**Supplementary Material**

**Supplementary Table 1.** Variables used in the ADNI PIB replication study (mean/standard deviation).

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| --- | --- | --- |
| **N=54 MCI due to AD**  **(36 male and 18 female)** | **Mean** | **SD** |
| **Delayed recall CC** | 0.00 | 0.93 |
| **PIB-PET** | 1.83 | 0.44 |
| **Education in years** | 16.32 | 2.56 |
| **Age** | 76.27 | 7.99 |

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| --- | --- | --- | --- | --- | --- | --- | --- |
| **Supplementary Table 2.** Partial correlations in the whole sample (HC and MCI) from the ACE study and the AB255 study | | | | | | | |
| **CCs** | **aHV related to CC (n=175)** | | **FDG-PET related to CC (n=175)** | | **PIB-PET related to CC (n=59)** | |
|  | **β** | **p-value** | **β** | **p-value** | **β** | **p-value** |
| **Learning CC** | 0.36 | 1.55 e-08\*\* | 0.38 | 1.00 e-07\*\* | - 0.51 | 1.26 e-05\*\* |
| **Delayed Recall CC** | 0.46 | 9.66 e-14\*\* | 0.55 | 8.56 e-17\*\* | - 0.54 | 2.24 e-06\*\* |
| **Executive Functions CC** | 0.32 | 6.80 e-06\*\* | 0.44 | 4.30 e-09\*\* | - 0.45 | 0.01\* |
| **Language CC** | 0.31 | 1.93 e-06\*\* | 0.32 | 8.20 e-06\*\* | - 0.28 | 0.03 |
| **Praxis CC** | 0.18 | 0.01\* | 0.36 | 5.67 e-07\*\* | - 0.33 | 0.01\* |

CC, cognitive composite domain score; aHV, adjusted hippocampal volume; β, partial correlations adjusted by age, gender, and education; \*Statistically significant after Bonferroni’s correction *p*≤0.01; \*\**p*≤0.001.

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| **Supplementary Table 3.** Survival time of conversion to dementia. Non-converters MCI (n=3) were censored (15%). | | | | | | |
| **CCs** | **PIB-PET related to CCs domain scores** | | | | |
|  | **Wald** | **p-value** | **Odds Ratio** | **Inferior CI** | **Superior CI** |
| **Learning CC** | 0.03 | 0.86 | 1.12 | 0.29 | 4.29 |
| **Delayed Recall CC** | 3.49 | \*0.06 | 7.40 | 0.91 | 58.82 |
| **Executive Functions CC** | 3.03 | 0.08 | 2.31 | 0.90 | 5.95 |
| **Language CC** | 1.36 | 0.24 | 1.53 | 0.75 | 3.11 |
| **Praxis CC** | 1.12 | 0.29 | 1.38 | 0.76 | 2.53 |

CC, cognitive composite domain score; OR, Odds ratio; CI, Confidence Interval at 95%; \*Statistically insignificant trend p≥0.05

**Supplementary Figure 1.** Survival time of conversion to dementia. Non-converters MCI (n=3) were censored (15%).



**Supplementary Figure 2.** Survival time of conversion to dementia. Mean of covariates.

