Message from the Coordinators

Dear AETIONOMY partners,

Dear all,

Another month has flown by – it has been a hectic time again.

We have seen great steps in the progress towards closure of the clinical database, and an increased emphasis on delivering biomarker analyses from all partners in WP5.

Jackie, Stubbi and Tobias have achieved the herculean task of re-submitting our final DoW amendment – thanks to them, and all of you for your support of this.

You will not have missed it, but we also passed May 25th (GDPR day) and Marc and the team have been working hard to ensure that we as a consortium remain compliant with adjustments to our data sharing agreement.

Currently, the 'Final AETION OMY Symposium' is shaping up to be a great event, we have had a stellar list of invited speakers confirm and it is shaping up to be a tour de force for Neuroinformatics in Europe. Naturally, the spotlight turns to us and our individual and joint contributions to this project so that we can demonstrate the value that AETIONOMY will bring. The data that we are generating, the stories that the analyses are revealing and the joint publications are all critical deliveries - please take some time now as we hit this midpoint of the year to think about how you are contributing to the AETIONOMY story.

Finally, we would like to point out the planned webinars described in the sections of WP2 and WP3, and on further events and deliverables listed on the next page.

Thanks

Your Project Office (Phil, Martin, Jaqueline, Stephan and Tobias)

General Information

Upcoming Meetings

- EAN Conference 16-19 June 2018, Lisbon
- IMI 10 years of medical Innovations (jointly with EC and EFPIA) – please register!
  27 June 2018, Brussels
- ISMB Conference 6-10 July 2018, Chicago
- PO/SC Meeting, Luxembourg 4/5 July 2018
- PO Meeting, BBRC, 19 Sept 2018, Barcelona
- Final WP3-5 Workshop & Datathon – BBRC, 20 & 21 Sept, Barcelona
- Joint Taxonomy Workshop – 20 Sept – Barcelona
- IMI 10th Anniversary Scientific Symposium on 22-23 Oct 2018, Brussels
- IMI Stakeholder Forum 2018, 24 Oct 2018, Brussels
- Final General Assembly and NDD Symposium on 29th & 30th Nov 2018 – Bonn, Germany '

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. Remember to follow the **IMI mandatory** communication guidelines with regards to funding statements and logos.

Did you know that **AETIONOMY** should always be capital letters?

Deliverables due to IMI in 2018 (DoW v5.1, Aug 2017)

- D2.5.3.4 (AMU) was due M50 => M54
- D3.9.1.3 due M54
- D3.9.1.4 was due due M52 => M54
- D3.9.3.1 was due M50
- D3.9.3.2 due in M54
- D3.9.2.3 due in M54
- D5.1.6.4 – on-going
- D2.4.2.1 due M54
- D2.4.3.2 due M54
- D2.4.3.3 due M55
- D1.4.2 due M55

WP1 – Governance & Coordination

- The annual report for year 4 is still with IMI for approval.

- The final amendment to the Description of Work, v6.1 will be submitted on Monday 28 May 2018.

- The PO is validating the affiliations list of all partners for the Consortium Publications.

- The **Final Symposium and last General Assembly** date will now be held on the **29th & 30th November 2018**. This will take place in **Bonn, Hotel Hilton**. We now have a semi final agenda and list of speakers that we will share with you. We expect all partners to be present at this final conference on neurodegeneration.

- The PO again would like to ask all WPs to please try to submit the deliverables on time as we are being measured on this!

WP2 – Knowledge & Data Management

The WP2 team is preparing all the next deliverables which are due in June and July:

- D2.4.2.1 'Documentation of usability improvement'. For this deliverable we are working on the layout and structure of the AETIONOMY Knowledge base (AKB). The goals are that users are getting a quick overview on the content and services of the AKB and easy access.

- D2.4.3.2 'Updated user documentation for pipelines'. For the integration of pipelines into the AKB we will incorporate the ADA server into our system component tranSMART, which offers pipelines for data analyses.

- D2.4.3.3 'Feedback on Public Webinar about the knowledge management Platform'. In this webinar we will present features, services and data of the AKB.

