A4 PET SUVR Methods

Summary

The following datasets were generated with results of standardized uptake value ratios (SUVRs) for two different ligands:

	Filename	File label	Ligand of interest
1	imaging_SUVR_amyloid.csv	Imaging - Amyloid PET SUVR Quantitative Analysis	Florbetapir
2	imaging_SUVR_tau.csv	Imaging - Tau PET SUVR Quantitative Analysis	Flortaucipir

The SUVRs were generated for the following brain regions using the same analysis method for all scans:

brain_region	Definition
xlaal_frontal_med_orb	Frontal cortex
new_temporal_2	Temporal cortex
lprecuneus_gm	Precuneus
lnew_parietal	Parietal cortex
llposterior_cingulate_2	Posterior cingulate
lanterior_cingulate_2	Anterior cingulate
blcere_all	Whole cerebellum
Composite_Summary	Composite summary

The SUVR values for all scans were calculated using the whole cerebellum ("blcere_all") as a reference. In addition, a Composite_Summary value is provided for all scans. The calculation for the Composite_Summary is detailed below. Details for the items included in the SUVR datasets are described in the data dictionary.

SUVRs delivered in the datasets contain quantitative imaging results derived using a linear normalization method. See Clark et al. (2012) and Joshi et al. (2015) for more details.

References

Clark CM, Pontecorvo MJ, Beach TG, Bedell BJ, Coleman RE, Doraiswamy PM, Fleisher AS, Reiman EM, Sabbagh MN, Sadowsky CH, Schneider JA, Arora A, Carpenter AP, Flitter ML, Joshi AD, Krautkramer MJ, Lu M, Mintun MA, Skovronsky DM; AV-45-A16 Study Group. Cerebral PET with florbetapir compared with neuropathology at autopsy for detection of neuritic amyloid-beta plaques: A prospective cohort study. *Lancet Neurol*. 2012 Aug;11(8):669-78. doi: 10.1016/S1474-4422(12)70142-4. Epub 2012 Jun 28. PMID: 22749065

Joshi AD, Pontecorvo MJ, Lu M, Skovronsky DM, Mintun MA, Devous MD Sr. A Semiautomated Method for Quantification of F 18 Florbetapir PET Images. *J Nucl Med*. 2015;56(11):1736-1741. doi:10.2967/jnumed.114.153494