Assessment of mood and cognition

As part of the neuropsychological examination, in addition to the Rey's Auditory Verbal Learning test[1] (main text), the following tests were performed in both patients and healthy controls: Animal Verbal Fluency[2] (AVF), Trail Making Test A and B[3] (TMT), digit span forward and backward, Raven's Continuous Progressive Matrices[4] (CPM) and the Purdue Pegboard Test[5] (PPT).

Participants were also scored on the Apathy Evaluation Scale[6,7], to score the severity of apathy. Positive and negative affect were scored using the Positive and Negative Affect Schedule (PANAS)[8].

Results are displayed in Table S1 below.

	Depression patients		**Healthy controls**		
Test/Scale	mean	sd	mean	sd	Group level statistical difference, p
AVF	13	4.55	21.8	5.26	< 0.001
TMT (s)					
A	97.8	52.85	43.2	26.96	< 0.001
B	230.5	130.7	108.7	49.2	< 0.001
Digit span					
Forward	5.4	1.53	6.1	1.03	<0.01
Backward	3.6	1.48	4.2	0.8	<0.01
CPM (/12)					
A	8.6	2.38	10.4	1.37	<0.001
B	5.8	2.78	8.7	2.47	<0.001
PPT					
Right Hand	8.6	2.6	12	1.9	<0.001
Left Hand	8.4	2.92	11.7	2.0	<0.001
Both hands	6.3	2.74	9.5	1.58	<0.001
Assembly	11.9	7.61	22.2	6.14	<0.001
Apathy Evaluation Scale	41.7	9.84	21.1	3.07	<0.001
PANAS					
Positive Affect	18.4	6.59	34	6.61	<0.001
Negative Affect	29	9.3	13.8	9.13	<0.001

Statistical Analysis of Group Differences Using an SUVR Threshold of 1.5

In our primary analysis we chose an SUVR threshold of >1.38 to determine amyloid positive status. However, other studies have used >1.5. To satisfy interested readers and alleviate any concerns that our findings were the result of a threshold effect, we repeated the analyses using an SUVR cut-off of 1.5. Our findings remained the same using both thresholds:

1. There was no difference in the proportion of participants with a positive versus a negative amyloid scan between groups at a threshold of 1.5 $X^2(1)=0.331$, Fisher's exact p=0.545.

2. There was a significant difference in mean normalized total hippocampal volume between 43 amyloid negative patients and 44 controls: t(85)=2.309, p=0.023, $d_{Cohen}=0.495$), but no group difference in the distribution of SUVR values or median amyloid load (Mann-Whitney U and Median test, p=0.312 and p=0.593 respectively) (Figure 3).

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