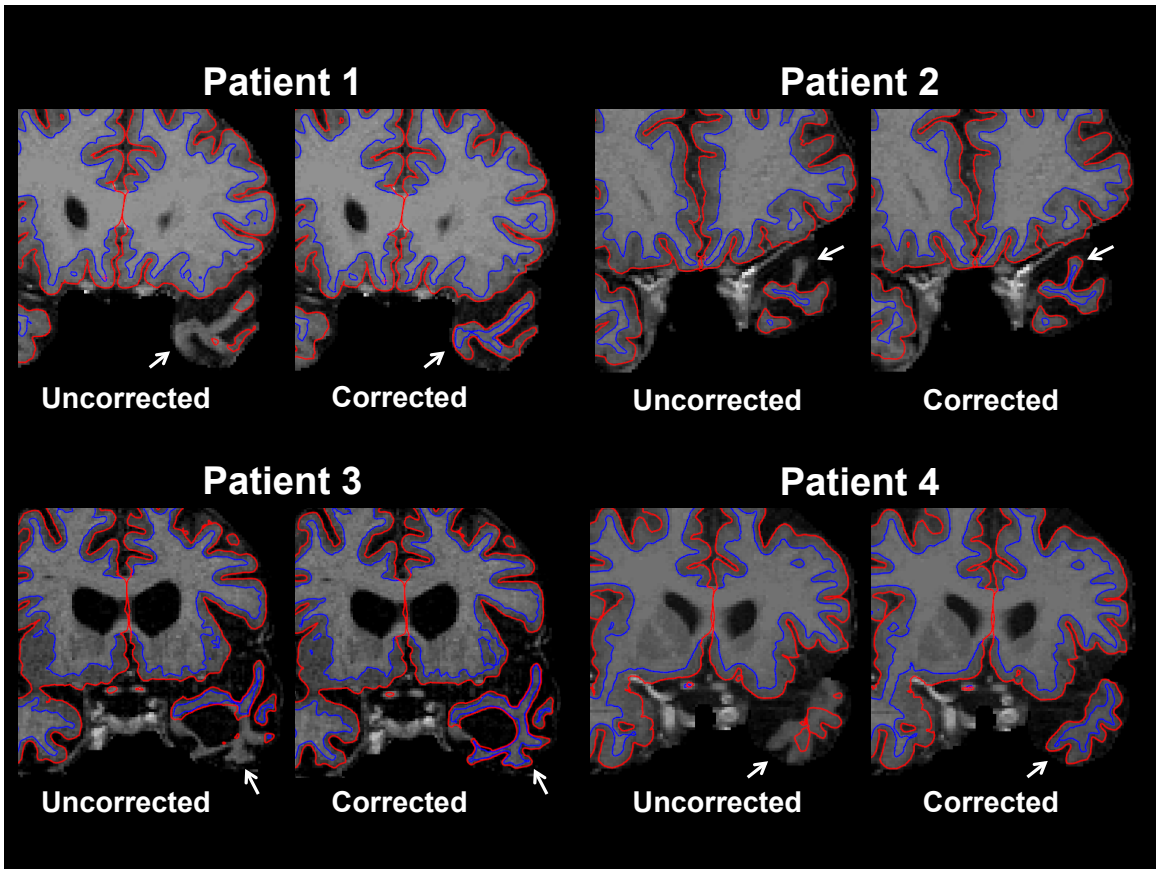
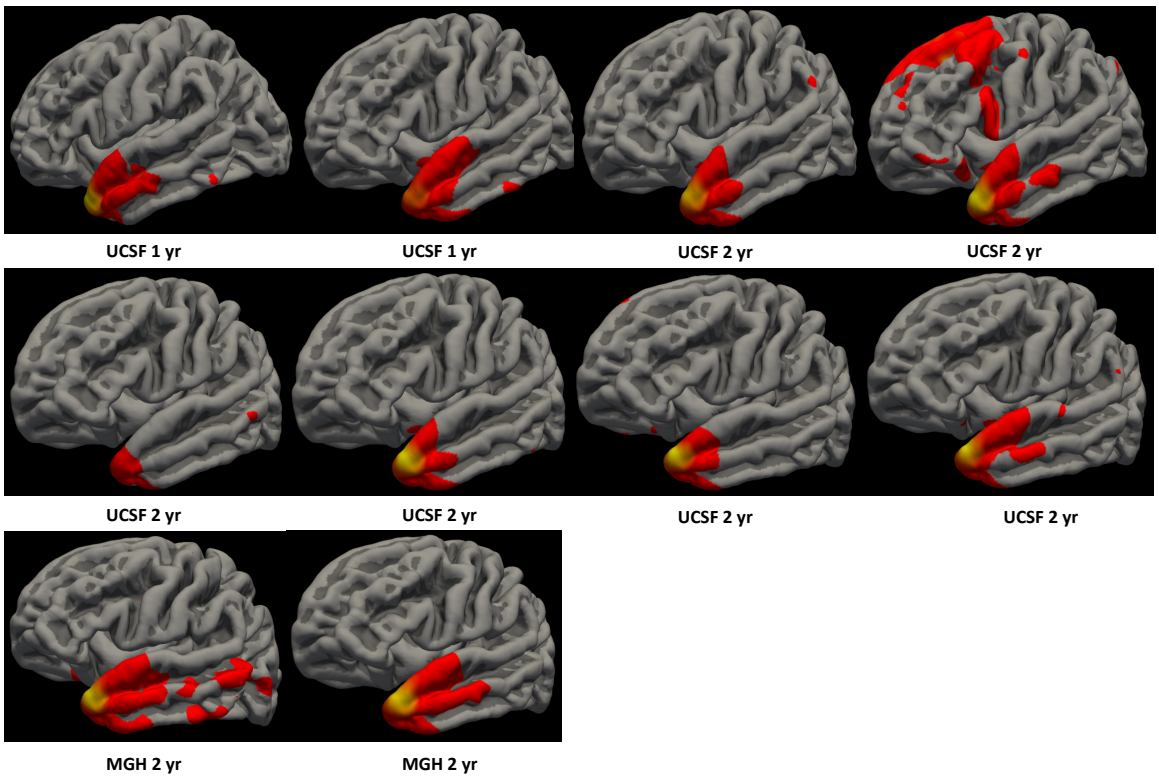
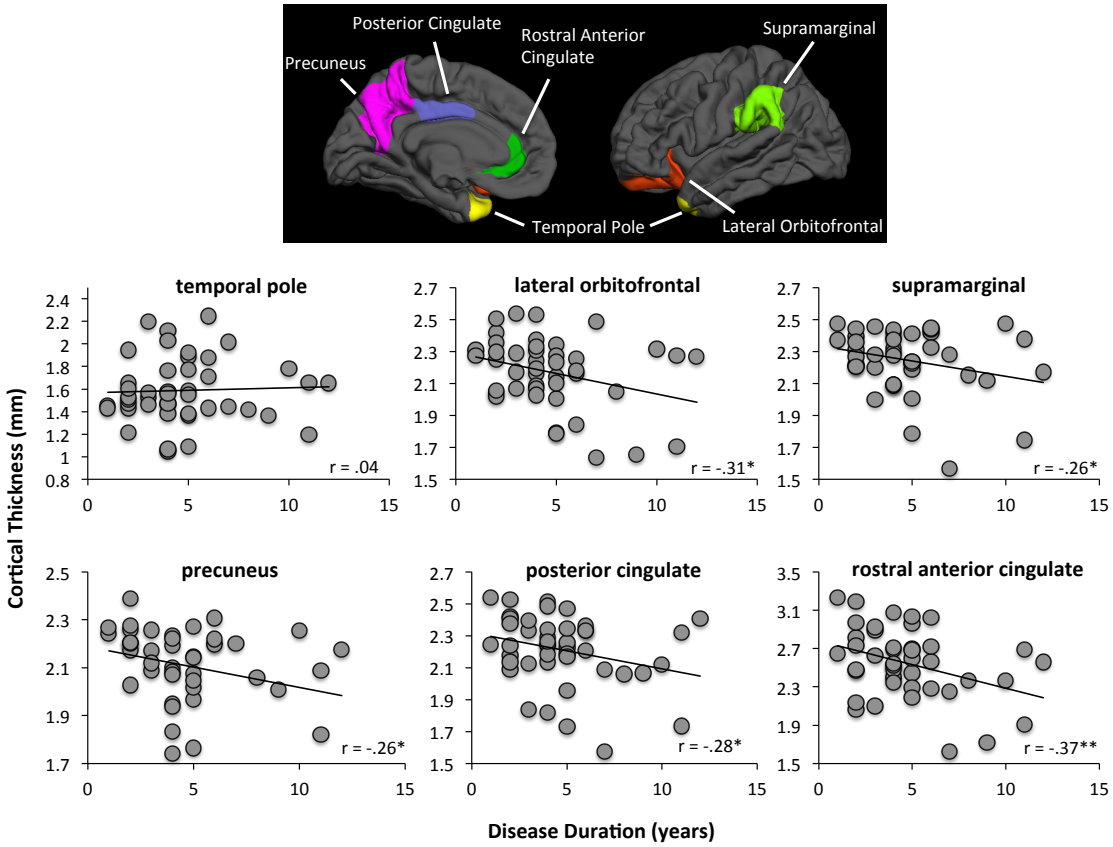


