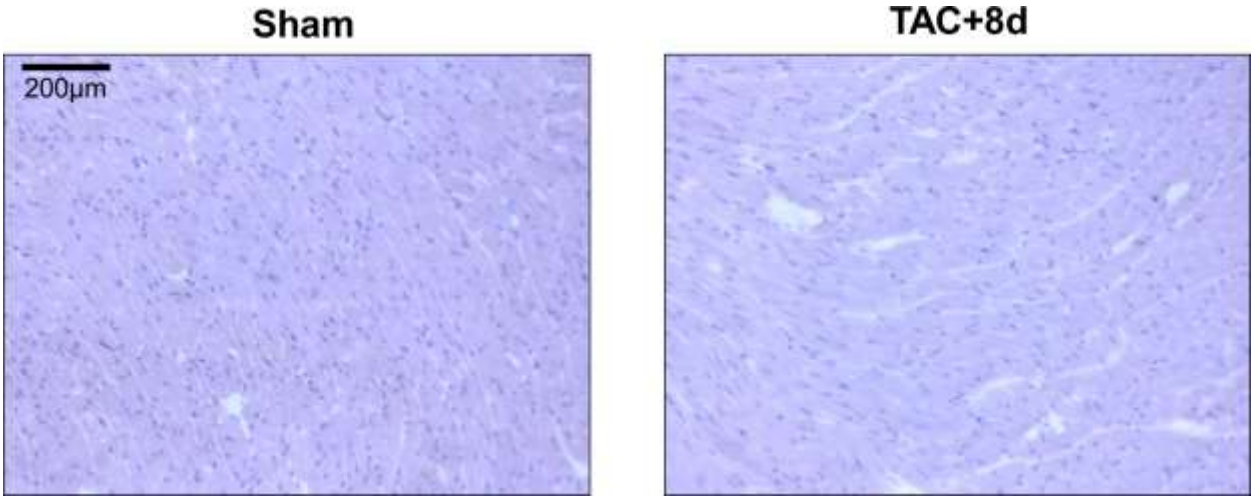
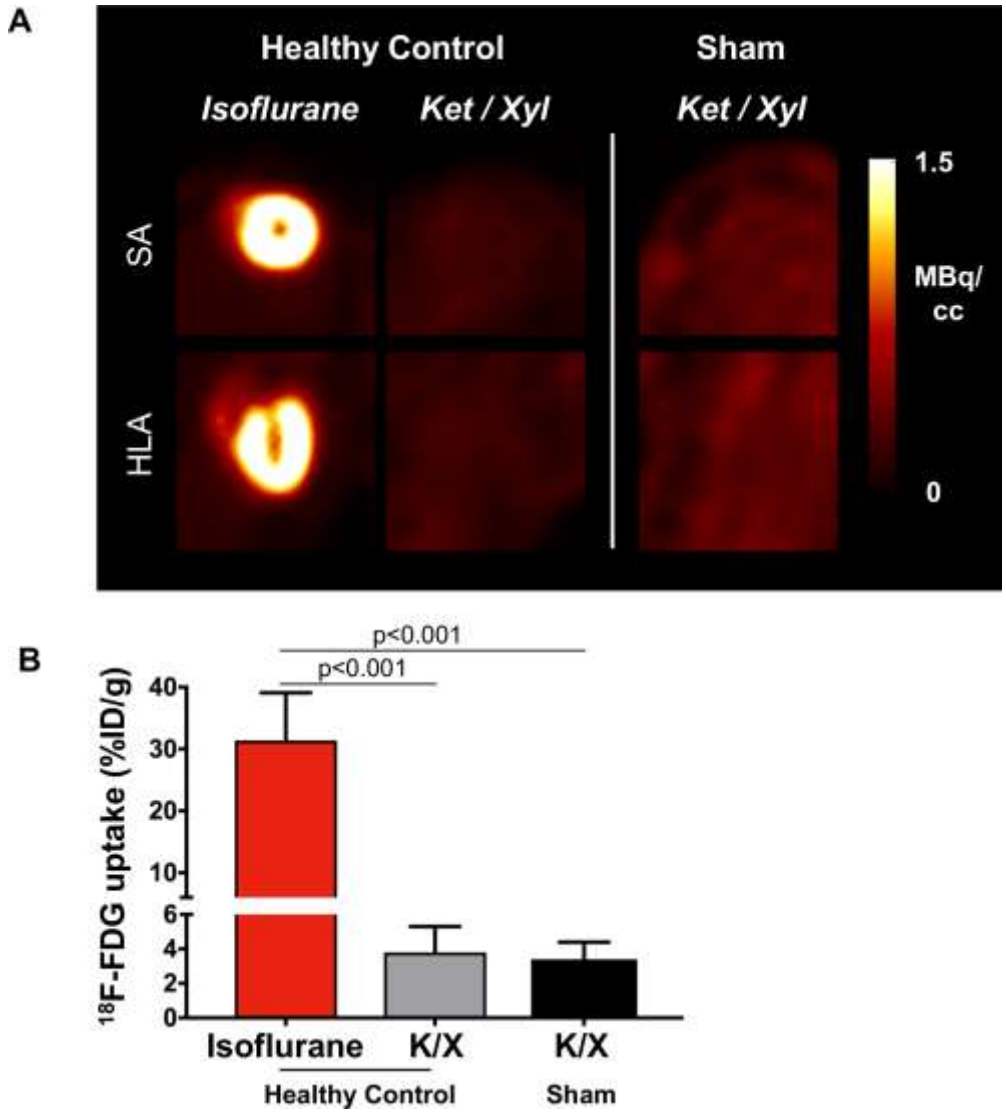
