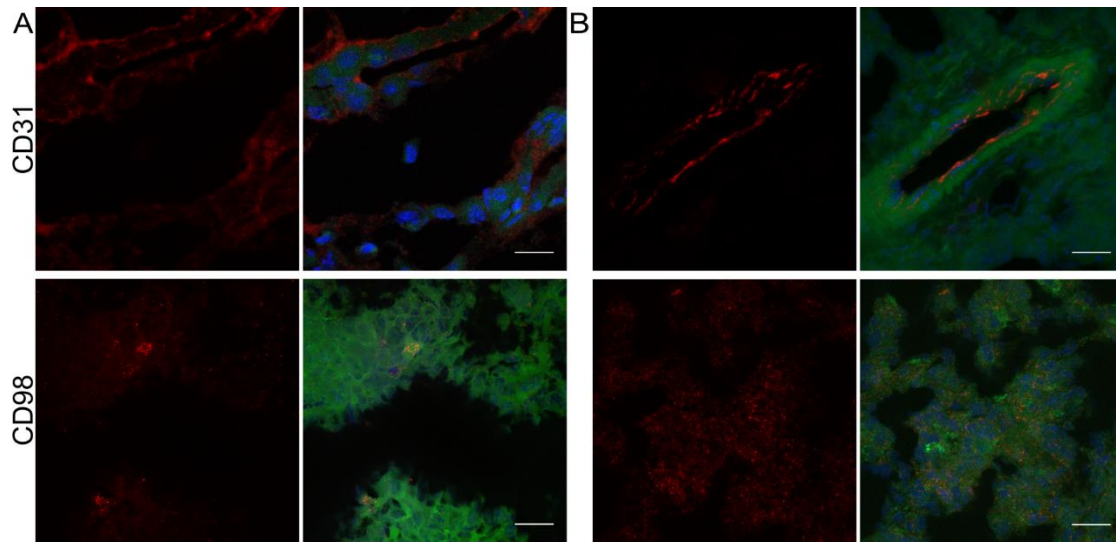**SUPPLEMENTAL FIGURE 1**: Distribution of ^{18}F-FDOPA and ^{18}F-FDG uptake metrics during longitudinal treatment and imaging. (A) TACs for ^{18}F-FDOPA (left) and ^{18}F-FDG (right), with statistical significance calculated with 2-way ANOVA with repeated measures and Bonferroni comparisons post-test. (B) TLA (left) and TLG (right) were calculated for each week, as were (C) SUV$_{Max}$ and (D) total uptake from ^{18}F-FDOPA and ^{18}F-FDG TACs. Time points (weeks 1 and 2) were relative to pre-treatment baseline (week 3 post tumor implantation). Statistical significance for the individual comparisons was calculated using 1-way ANOVA with Tukey post-hoc test (*$p<0.05$, **$p<0.01$, ***$p<0.001$).

SUPPLEMENTAL FIGURE 2: Immunohistochemistry of CD31 (top) and CD98 (bottom) for representative

(A) untreated and (B) treated tumors with initialization of melphalan therapy at week 2 post tumor

implantation. Expression for each stain was visualized as a maximum intensity projection (63X

magnification; 20μm scale bar) separately and as a composite with GFP (green) and DAPI nuclear stain

(blue).