- Finally we are preparing D2.5.3.4 'Manuscript of "theoretical paper" describing the VDC modeling and implementation strategy ready for submission'. The publication plan for the Virtual Dementia Platform was decided during the VDC workshop in February in Marseille (partners AMU and Fraunhofer).

WP3 – Knowledge Integration & Mining

Also WP3 is preparing the next deliverables:

- D3.9.1.1 'Paper on strategies for in silico validation of candidate mechanisms'. The partners have agreed on the concept written by Martin Hofmann-Apitius (Fraunhofer). This document will be the basis for this deliverable.

- D3.9.1.3 'Webinar: Demonstration of high-throughput in silico validation using NeuroMMSig-Server.'. This webinar will report about applying the NPA algorithm for data analyses for our hypotheses. The webinar is planned to be hold in June.

- D3.9.1.4 'Webinar: Mining on Bayesian representations of major cohort studies (incl. ADNI and PPMI'. This webinar will report again about the Bayesian Modelling approach focussing this time mainly on PPMI and longitudinal Bayesian network patient trajectory modelling. Additionally the status of the virtual patient data generation will be described. This webinar will be announced very soon.

- D3.9.3.1 'Webinar: In-depth validation of imaging-related candidate mechanisms using advanced strategies, like regression analysis on genetic and imaging biomarkers (HASE), Voxel-Based Morphometry (VBM), and Event-Based Modeling (EBM).' EMC will report about their analyses regarding the validation of our hypotheses in clinical imaging data.

- D3.9.3.2 'Paper manuscript on In-depth validation of imaging-related candidate mechanisms using advanced strategies, like regression analysis on genetic and imaging biomarkers (HASE), Voxel-Based Morphometry (VBM), and Event-Based Modeling (EBM)'.

WP4 – Ethical & Legal Governance

- WP4 is finalising the data protection supplemental agreement that has updated partner obligations in line with the new EU data protection regime under the General Data Protection Regulation. A copy of the completed agreement will be sent to each partners for its records shortly.

- LUH will also shortly conduct further ethical analysis into the implications of using virtual cohorts in patient stratification studies, to be included in future WP4 deliverable, D4.5.2.

WP5 – Clinical Validation (1/2)

- **AETIONOMY sample plan:**

The last transfers of samples will be finalized **by Friday, May 31**.
A summary of the whole sample shipment is presented in the table below (Table 1), updated to date.

- **AETIONOMY sample analysis update:**

WP5 analysis status is summarized in Table 2 (next page).

Please be reminded that our reviewers requested - as a proof of a successful collaboration - joined publications from AETIONOMY partners.

A list of proposed publications and affiliations is being circulated this week amongst the consortium members.

Table 1:

AETIONOMY samples & shipment status

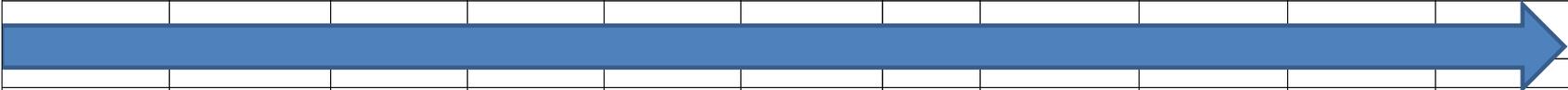| From	Samples	To	Status	Actual/Estimated date
KI (Prof. Svenningsson)	105 DNA	ICM	OK	26 MARCH 18
	34 CSF	UKB (MH)	OK	4 APR 18
	34 CSF	IDIBAPS	OK	9 APR 18
	23 CSF INSIGHT cohort	IDIBAPS	Planned	MAY 18
UKB (Prof. Wuellner)	94 DNA	ICM	OK	26 FEB 18
	40 DNA	ICM	OK	24 APR 18
	23 CSF	KI	OK	28 MARCH 18
	23 CSF	IDIBAPS	OK	5 MARCH 18
	19 CSF	UKB (MH)	NA	Internal transfer
UKB (Prof. Heneka)	240 DNA add. Cohort	ICM	Planned	Selection ongoing
	220 CSF add. Cohort	KI	OK	20 FEB 18
	220 CSF add. Cohort	IDIBAPS	OK	26 FEB 18
ICM (Prof. Corvol)	41 CSF + 14 add. Cohort	KI	OK	7 MARCH 18
	37 CSF + 9 add. Cohort	UKB (MH)	OK	7 MARCH 18
	41 CSF + 14 add. Cohort	IDIBAPS	OK	7 MARCH 18
	318 DNA + 642 add. Cohort	UKB (UW)	OK	11-12 APR 18
	25 CSF (PD/AD/HC)	SARD	Planned	28 MAY 18
IM2A (Prof. Dubois)	7 DNA + 364 add. Cohort	ICM	NA	Internal transfer
	23 CSF add. Cohort	KI	OK	9 MAY 18
IDIBAPS (Prof. Sanchez-Valle)	137 CSF add. Cohort	UKB (MH)	OK	6 MARCH 18
	118 DNA add. Cohort	ICM	Planned	28 MAY 18
	137 CSF add. Cohort	KI	OK	16 APR 18

