

Possible covariates are:

APOE4: with values 0,1,2: number of copies of the type 4 allele, increased values are associated with late-onset AD.

MMSE: with integer values in 0 -30: clinical memory test, with lower values reflecting increased memory impairment.

Age: years of age

Gender: 1 male, 2 female

Education: years of education.

Diagnosis (DX): 1 cognitively normal, 2 mild cognitive impairment, 3 AD

Biomarkers:

CSF Abeta: a measure of A β 42 in cerebrospinal fluid biospecimen, reflects the accumulation of the proteins β -amyloid (A β) in the brain

CSF Tau: a measure of tau protein in cerebrospinal fluid biospecimen (increases associated to neuronal injury)

Imaging:

hippocampal volume (extracted from sMRI) and hci (extracted from FDG-PET))

It is believed that CSF Abeta is the first to become abnormal, followed by CSF Tau, and then FDG-PET/sMRI measures. Thus, the former may be better at distinguishing between cognitively normal and MCI.