

No.9
March
2017

AETIONOMY – CONSORTIUM MONTHLY UPDATE



General Information

Recruitment Update

Site	PD	AD	Controls	Total
ICM	72	0	23	95
KI	48	0	13	61
UKB	36	0	10	46
Total:	156	0	46	202
Neurorad	0	7	34	53
Oxford	0	0	0	Not started
EPAD	x	x	58 BBRC	123 Global

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 and follow the IMI mandatory communication guidelines.

Upcoming Meetings

- IR rehearsal at UCB HQ on 20 March
- IR at IMI-JU on 21st March 2017
- AD/PD Conference 2017 – Vienna (A), 29 March – 2 April 2017
- WP3/WP5 Mtg in May at ICM, Paris
- AAIC Conference July 16-20, 2017, London
- General Assembly IV at Novartis, Basel on 30 Nov & 1st Dec 2017

Deliverables due to IMI in 2016 (late)

- D3.3.3. Webinar and report to review the pathophysiology graphs and potential hypotheses to be tested (M34 & M38)
- D2.2.3. Examination of data together with users for inconsistencies (M36)
- D3.6. Generation of specific hypotheses about disease sub-groups (M36)
- D5.1.6.1. To confirm choice of principal biomarkers (M36)
- D2.4.2. User documentation for querying interface (M37)

WP1 – Governance & Coordination

- The Annual Report (AR) for IMI on both scientific and financials, was submitted to IMI on the 28th February on time. Thank you all for your contributions. Now we must wait for IMI feedback.
- The collaboration with Prof. Simon Lovestone's group and Fraunhofer has started with meetings held from 30th Jan – 3rd Feb at Fraunhofer. UCB has contributed to this collaboration via a cash grant to Fraunhofer.
- The 2nd Interim Review is scheduled on the 21st March at IMI-JU. All work package leaders will be attend to present the project's advances since the 18 month review. One rehearsal was held on 1st March at UL and the final dress rehearsal will be at UCB HQ on the 20th March. Please support your work packages by providing all needed info promptly.
- We are planning on using the EAN congress in June 2018 in Lisbon as our final congress presenting all AETIONOMY results.

WP2 – Knowledge & Data Management

- Partner Fraunhofer has released the PyBEL software which is freely available now. PyBEL is a Python software package that parses BEL statements, validates their semantics, applies common graph algorithms, and allows for data interchange with common formats like Neo4J, JSON, CSV, Excel, and SQL. It provides a simple API so bio-informaticians and scientists with limited programming knowledge can easily use it to analyze BEL graphs. PyBEL is built on a rich framework that can be extended to develop new algorithms. The software is running on Windows, Linux and Macintosh and is free available on <https://pypi.python.org/pypi/PyBEL/>.
- The GenePark dataset from partner ICM is under curation and will be uploaded as soon as the curation is complete. DIG-PD and NGC cohort are in the pipeline to be estimated for curation efforts. The data inclusion status can be tracked and access to datasets can be requested via the ticketing system (<https://aetionomy.uni.lu/StudyRequest/>)
- IDIBAPS validation cohort (15AD, 19Control) has now been uploaded in our transSMART system. The IDIBAPS AD Dementia cohort is under curation and will be loaded as soon as the curation is complete.
- The migration to the new server with the new release of transSMART will be available this month.

- UL hosted the first IR preparation meeting on 1st and 2nd of March where all the WPs attended.
- The approved research members now have access to the SAS MSE environment with the EFPIA datasets and strategies to analyse this data is under discussion.

In a preparatory step towards this collaboration, Dr. Alejo Nevado-Holgado was visiting the Fraunhofer institute SCAI in Sankt Augustin for a week.

Finally, the work of partner Pharmacoidea will be closely aligned to the new WP3 validation strategy. In a first attempt at integrating Pharmacoidea's work in WP3, we worked for an entire week with Dr. Tamas Letoha during his visit to partner FRAUNHOFER.

WP3 – Knowledge Integration & Mining

- Partners Fraunhofer, EMC and the external AETIONOMY collaborator University of Oxford (Dr. Alejo Nevado-Holgado) have started to draft a paper manuscript describing strategies for in-silico-validation of candidate mechanisms.
- As NeuroMMSigDB – the inventory of candidate mechanisms in AETIONOMY – comprises now 126 candidate mechanisms for AD and 76 candidate mechanisms for PD, we are now able to perform systematic analyses of the “presence” or “absence” of mechanisms in data of cohort studies.
- The various efforts to organise independent clinical data sets suited for purposes of independent validation have finally resulted in a close collaboration between partner FRAUNHOFER and the University of Oxford (Prof. Simon Lovestone's Department). This collaboration will allow us to validate NeuroMMSig candidate mechanisms (DB and Server) against clinical trial data and electronic patient records.

WP4 – Ethical & Legal Governance

- LUH and Alzheimer Europe are completing a joint dissemination article on the legal and ethical implications of data-driven research in the area of personalized medicine. It is currently planned to submit the article, which builds upon their joint work (in Task 4.4) on legal and ethical guidelines on patient stratification in non-curable diseases, for publication in the (UK-based) Denning Law Journal.
- Planning is on-going for the second joint legal and ethics meeting with the PRECISEADS project (a sister IMI project focusing on neuro-inflammatory diseases), which will be held on 25 April. The original venue for the meeting, Hanover, has changed and a new venue will be announced shortly. The meeting will focus especially on the implications of the EU General Data Protection Regulation (which will take effect in May next year) for data-sharing in biomedical research projects.

WP5 – Clinical Validation

- Recruitment has reached 50% in both the PD and AD groups of the clinical study. Congratulations to all centers for these efforts. Let's keep up the good work!
- Michael Heneka's clinical center is now opened for AD group recruitment at partner site UKB. We are looking forward to the first recruitments to complement the EPAD recruitment. It is also planned for ICM to recruit AD patients before end of March.
- An amendment to the AETIONOMY protocol is currently being prepared to add 2 more clinical centres in France for PD group recruitment.
- 7 mechanistic hypotheses have been chosen: 4 coming from WP5 clinicians' lab work, 1 issued from Pharmacoidea participation and 2 from WP3 data mining approaches.
- An analysis plan for validation of candidate mechanisms is currently being written.
- Please be sure to clean the CRF data on an on-going basis as we may start to do some preliminary analyses.

Clinical Study Recruitment

