

QIBA FDG-PET/CT Biomarker Committee (BC) Update Call

23 January 2015 at 9 AM CT (GMT-6)

DRAFT Call Summary

In attendance:

John Sunderland, PhD (Co-chair)

Scott Wollenweber, PhD (Co-chair)

Christopher Buckley, PhD

Ming-Kai Chen, MD, PhD

Norman Foster, MD

Amy Fowler, MD

Howard Higley, PhD

Paul Kinahan, PhD, FIEEE

Gregory Klein, PhD

Adriaan Lammertsma, PhD

Martin Lodge, PhD

Lawrence (Larry) MacDonald, PhD

Amy Perkins, PhD

Eric Perlman, MD

Sandra Sanabria, PhD

John Seibyl, MD

Anne Smith, PhD

Pierre Tervé, MS

Huseyin Tore, MD

Timothy Turkington, PhD

Jean-Luc Vanderheyden, PhD

Richard Wahl, MD

Dewen Yang, MD, PhD

Jeffrey Yap, PhD

Brian Zimmerman, PhD

RSNA

Joe Koudelik

Julie Lisiecki

Call Schedule

- The FDG-PET Biomarker Committee meetings will be reduced to once a month, allowing more time for other QIBA NM groups to meet

Single-Photon Emission Computed Tomography (SPECT) (Dr. Wahl)

- A preliminary call for the SPECT Task Force with invited recruits will be held on February 6th, along with FDG-PET BC members

QIBA FDG-PET Profile Field Testing Project Update (Dr. Turkington)

- Weekly t-cons are held with the task force team, and a compliance checklist for Phase I is being developed
- Clinical physicist consultants have been recruited to expedite Phase II of Profile field testing
- Up to 5 additional volunteer sites are welcome to participate, though no more funding is available
 - **Action item:** Dr. Kinahan to draft letter for the co-chairs to use on QIBA letterhead
- Actual field testing of the checklist and collecting data suggested, moving beyond the initial assessment of real-world functionality
- Field test planning to be added to next agenda for continuing discussion

QIBA Organizational Changes Overview (Dr. Sunderland)

- The QIBA Coordinating Committees (CC) will oversee the BC, respective to their related modalities.
- CC will meet quarterly and will vote on document release (e.g., Profiles, Protocols, etc.), and focus on compliance issues and future planning.
- Another QIBA committee will be formed to handle issues regarding process, and will most likely be referred to as the "Profile Changes and Documentation Committee"
- Documentation for vendors will be an important focus to aid in marketing the Profiles, and also, Digital Reference Objects, or DROs.
- A Profile "stability guarantee" is being considered to avoid frequent revisions, similarly to DICOM
 - Versions of the Profile will be "locked" in the future to avoid expensive process changes for industry
 - It is preferred to refer to a document as a dated edition, e.g., QIBA FDG-PET Profile 2015, rather than "version 1.1.1," etc.
- Vendors, i.e., engineers, want a stationary guide of specific tasks that can be implemented and tested
 - In addition, Profiles and protocols must have tools for vendor marketing teams in order to communicate the importance of any significant changes effectively for efficient manufacturing
 - Checklists to communicate technical detail in a succinct manner are highly desirable, organized from *most important to least important*
- The model used by the Association of Electrical Equipment and Medical Imaging Manufacturers, ([NEMA](#)), was also recommended as a reference for Profile authors
 - NEMA standards, (vendor-driven), are updated every 5 years
- Dr. Eikman suggested publishing the FDG Profile on a journal website for greater exposure

UPICT Update (Drs. Yap, Sunderland)

- Dr. Graham circulated a summary document of the UPICT Protocol to authors
 - Suggestions were incorporated and the document was submitted to the *Journal of Nuclear Medicine*
 - It is likely that the document will need additional review to address editorial comments received

QIBA PET Amyloid Phantom (Dr. Sunderland)

- The team is working to design a physical phantom in parallel to a DRO for a complete brain phantom with amyloid distribution
 - Trying to locate and evaluate good datasets for this project is challenging
 - Dr. Kinahan recommended a database of 150 patients with high-quality MRIs which are downloadable; however, IRB approval will be required
 - Cross-modality partners in this area are Dr. Barboriak and Mr. Tervé

Proposed Call Schedule (Fridays, 9 am CT):

- **January 30:** PET Amyloid Biomarker Ctte
- **February 6:** SPECT Task Force *with* FDG-PET Biomarker Ctte
- **February 13:** PET Amyloid Biomarker Ctte
- **February 20:** FDG-PET Biomarker Ctte *or* SPECT Task Force
- **February 27:** PET Amyloid Biomarker Ctte