**Supplementary Material**

**Supplementary Table 1.** Spearman correlation analysis between anosognosia scores and neuropsychological assessments in AD patients

|  |  |  |
| --- | --- | --- |
|  | ***r*** | ***p*** |
| **Demographic factors** |  |  |
|  Age | 0.27 | NS |
|  Level of education (years) | 0.22 | NS |
| **Cognitive level** |  |  |
|  MMSE (/30) | -0.39 | NS |
| **Memory functions** |  |  |
| *Visual memory* |  |  |
|  RBMT III (Total corrected answers, /30) | -0.36 | NS |
| *Verbal memory* |  |  |
|  RBMT III (Total corrected answers, /50) | -0.16 | NS |
|  FCSRT (Sum of free recalls, /48) | 0.27 | NS |
|  FCSRT (Sum of free & cued recalls, /48) | -0.01 | NS |
| *Spatial memory* |  |  |
|  RBMT III (Total corrected answers, /26) | -0.05 | NS |
| *Prospective memory* |  |  |
|  RBMT III (Total corrected answers, /12) | 0.39 | NS |
| *Ability to learn a new task* |  |  |
|  RBMT III (Total corrected answers, /68) | -0.14 | NS |
| **Executive functions** |  |  |
| *Flexibility* |  |  |
|  TMT B-A, time | 0.23 | NS |
| *Inhibition* |  |  |
|  Stroop test, interference score (IS), time | 0.30 | NS |
| *Initiation* |  |  |
|  Phonologic fluency (P) | -0.32 | NS |
|  Semantic fluency (Animals) | -0.35 | NS |
| *Verbal working memory* |  |  |
|  Digit span, forward (/16) | 0.12 | NS |
|  Digit span, backward (/16) | -0.02 | NS |
| **Processing speed** |  |  |
|  Stroop denomination, time | -0.07 | NS |
|  Stroop reading, time | -0.01 | NS |
|  TMT A, time | 0.22 | NS |
| **Language** |  |  |
| *Naming (/36)* | -0.18 | NS |
| **Praxis** |  |  |
| *Gestural praxis (/23)* | -0.12 | NS |
| **Behavioral assessment**  |  |  |
| *Depression Scale (/38)* | 0.04 | NS |
| *Apathy (/36)* | 0.23 | NS |
| **Autonomy** |  |  |
|  ADL (/6) | -0.43 | NS |
|  IADL (/8) | -0.42 | NS |

MMSE, Mini-Mental State Examination; RMBT III, Rivermead Behavioral Memory Test III; FCSRT, Free and Cued Selective Reminding Test; TMT, Trail Making Test; ADL, Activities of Daily Living Questionnaire; IADL, The Lawton Instrumental Activities of Daily Living Scale

**Supplementary Fig. 1.** Regions showing less density of grey matter (A) and hypometabolism (B) in patients with AD in comparison to healthy controls



Results were obtained from 27 T1-3D scans (A) and 28 FDG-PET scans (B). The statistical threshold is pFWE-corr < 0.05 (k >200 voxels).

**Supplementary Fig. 2.** Correlations between the anosognosia score and MRI scans

Results were obtained from 27 T1-3D scans in Alzheimer’s disease patients. The statistical threshold is puncorr < 0.001 (k > 70 voxels). Correlations are realized on the whole cluster of the Cerebellum (A), right fusiform gyrus (B) and the left postcentral gyrus (C) after extraction of data with MARSBAR.

**Supplementary Fig. 3.** Distribution of the anosognosia score in the Alzheimer’s disease group

Effective

 Anosognosia Score

Histogram shows the normal distribution of the anosognosia score in the Alzheimer’s disease patients (n=30).