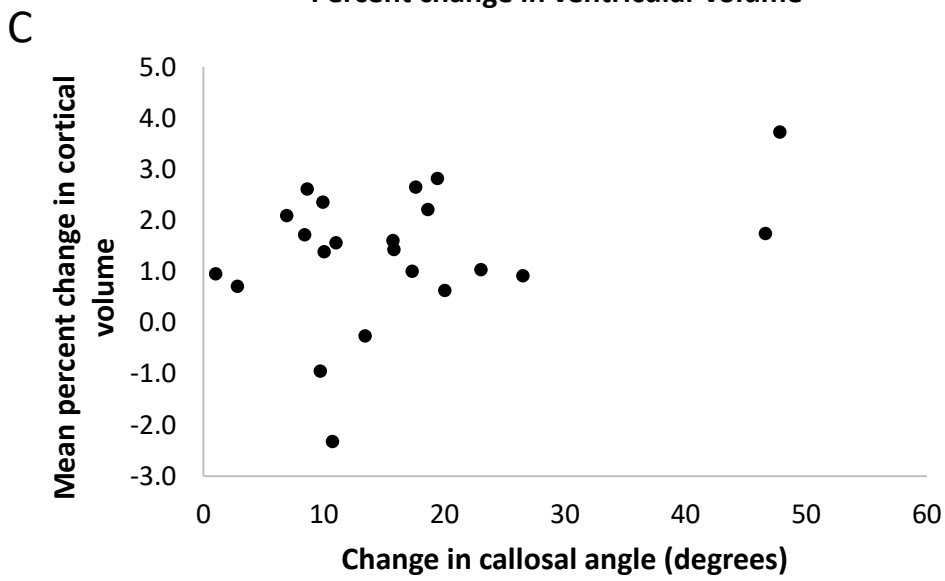
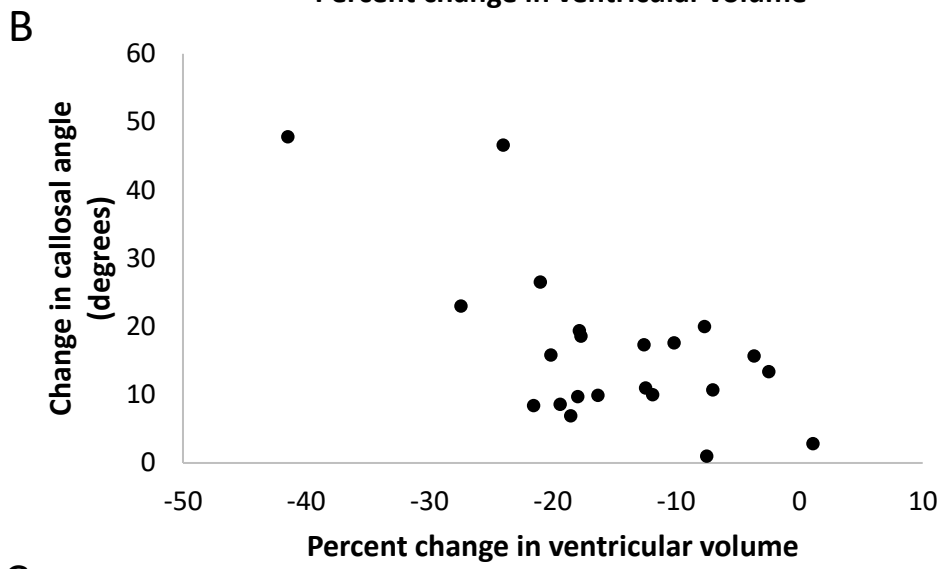
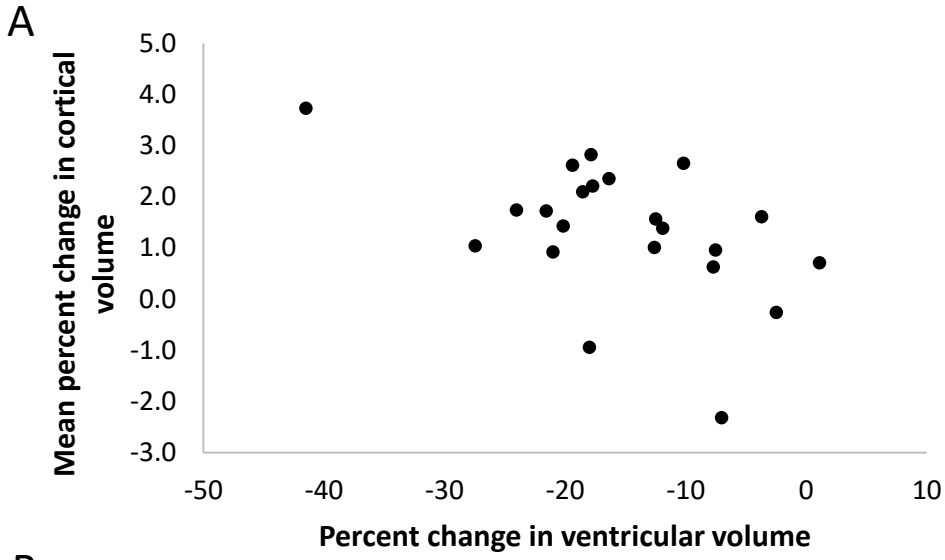


Supplemental Figure 1: Percent change in gray matter volume by cortical region. Each dot represents a patient's regional cortical volume change with right and left sides shown as separate

points. Regions near the vertex (e.g. frontal and parietal superior) show on average the greatest increases in cortical volume. The widest range of values and large negative values are seen in the occipital inferior and mid regions, which correspond to regions affected by artifact from the Certas Plus valve and were excluded from summary statistics. Inf = inferior; mid = middle; sup = superior; ant = anterior, post=posterior; orb = orbital; oper = operculum.



Supplemental Figure 2: Associations between imaging metrics. (A) Mean percent change in cortical volume across the cortical regions-of-interest using latest follow-up MRI exam versus percent change in ventricular volume. (B) Change in callosal angle versus percent change in ventricular volume. (C) Mean percent change cortical volume versus change in callosal angle.