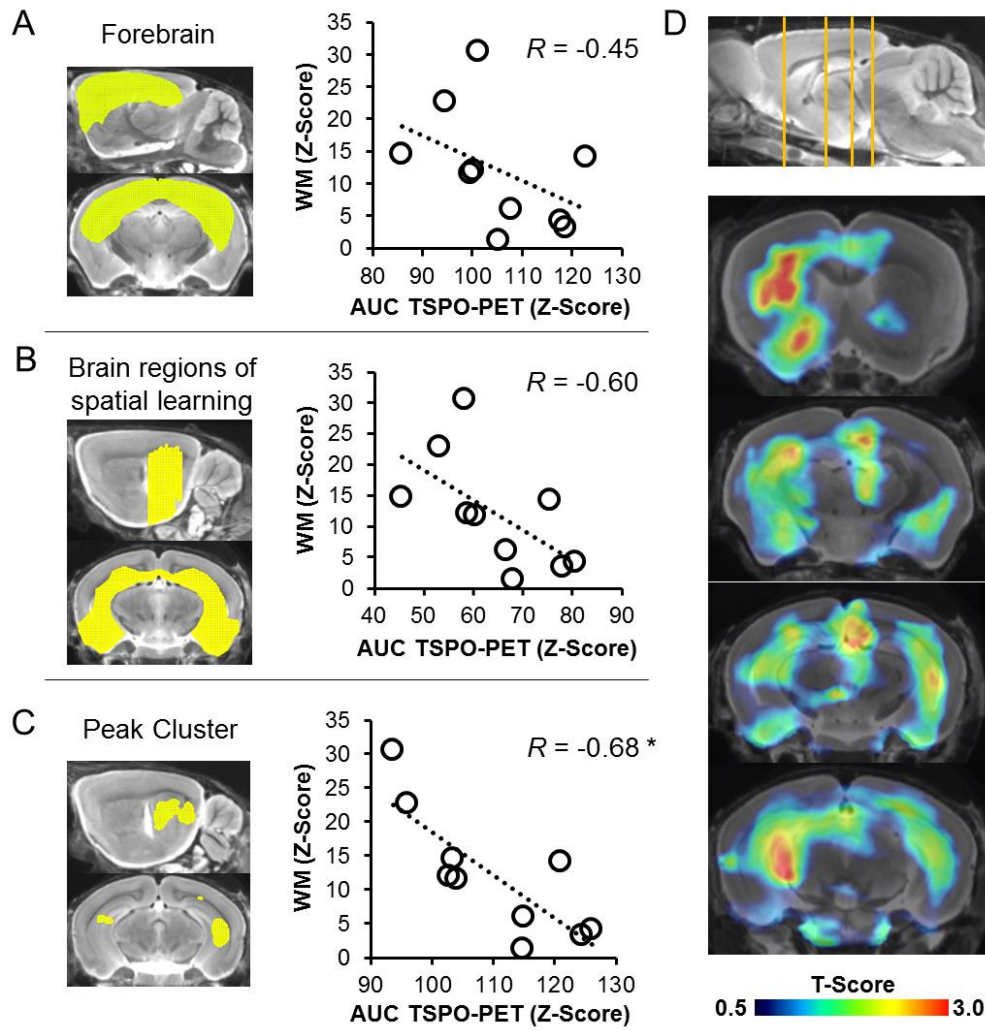


## Supplemental Figure 1



**Supplemental Figure 1. Prediction of cognitive performance by the longitudinal magnitude of microglial activation in PS2APP mice.** Correlations between individual findings in cognitive testing (Z-scores) with longitudinal TSPO-PET ( $[^{18}\text{F}]\text{GE180}$ ) as expressed by the area under the curve (AUC) are presented by scatter plots for (A) the forebrain, (B) brain regions associated with spatial learning, and (C) an amygdaloidal peak cluster. (D) Coronal slices depict statistical maps (T-Scores) of voxel-wise correlation between TSPO-PET ( $[^{18}\text{F}]\text{GE180}$ ) at baseline and performance in water maze (WM) at study termination upon a T1w MRI template. R indicates Pearson's coefficient of correlation. \* $p < 0.05$