

### Supplementary Table 3: MRI<sup>1</sup> measurements

Measured at all 3 time points: t0: baseline; t1: 3 months; t2: 6 months

TYPE OF MRI MEASUREMENT / SCAN	Main technical details of the Siemens protocols
<b>Grey matter volume assessment [1]</b>	MP2RAGE <sup>2</sup> ; duration: 8.22 minutes; voxel size: 1 mm isotropic; 176 slices; FOV <sup>3</sup> : 256x240x176 mm; TR <sup>4</sup> /TE <sup>5</sup> : 5000/2.98 ms; T1 <sup>6</sup> /T2 <sup>7</sup> : 700/2500 ms; flip angle 1/2: 4/5 degrees
<b>Functional MRI</b> Letter N-back visual working memory task [2]	EPI <sup>8</sup> ; duration: 20.00 minutes; voxel size: 2.5 mm isotropic; 54 slices; FOV: 210x210x135 mm; multiband accelerator factor: 3; TR/TE: 1350/31.6 ms
<b>Resting-state functional MRI</b> Allows to measure activity in the Default Mode Network (DMN) reflecting global functional connectivity of the brain [3]	EPI; duration: 10.31 minutes; voxel size: 2.5 mm isotropic; 54 slices; FOV: 210x210x135 mm; multiband accelerator factor: 3; TR/TE: 1350/31.6 ms
<b>White matter assessment</b> Allows to compute i.a. Fractional Anisotropy for evaluating white matter integrity reflecting structural connectivity [4].	DTI <sup>9</sup> ; duration 7.38 minutes; voxel size: 1.5 mm isotropic; 84 slices; FOV: 222x222x126 mm; multiband accelerator factor: 3; TR/TE: 5163/109.2 ms; b-values: 0/1500 s/mm <sup>2</sup> ; 65 directions, anterior to posterior phase encoding direction followed by a reverse direction for distortion correction; b-values: 0/ s/mm <sup>2</sup> )

#### Footnotes Table 5

1. MRI: Magnetic Resonance Imaging
2. MP2RAGE: Magnetization-Prepared 2 Rapid Acquisition Gradient Echoes
3. FOV: Field Of View
4. TR: Time to Repetition
5. TE: Time to Echo
6. T11: Inversion Time 1
7. T12; Inversion Time 2
8. EPI: Echo Planar Imaging
9. DTI: Diffusion Tensor Imaging

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3. Leonardi N, Richiardi J, Gschwind M, Simioni S, Annoni JM, Schluep M, Vuilleumier P, Van De Ville D: **Principal components of functional connectivity: a new approach to study dynamic brain connectivity during rest.** *NeuroImage* 2013, **83**:937-950.
4. Bosch B, Arenaza-Urquijo EM, Rami L, Sala-Llloch R, Junque C, Sole-Padulles C, Pena-Gomez C, Bargallo N, Molinuevo JL, Bartres-Faz D: **Multiple DTI index analysis in normal aging, amnesic MCI and AD. Relationship with neuropsychological performance.** *Neurobiol Aging* 2012, **33**(1):61-74.