

## QIBA FDG-PET Biomarker Committee (BC) Call

01 April 2016 at 9 AM CT (GMT-6)

Draft Call Summary

### In attendance:

*Rathan Subramaniam, MD, PhD (co-chair)*

*John J. Sunderland, PhD (co-chair)*

*Scott Wollenweber, PhD (co-chair)*

Ronald Boellaard, PhD

Terry Brown

Howard Higley, PhD

John Hoffman, MD

Paul Kinahan, PhD

Martin Lodge, PhD

Alan Maurer, MD

Nancy Obuchowski, PhD

Amy Perkins, PhD

Eric Perlman, MD

Anne Smith, PhD

Charles Smith, MSCS

Jeffrey Yap, PhD

Brian Zimmerman, PhD

### RSNA

Julie Lisiecki

**Moderator:** Dr. Wollenweber

### Profile Updates

- Dr. Kinahan received helpful responses from manufacturers re: scanner performance Profile specifications
- Dr. Perkins has some specific questions regarding direct interpretation of what is being asked of manufacturers; she will provide feedback at the f2f meeting
- Dr. Sunderland to follow up with NCI / QIN to ask them to engage the Profile, possibly for use with an ACRIN trial

### DICOM (REM-NM Profile)

- Mr. Smith updated the group regarding the REM-NM Profile
  - There is a special provision for blood glucose values to be copied to PET images if the radiopharmaceutical is FDG
  - New QIBA fields have been added from the radiopharmaceutical report for:
    - hydration
    - glucose
    - patient activity
  - Suggestion to expand SUVs to look for glucose in image files
    - Could improve testing for phantoms
    - Better integration of quantitative information into workloads
    - Almost a 'QIBA'-like SUV to test for other attributes in the images

### Round-6 Proposal – Expanded Uniformity Measurements Project (Dr. Lodge)

- Dr. Lodge plans to expand upon his current Round-5 project with a proposal to explore post – reconstruction filtration approach reconstruction (PSF); currently a gap exists with regard to recovery
- Proposal to consider using SUV-Peak instead of SUV-Max when reconstructing with PSF
  - Many variables to consider
  - More sites are using PSF in reconstructions clinically, and these should be included
- Ultimate goal is to identify the “best” approach
- Comparable results were achieved with SUV-Peak as with SUV-Max, not evaluating lesions less than 2 cm
  - Question remains if this can be reproduced on different scanners with different pixel sizes / noise
  - Dr. Lodge to prepare draft funding proposal for the QIBA f2f meeting

### Suggested Strategies for Testing PSF:

- Incorporate field testing of PSF within the Profile to determine if it makes a difference
- Test with and without peak values
- PSF could affect the claim; data should be collected for both cases
- Goal is to get to better detectability and greater diagnostic performance accuracy

### Plan for f2f QIBA Annual Meeting Breakout Sessions

- Dr. Wollenweber to prepare the agenda for the FDG-PET BC f2f session at the QIBA Annual Meeting
  - Short 5-minute PowerPoint presentations are requested from those considering projects

- Profile update based on vendor and site feedback to the FDG-PET Profile feasibility study (PI: Dr. Turkington)
- Manuscript update for the Profile (Dr. Subramaniam)

### Round-6 Project Proposal Timeline

- Interested PIs are to follow up with the co-chairs ([rathan.subramaniam@UTsouthwestern.edu](mailto:rathan.subramaniam@UTsouthwestern.edu); [john-sunderland@uiowa.edu](mailto:john-sunderland@uiowa.edu); [Scott.Wollenweber@med.ge.com](mailto:Scott.Wollenweber@med.ge.com)) regarding topic ideas before completing proposal and budget forms
- If ideas are approved by the BC, co-chairs will provide PIs detailed proposals forms and budget sheets that are **due to RSNA Staff by April 15<sup>th</sup>**
  - Projects *must* support the Profiles and/or conformance process
  - Projects *must* address the federal contract objectives
  - Budget details to take federal indirect rates into consideration

### Action items:

- Interested PIs are to follow up with the co-chairs ([rathan.subramaniam@UTsouthwestern.edu](mailto:rathan.subramaniam@UTsouthwestern.edu) ; [john-sunderland@uiowa.edu](mailto:john-sunderland@uiowa.edu); [Scott.Wollenweber@med.ge.com](mailto:Scott.Wollenweber@med.ge.com)) regarding Round-6 projects
- MTV-DRO testers may send feedback to: ([kinahan@uw.edu](mailto:kinahan@uw.edu); [lapierce@u.washington.edu](mailto:lapierce@u.washington.edu))
- Group to work toward publishing a white paper and ready-to-use checklist to advance compliance effort

<b>APRIL</b>	
<b>Biomarker Committees (Fridays, 9 am CT):</b>	<b>SPECT Task Forces: (Tuesdays, 2 pm CT)</b>
<ul style="list-style-type: none"> <li>• Apr 08: Amyloid BC</li> <li>• <b>Apr 15: No call</b></li> <li>• Apr 22: SPECT BC</li> <li>• <b>Apr 29: TBD</b></li> </ul>	<ul style="list-style-type: none"> <li>• Apr 05: Image Acquisition / Processing for DaTscan – <i>(Dr. Eric Frey)</i></li> <li>• <b>Apr 12: No call</b></li> <li>• Apr 19: Phantoms / DRO Group – <i>Drs. Dickson and Zimmerman</i></li> <li>• Apr 26: Clinical / Literature Review – <i>Dr. Seibyl</i></li> </ul>
<b>MAY</b>	
<ul style="list-style-type: none"> <li>• <b>May 02: QIBA NM CC WebEx</b> <i>(Monday, May 2<sup>nd</sup>, 1 pm CT)</i></li> <li>• May 06: FDG-PET BC</li> <li>• May 13: Amyloid BC</li> <li>• May 20: SPECT BC</li> <li>• May 27: <b>Combined NM BCs</b></li> </ul>	<ul style="list-style-type: none"> <li>• May 03: Image Acquisition / Processing for DaTscan – <i>Dr. Dewaraja</i></li> <li>• May 10: Quantitative / Image Analysis – <i>Drs. Miyaoka and Seibyl</i></li> <li>• May 17: Phantoms / DRO Group – <i>Drs. Dickson and Zimmerman</i></li> <li>• May 24: Clinical / Literature Review – <i>Dr. Seibyl</i></li> </ul>