

## **Phenotypes BrainLaus**

B: Base 2003-2008 F1: Followup 2009-2013 F2: Followup 2014-2018 F3: Followup 2018-2021 F4: Followup 2022-2026

Brain morphology			
Brain volume measures in 134 cortical and subcortical regions	F2	F3	<b>F4</b>
Linear and non-linear models of ageing for 134 cortical and subcortical regional volumes	F2	F3	<b>F4</b>
Brain tissue property measures (myelin, iron, tissue water) in 134 cortical and subcortical regions	F2	F3	<b>F4</b>
Brain water diffusion indices (FA, MD) in 134 cortical and subcortical regions	F2	F3	<b>F</b> 4
Interview			

Montgomery Asberg Depression Rating Scale (MADRS)	F2	F3	<b>F4</b>
Social recognition & social network questionnaires (in ca 400 individuals)	F2	F3	<b>F4</b>

## Additional information

Structural imaging: We use quantitative structural MRI protocol comprising a multi-parameter mapping protocol of three whole-head 3D multiecho fast low angle shot (FLASH) datasets with T1-, PD-, and MT-weighting at 1 mm isotropic resolution as previously described (Draganski et al., 2011), allowing optimal delineation of iron-rich basal ganglia nuclei, voxel-based quantification of R2\*, R1 and MT and measures of grey matter volume/cortical thickness.

Diffusion-weighted imaging (DWI): We use a DWI protocol of whole brain single-shot echo-planar imaging (EPI) at 2mm isotropic resolution. A total of 118 measurements are made over 3 shells with isotropic angular sampling (13 at b=0; 15 at b=650 s/mm2; 30 at b=1000 s/mm2; and 60 at b=2000 s/mm2).

COMPLEMENTARY INFORMATION ON ASSESSEMENTS OF COLAUS|PSYCOLAUS here

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