

No.6
October
2016

AETIONOMY – CONSORTIUM MONTHLY UPDATE



General Information

Recruitment Update				
Site	PD	AD	Controls	Total
ICM	42	0	16	58
KI	34	0	9	43
UKB	9	0	3	12
Total:	85	0	28	113
Neurorad	0	7	34	53
Oxford	0	0	0	Not started
EPAD	x	7	13	20

Reminder that all publications need to be submitted to the Project Office before submission. Same for Congress abstracts, etc. Please review the Project Agreement for more details.

Upcoming Meetings

- WP 3 & 5 – Barcelona (E) – 10 October 2016, 10h00 -17h00
- Steering Committee Meeting, – 10 October 2016, 17h00 -19h00
- Joint Taxonomy Workshop, Barcelona (E), 11 October 2016
- 3rd General Assembly – at Sanofi, Paris (F), 1 & 2 December 2016
- AD/PD Conference 2017 – Vienna (A), 29 March – 2 April 2017

Deliverables due to IMI in September 2016 (late)

- D3.3.2 Webinar and report to review the pathophysiology graphs and potential hypotheses to be tested (M30)
- D3.7.2 Report of the generation of specific pathophysiological mechanisms that induce class separation for NDD sub-groups (M32)
- D3.1.3.6 Report of the generation of specific pathophysiological mechanisms that induce class separation for NDD sub-groups (M32)
- D3.3.3. Webinar and report to review the pathophysiology graphs and potential hypotheses to be tested

WP1 – Governance & Coordination

- Payments to partners are delayed whilst the PO reviews all contributions & spending to date.
- A CDA has been signed with Prof. Simon Lovestone's group in Oxford and the Consortium has produced a first draft of the Memorandum of Understanding with plans to finance a post doc in Oxford to access EHR.
- The Description of Work is being amended to include our 2 new partners: BBRC and AMU. Final submission will be done to IMI on the 14th October. Any changes made need to be justified to IMI.
- The PO is busy planning the III General Assembly with exciting presentations.
- Plans will soon be drafted for the 2nd Interim Review rehearsals and preparation.

WP2 – Knowledge & Data Management

- In the last two months about 1250 ADNI imaging data sets (multiple visits from about 300 patients and controls) were processed with the **EMC image processing** pipelines. Furthermore, about 830 PPMI data sets (multiple visits from about 350 patients and controls) are processed with the same pipelines. An extra set of 300 PPMI subjects (single visit) are only processed with FreeSurfer and Tissue Segmentation, since from those datasets there were no diffusion-weighted scans available. These were processed nevertheless to create more statistical power. All computed biomarkers from the scans mentioned are stored on the BSCW server and used by David Gomez-Cabrero (KI) and the **Fraunhofer SCAI**-team for subsequent clustering, associating and mining tasks.
- The **tranSMART system at UL**, is undergoing a migration to the latest released version from the tranSMART Foundation. The new release focuses primarily on quality and stability and contains relatively new functionality. It fixes few GUI glitches and updated loading procedures. WP2 is expecting the retrospective data from ICM and IDIBAPs and following up with the clinical partners on a regular basis.

- UCL has shared the documentation on their hypothesis generation tools taking into account the cluster of clinical variable, and brain regions and connections. Any feedback or improvements on the tools is welcome. The next steps includes overlaying the BEL networks.
UCL and Fraunhofer teams are working on BEL graph overlays on the apiNATOMY tiles and integration and exchange between the systems. It is now possible to retrieve to use the BEL API to retrieve edges and nodes by ID to generate subnetworks.

WP3 – Knowledge Integration & Mining

- WP3 has made considerable progress on the side of the “mechanism-inventory” NeuroMMSigDB. We do have already more than 100 candidate mechanisms for AD and more than 60 candidate mechanisms for PD, but Alpha Tom Kodamullil and Daniel Domingo-Fernandez in the SCAI team are currently working on identifying “chains of causal relationship” within these candidate mechanisms and we may end up with a significantly larger number of candidate mechanisms encoded in OpenBEL.
- The implementation of the NeuroMMSigDB Server (the “mechanism-enrichment server”) has made substantial progress and we will see a functioning prototype before the end of the year.

- Partner UCL will add some higher level (anatomical regions linked to cognition functions) mechanism-representing graphs to the NeuroMMSigDB inventory.
- During the Barcelona meeting, we will need to decide, which graphs contain entities that map to variables in existing clinical data and to the variables that will be measured in the prospective cohort.

WP4 – Ethical & Legal Governance

- WP4 is organising the third annual meeting of the AETIONOMY Legal and Ethical Advisory Board (LEAB), which will take place in Barcelona in October within the framework of the joint meeting of AETIONOMY and its sister IMI project PRECISESADS.
- This will also give the LEAB an opportunity to consider related ethical issues and approaches in PRECISESADS.
- In the meantime progress has been made in finalising data sharing arrangements to cover further EFPIA clinical data submission to AETIONOMY.
- WP4 also continues to monitor and advise in respect of the pending applications by WP3 and WP5 to access AD cohort data collected by the EPAD project.

WP5 – Clinical Validation

- All retrospective datasets from IDIBAPS have been sent to WP2. ICM and UKB (M Heneka) datasets are currently prepared to be shared in October and November.
- While waiting for Ethical Approval of Neurorad protocol, scanning has been temporarily suspended.
- Clinical study recruitment (PD group) has significantly increased in September and crossed the 100 mark! (8 new inclusions at UKB, 7 at KI and 12 at ICM). By keeping this inclusion rate each month, we will reach our goal and have 200 subjects included before the end of 2016.

The Consortium extends a warm welcome to our new Partner no 18 BarcelonaBeta Brain Research Center (BBRC) led by Prof. Jose Luis Molinuevo.

Course offering

- The first Neuroinflammation School will be held in Conil de la Frontera, Spain from Oct 11th to Oct 16th 2016. We will host a series of exciting lectures and work shops, which will be of interest to students, postdocs and established academics in the field of neuroinflammation. Note that places are limited and will be awarded on a first come first served basis. Please contact Michael T. Heneka M.D. at UKB for more details.

Clinical Study Recruitment

