

### **Supplement 5: FDG PET analysis**

Following stereotactic anatomic standardisation, metabolic activity on the subject's PET scan was laid out in three-dimensional stereotactic surface projections. The subjects' datasets were compared individually with the institutional age-adjusted normal database by calculating a Z-score on a pixel-by-pixel basis. The results of this analysis were displayed in 3D-SSP views for visual inspections. A standardized software delivering three dimensional tomographic images after automated fitting to 3D reference normal templates (BRASS, Hermes Medical Solutions, Stockholm, Sweden) was used for analysis of subcortical structures like the basal ganglia.