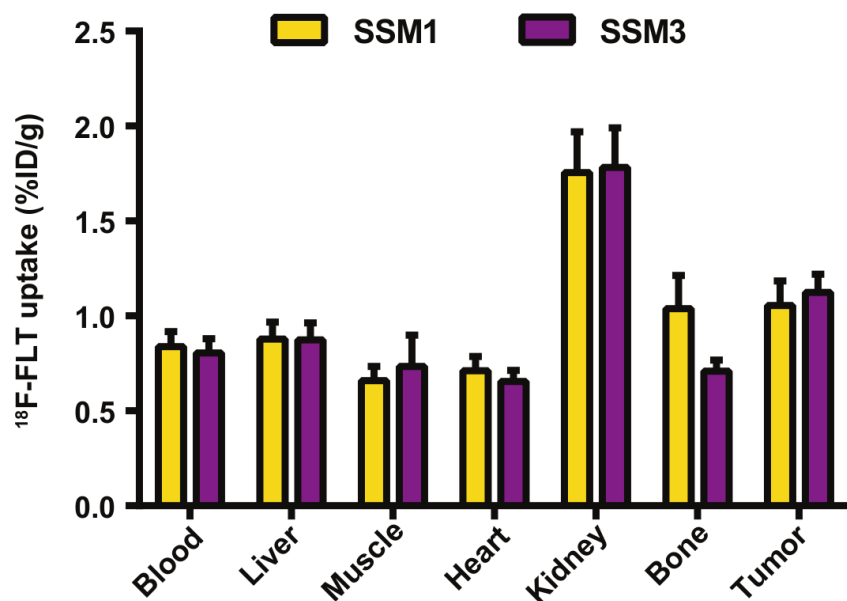


**Supplemental Figure 1:  $^{18}\text{F}$ -FLT biodistribution normalized to mouse weight.**

Male and female (A) 129S6/SvEv, (B) athymic nude, (C) and BALB/c mice were sacrificed 1 h and 2 h following injection of 0.74-0.89 MBq (20-24  $\mu\text{Ci}$ )  $^{18}\text{F}$ -FLT (n=5 129S6/SvEv; n=5 athymic nude; n=4 BALB/c per time point). Tissues were harvested, weighed, and radioactivity

was measured by gamma counting. Percent injected dose/gram (%ID/g) of each tissue type was calculated and normalized to mouse weight.



**Supplemental Figure 2: <sup>18</sup>F-FLT biodistribution in STAT1<sup>-/-</sup> tumor bearing female mice.**

Mice bearing SSM1 tumors (n=4) or SSM3 tumors (n=4) were sacrificed 2 h after injection of 0.85 MBq (23  $\mu$ Ci) <sup>18</sup>F-FLT. Tissues were harvested, weighed, and radioactivity was measured by gamma counting. Percent injected dose/gram (%ID/g) of each tissue type was calculated.