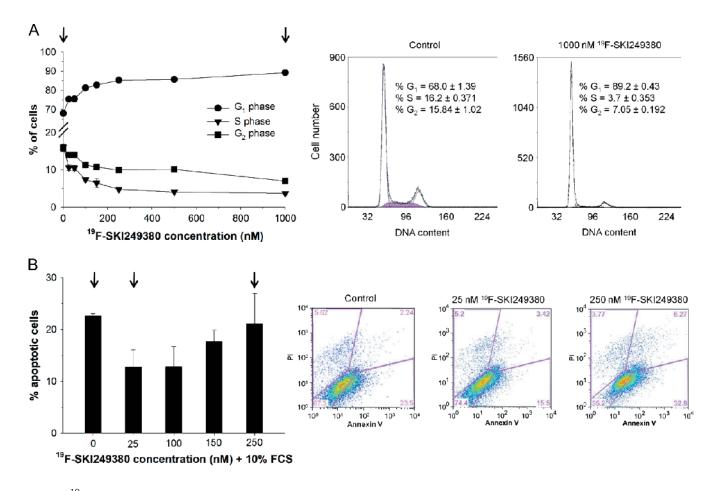
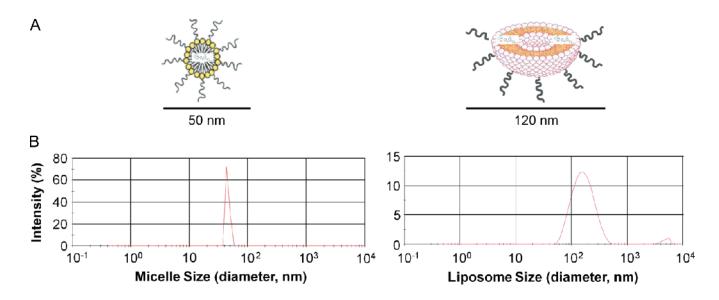


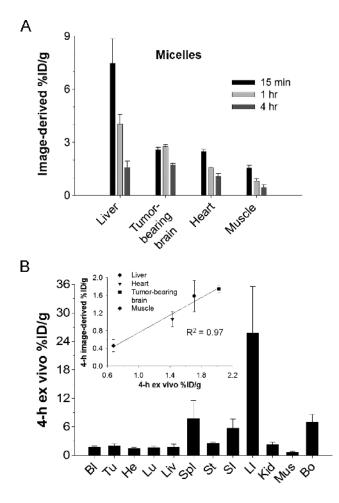
**Figure W1.** PDGFB-driven mGBM cell survival and proliferation are inhibited by increasing concentrations of <sup>19</sup>F-SKI249380 and dasatinib. (A) Cell viability loss as a function of drug concentration in DMEM-HG media supplemented with 10% FCS. (B) Differences in viability and growth rate of mGBM cells incubated with <sup>19</sup>F-SKI249380 or dasatinib as a function of time at two different concentrations. (C) <sup>19</sup>F-SKI249380 reductions in the viability of mGBM cells initially quiescent (serum-deprived conditions) but subsequently induced by 10% FCS–supplemented media. (D) Same as in C but induced by 0.2% FCS and PDGF-BB supplementation. Control wells contain 0.2% FCS. Experiments performed in triplicate.



**Figure W2.** <sup>19</sup>F-SKI249380 promotes G<sub>1</sub> arrest, marked reductions in S phase (proliferative phase) activity, and increased apoptosis. (A) Percentage (%) of viable cells in the G<sub>1</sub>, S, and G<sub>2</sub> phases of the cell cycle as a function of <sup>19</sup>F-SKI249380 concentration. Representative histograms (arrows) are shown for cells under control (i.e., no drug) conditions and after incubation with 1  $\mu$ M <sup>19</sup>F-SKI249380. (B) Percentage of apoptotic cells as a function of <sup>19</sup>F-SKI249380 concentrations indicate percentage of apoptotic cells (lower right-hand corner). Experiments were performed in triplicate.



**Figure W3.** *In vitro* lipid formulations of <sup>18</sup>F-SKI249380 for PDGFR targeting and characterization. (A) Schematic of a representative micelle (left) and liposome (right). (B) Micelle (left) and liposome (right) size distribution by intensity.



**Figure W4.** MicroPET image–derived and *ex vivo*  $\gamma$ -counted biodistribution data following injection of glioma-bearing mice with micelle nanoformulations of <sup>18</sup>F-SKI249380. (A) Image-derived mean uptake values for organs/tissues in glioma mice at various times from 15 minutes to 4 hours after i.v. injection of micelle-encapsulated <sup>18</sup>F-SKI249380. (B) *Ex vivo* uptake values for  $\gamma$ -counted tissues/ organs acquired 4 hours after injection. Inset: Correlation of *in vivo* and *ex vivo* tissue %ID/g values at 4 hours p.i. Each bar represents mean  $\pm$  SD. BI, blood; Tu, tumor; He, heart; Lu, lung; Liv, liver; Spl, spleen; St, stomach; SI, small intestine; LI, large intestine; Kid, kidney; Mus, muscle; Bo, bone.