



Supplemental Figure 1. Complete co-registered image dataset for one stack of sequential tissue sections of a FaDu xenograft tumor: (A) ^{18}F -FLT autoradiogram; (B) ^{14}C -FDG autoradiogram; (C) Hoechst 33342 (blood flow); (D) DAPI (cell nuclei); (E) Hematoxylin and eosin (morphology); (F) Pimonidazole (hypoxia); (G) Bromodeoxyuridine (cell proliferation, exogenous marker); (H) Ki-67 (cell proliferation, endogenous marker); (I) CD31 (vasculature).