



**Supplemental Digital Content 1.** To quantitatively compare 2-tier sequential in-plane motion correction (IPMC) against standard direct IPMC and sequential IPMC, region-of-interest (ROI) CEUS time-intensity curves were fitted to Equation 1 and the goodness-of-fit coefficient of determination ( $R^2$ ) was compared. 2-tier sequential IPMC reliably produced good fits ( $R^2 > 0.7$  for all cines), whereas direct IPMC and sequential IPMC each performed poorly on a few cines.  $R^2$  values for cine #11 were corrupted due to scale markers entering the ROI with motion correction.