- **AETIONOMY data cleaning update:**
  - A "Biological sampling spreadsheet" has been shared with all the clinical centers to complete the currently missing data entries in REDCap.

  => To be completed before **Friday May 25**.

  - Last queries (sites 01, 02, 03, 05 and 07) to be answered before **Friday May 25**.

- **AETIONOMY data validation:**
  - A Follow-up Data Review TC has been held on May 22: following the few validation actions, AETIONOMY-Clinical Study DB will be locked, by the end of May.
  - In order to do so, all the pending Closing Out Visits (French centers) will occur by the first week of June.

WP5 – Clinical Validation (2/2)

	N Biospecimen	N processed (to date)	Available results
Genome wide genotyping (ICM) [D5.3.2.2]	~ 1800 DNA	80% 350 samples to be received	June 2018
Methylome of SNCA gene (UKB, UW) [D5.3.2.3]	~ 1000 DNA	14 CpGs of SNCA 3 CpGs of METRNL	June 2018
Cholesterol panel analysis (UKB, UW) [D5.3.2.4]	~ 50 Plasma	50 ongoing	June 2018 (whole panel)
Neuroinflammatory markers generation in CSF (UKB, MH) [D5.3.2.5]	~ 240 CSF	~ 240 2 batches on 6 i.e. 10 analytes on 20	June 2018 (all 6 batches)
YKL40 and AD markers (IDIBAPS) [D5.3.2.6]	~ 500 CSF	YKL40	June 2018 (whole panel)
Brain imaging features from YKL40, sTREM and AD markers (BBRC) [D5.3.2.7]	~ 550 MRI	Waiting for data Data sharing agreements ongoing	June 2018 (if received May)
Proteomic analysis in CSF (KI) [D5.3.2.8] + in plasma	~ 560 CSF ~ 250 Plasma	Not yet Not yet	June 2018 June 2018
IRS and Autophagy markers in CSF (SARD) [D5.3.2.9]	~ 330 CSF	Waiting for samples	September 2018 (1st batch 25 samples)

Table 2: AETIONOMY WP5 analysis status

Important Timelines to Project End

M51	M52	M52	M53	M54	M55	M56	M57	M58	M59	M60	
Mar-18	**26 or 27 Apr**	**30-Apr-18**	**may**	**june**	**Jul-18**	**August**	**20-21 Sep**	**3-5 Oct 18**	**29 & 30 Nov**	**31-Dec**	**28-Feb-19**
Data analysis on data sets already available EMIF 1000	Workshop WP3/5 & datathon UK	results available	biomarker data analysis	biomarker data analysis	SC mtg / results interpretation UL	Holiday	final Workshop WP3/5 & datathon? BBRC, Barcelona	Granada Genomics Conference / Joint Taxonomy Mtg?	NDD Conference & Final GA	Project ends	Final report due to IMI
Oxford PD cohort data being analyzed							Taxonomy 20 Sept Barcelona?				
Newsletter Identification of new mechanisms for NDD	Determine if amendment is needed / budget shifts			Newsletter - the Virtual Dementia Cohort	02-05/2018 5th July Luxembourg (JC)				Newsletter - The new Taxonomies		

Did you know that all the project deliverables submitted to IMI are available on our BSCW Server?

Check them out at: *https://bscw-biosc.scai.fraunhofer.de/bscw/bscw.cgi/42644*