



EIBALL: QIBA/ASL Biomarker Committee Meeting

16:00 GMT, February 24th 2023 - online meeting

Attendees

- Xavier Golay
- Patricia Clement
- Karl-Olof Lovblad
- Cyrus A. Raji
- Lino Becerra
- Klaus Eickel
- Hanzhang Lu
- Nancy Obuchowski
- Ze Wang
- Valentin Prevost
- Nic Blockle
- Mark Shiroshi
- Ananth Madhuranthakam
- Matthias J.P. van Osch
- Henk Mutsaerts
- Mai-Lan Ho
- Ona Wu
- Eszter Balazs

Summary

Xavier Golay opens the meeting and thanks all attendees for joining the call. He reports that there has been a change in leadership, and Patricia will join as co-Chair. Lino Becerra expresses his gratitude for Xavier's work so far.

Patricia Clement introduces herself and explains that her main research interest is physiological variability of ASL. She is currently a Post-doctorate Researcher at Gent University Hospital. Karl-Olof Lovblad as the other co-Chair of the Committee also introduces himself. He is a Prof. of Neuroradiology at the University of Geneva, and he has been working with ASL clinically for a number of years, mainly for tumours and dementia.

The introduction round continues with the other new members of the Committee: Cyrus A. Raji, Assistant Prof. of Neuroradiology at the Washington University and Ananth Madhuranthakam, Associate Professor at the University of Texas.

Patricia explains that the main point of discussion of this meeting is to gain an idea of the current state of the profile and to discuss and agree on next steps to move forward.

The current status of the ASL profile can be accessed here: https://docs.google.com/document/d/1rgaUqTLw1h3dYXGemkNAj3XADuPtB430oomZAf- Muo/edit

She proposes to plan 1-2 hackatons (writing sessions of a few hours) to work on specific parts of the profile. Patricia, Xavier and Karl will provide an agenda for the Hackatons to identify the parts of the profile that needs to be worked on ahead of time.

Xavier comments that Lino Becerra's paper titled as: "MRI assessment of cerebral perfusion in clinical trials", could provide a very good basis for the writing. The current profile should be moved to a new QIBA form and start from sketch again. He also adds that in the past, it was difficult to agree on the set of claims, which hinder the writing process.

Cyrus A. Raji asks whether there is a discussion on clinical application or only on the technical features of acquisition and standardisation in the profile. Xavier confirms that the focus of QIBA Profiles is on the implementation in clinical trials, therefore the defined clinical application is also important. He proposes to focus on two clinical applications: dementia, a disease where the blood flow is reduced, and tumours, a disease where the blood flow is increased.

Lino Becerra suggests using DSC Profile which has many similarities to the ASL Profile. Mark Shiroshi confirms that when working on the DSC Profile, they focus on brain cancer and looking at longitudinal claim.

Patricia proposes that the Hackaton should take place in March or April. A doodle poll will be sent out to ensure a common date is found for the sessions by Eszter Balazs (EIBIR).

Cyrus A. Raji proposes to establish a common channel for quick communication. It is agreed that a chat channel on Teams will be set up by Eszter Balazs (EIBIR) for the team to discuss any remarks. The platform for the monthly meeting will stay Zoom. For the Hackaton sessions specific topics will be defined once the agenda of the Hackaton has been prepared.

The next meeting will be on the 27th of March. Till then Patricia asks everyone that to look at the current ASL Profile, the procedure the draft profile and read Lino Becerra's paper.

There have been some changes on the QIBA form's stages. For example, Stage 3 has become "clinically feasible" and Stage 4 has been largely removed.

Xavier confirms, that a paper is intended to be published once the profile is ready. It is agreed that Soetkin Buen will be specified as first author, and Patricia Clement as the last. Cyrus A. Raji notes that in the paper the systematic reviews of different clinical applications should be noted along with software platform approaches doing this analysis. Xavier comments that the Profiles cannot provide recommendations on

specific software, but rather provide minimal requirements for each aspect of the use of a QIB, including the processing. However potential software can be linked.

Patricia adjourns the meeting.