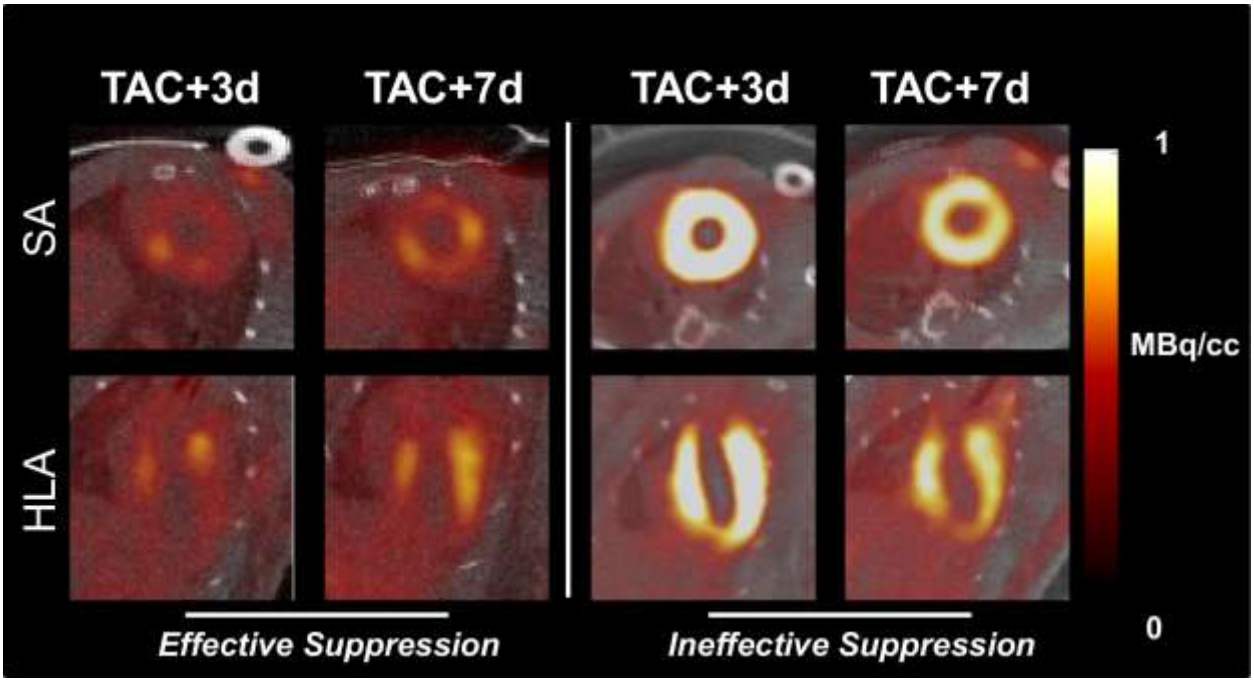



