

Synopsis for EU-GEI WP5 Publication

Synopsis no.: S5.13
Preliminary title: Regional Gray matter volume in individuals at ultra high risk of developing psychosis
Contact info for the person(s) proposing the synopsis Name: Stefania Tognin Partner no: 02 Institute of Psychiatry e-mail address: stefania.tognin@kcl.ac.uk
Publication category: 3 Publications from a single work package involving only some parties (or in some cases only one party) in the Work Package
Working and writing group: Stefania Tognin, Matthew Kempton, Philip McGuire and other parties contributing useable MRI data from WP5
Work Packages involved: WP5
EU-GEI Partners involved from whom candidate co-authors (<i>additional to working and writing group</i>) should be nominated: All centres that have collected MRI data which is of a sufficient standard to be included in the publication.
Objectives (scientific background, hypothesis, methods, and expected results): The overall objective is to examine changes in regional gray in ARMS and CONTROLS in across WP5 using DARTEL VBM The main specific objectives are: 1) To compare regional gray matter volume in ARMS-NT vs ARMS-T across all centres that have collected structural MRI data. 2) As the numbers of ARMS-T are likely to be small to conduct a complementary analysis examining follow-up GAF measures in relation to regional gray matter volume DARTEL VBM will be used to survey the whole brain to investigate changed in regional gray matter volume using appropriate statistical correction for multiple comparisons. The central focus would be on transition status and GAF, while a limited number of basic clinical variables would be examined, we are keen not to cover too many measures to ensure these can be included in separate publications as suggested by other researchers.
Data needed for the study: (please list the EU-GEI WP5 instruments): -Baseline Structural MRI data from EU-GEI -Transition status -Follow-up GAF scales -Follow-up cognitive measures (these will be in relation to MRI data only) -Basic demographics eg age, gender, years of education -Basic clinical information (e.g basic medication, basic symptoms at baseline, brief substance misuse)

Synopsis for EU-GEI WP5 Publication

Plan for statistical analysis (overall strategy): Structural MRI: MRI data would be processed using the DARTEL VBM pipeline. Although the ADNI scan has been used in all centres reducing the effects of inter-centre heterogeneity, the effect of centre will be controlled for using the general linear model with additional nuisance covariates including total intracranial volume, age and gender.
Other analyses/methods: N/A
Involvement of external Parties (non EU-GEI): N/A
IPR check (Intellectual property rights): N/A
Timeframe: Start date: Once baseline MRI data is complete. Analysis: 4 months Write up: 3 months
Additional comments: N/A