Supplementary Figure 1: Automated surface reconstruction before and after manual correction. The automated reconstruction of the cortical surfaces of many svPPA patients required substantial manual editing because cortical atrophy in the anterior temporal lobes interfered with the identification of the gray-white junction. Here, the automated reconstruction of the white-matter (blue) and pial (red) surface is displayed before and after manual correction in four example patients.



Supplementary Figure 2. Individual atrophy maps for all patients with disease durations between 1-2 yrs. Cortical atrophy maps were generated for each patient from both the MGH and UCSF sample relative to a group of healthy age-matched controls (N = 30). Brain areas with the highest magnitude of atrophy are displayed in yellow. All atrophy maps were threshold at $p<.0001$.



Supplementary Figure 3. Effect of disease duration on cortical thickness in svPPA patients. The effect of disease duration (years) on cortical thickness (mm) for all 44 svPPA patients from both patient samples (MGH and UCSF) was plotted for each cortical parcellation in the FreeSurfer Desikan-Killiany Atlas that is commonly atrophied in svPPA outside of the temporal lobes. We additionally assessed the effect of disease duration on cortical thickness in the Deskian-Killiany temporal pole parcellation that overlapped with the focal atrophy region identified in our sample. All regions plotted here are in the left hemisphere. A significant negative correlation was observed between disease duration and cortical thickness (*p<.05, **p<.01) in each cortical region in the extended svPPA atrophy network. In the temporal pole there was no relationship between cortical thickness and disease duration.