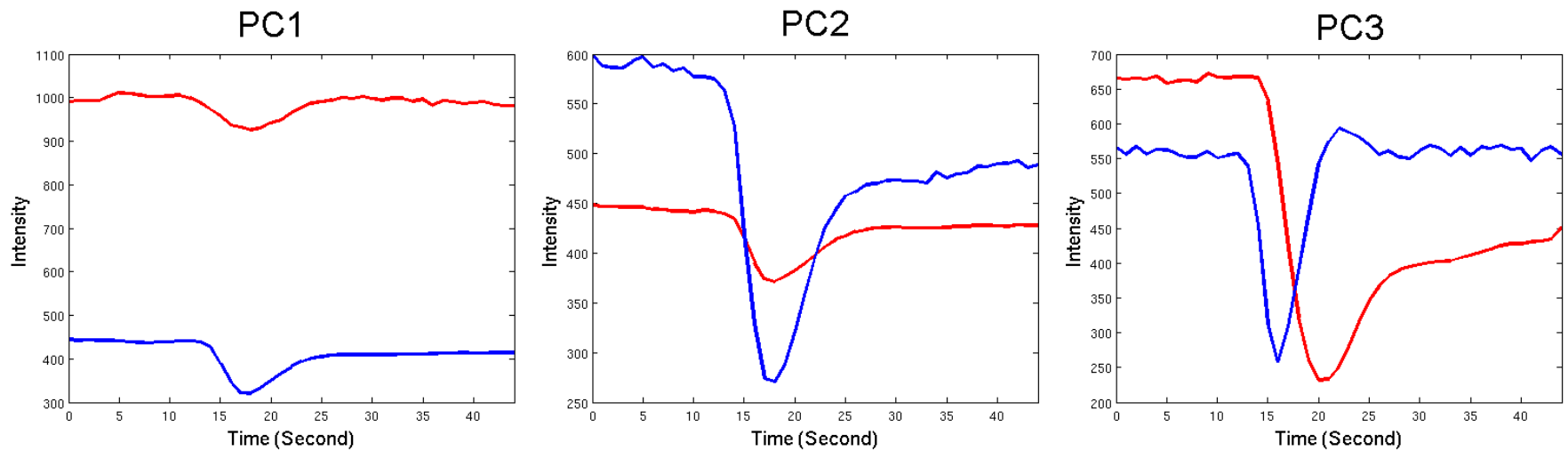## SUPPLEMENTAL DIGITAL CONTENT 5



**FIGURE.** Perfusion signal in high and low principal components tissues. The curves illustrate the average perfusion signal in high/low principal components tissues. Red and blue lines represent high and low principal components, respectively. The first principal component (PC1) primarily represents the global signal level; hence its resemblance with the $T_2$-weighted MR images. PC2 is inversely related to the magnitude of the drop in the depth of the perfusion signal, relative to the baseline. PC3 mostly reflects the combination of time delay between baseline and maximum signal drop, slope of signal recovery, and level of recovery.