**Supplemental Figure 1.** Immunohistologic Ly6G+ staining of representative long axis sections demonstrates no change in Ly6G-positive cells in left ventricular myocardium 8d after TAC compared to sham.

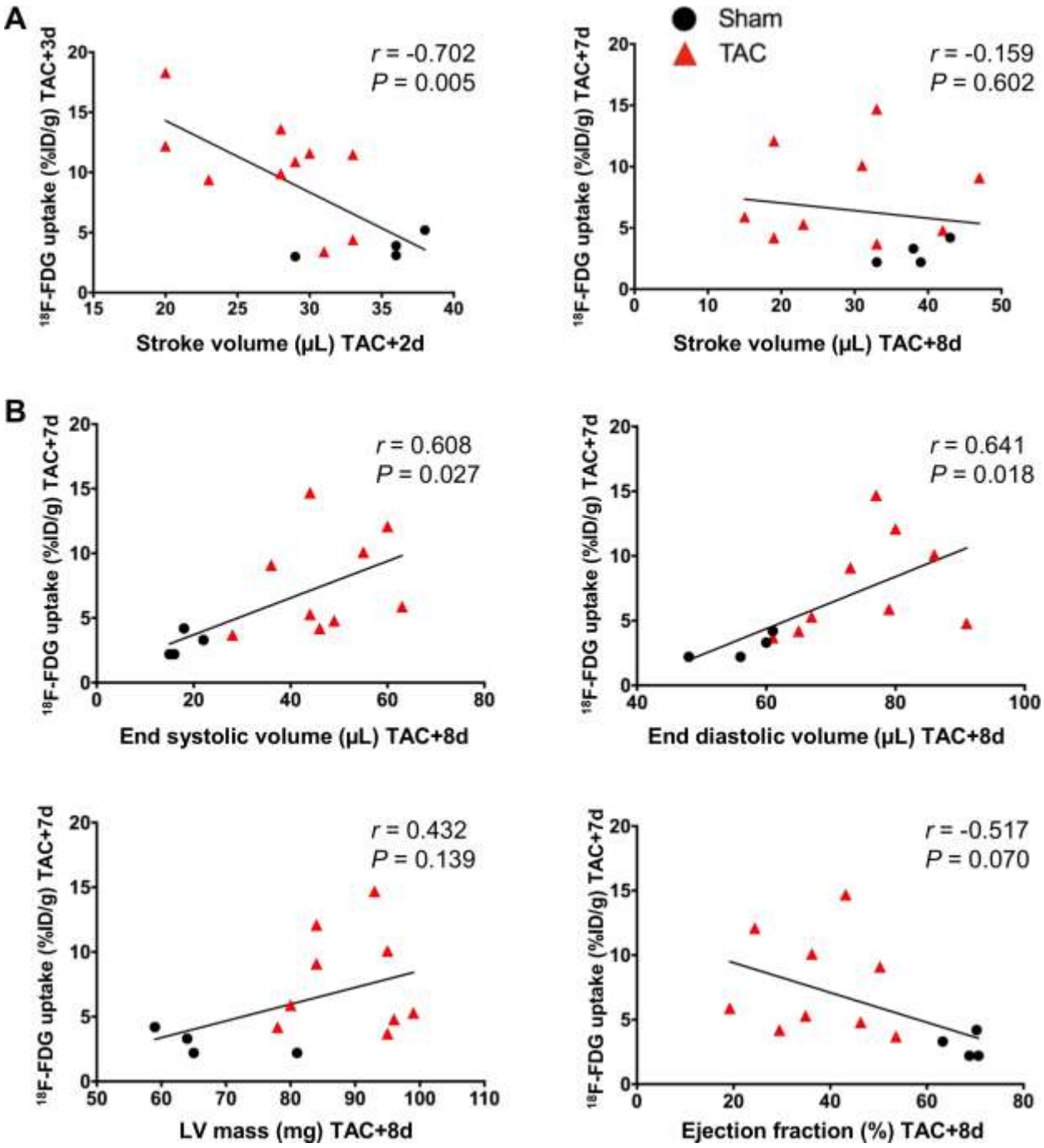



**Supplemental Figure 2.** Ketamine-xylazine (K/X) anesthesia suppresses cardiomyocyte glucose uptake effectively in healthy control and sham mice

(A) Robust $^{18}$F-FDG uptake in healthy myocardium under isoflurane anesthesia without K/X suppression. K/X suppression of cardiomyocyte $^{18}$F-FDG uptake lowered tracer uptake in healthy control mice to background levels, comparable to sham-operated animals. (B) Quantitative $^{18}$F-FDG signal shows elevation in healthy mice under isoflurane anesthesia (31.4±7.7 %ID/g, n=6). Signal under K/X anesthesia is comparable in healthy control mice (3.8 ±.1.5 %ID/g, n=5) and sham (3.4 ± 1.0 %ID/g, n=8).




**Supplemental Figure 3.** Cardiac functional parameter are not related to elevated $^{18}$F-FDG signal at 8d after surgery (A) Correlation of stroke volume (µL) at d2 and d8 to $^{18}$F-FDG signal. (B) Elevated left ventricular end systolic volumes (µL), end diastolic volumes (µL), left ventricular mass and ejection fraction (%) at 8d do not correlate to $^{18}$F-FDG signal at 7d.




**Supplemental Figure 4.** Ineffective K/X suppression of cardiomyocyte glucose uptake visualizes altered cardiac glucose metabolism in response to cardiac pressure overload

Diffuse $^{18}$F-FDG signal in SA and HLA images under effective K/X suppression of cardiomyocyte glucose uptake reflects global myocardial inflammation, whereas robust $^{18}$F-FDG signal in the LV shows insufficient suppression of cardiomyocyte glucose uptake.