QIBA CT Volumetry Biomarker Committee (BC) Update Call

12 January 2015 at 11 AM CT Draft Call Summary

In attendance: RSNA:

Samuel G. Armato, III, PhD (Co-Chair)

Hyun Grace Kim, PhD

Ehsan Samei, PhD

Joe Koudelik

Gregory V. Goldmacher, MD, PhD, (Co-Chair)

John Lu, PhD

Jenifer Siegelman, MD, MPH

Julie Lisiecki

James Mulshine, MD

Daniel Sullivan, MD

Andrew Buckler, MS

Charles Fenimore, PhD

David Gustafson, PhD

Lubomir Hadjiiski, PhD

Nancy Obuchowski, PhD

Michael O'Connor, PhD

Kevin O'Donnell, MASc

Eric Perlman, MD

Binsheng Zhao, DSc

Philip F. Judy, PhD Nicholas Petrick, PhD

Agenda: Future planning and Field Test Discussion

Long-Term Planning

- CT Volumetry Leadership will meet via t-con on 1/19 to plan committee activities
 - Detailed planning is needed to complete the Profile and get to a Field Test / Technically Confirmed Status
- The next call for the BC will be 1/23 to discuss a potential QIBA-QIN collaborative challenge
 - o Drs. Athelogou and Kalpathy-Cramer will lead the discussion; all are welcome

Profile Update

- Drs. Goldmacher and Petrick and Mr. O'Donnell are working to resolve Profile public comments with a goal of completion by the end of January 2015
 - o Once their review is complete, the updated Profile will be circulated to the BC for review
 - Mr. O'Donnell called for QIBA Group 3A collaborators to help with a solution to the "Test Image Set" problem in Section 4.4.1 of the Profile
 - Ideally, a cross-section of hardware vendors, software developers, and clinicians is needed to review how software compliance is achieved
- Steps needed to finish the Profile and get to a Field Test / Technically Confirmed Status were discussed
 - o Dr. Samei, Dr. Obuchowski, and Mr. Buckler volunteered to help design the field test and plan logistics
 - A dry-run field test at lower power may be conducted prior to undertaking a clinical trial
 - IRB approval will still be required
 - Synthetic lesions / Hybrid data may be used for this process
 - Other items for consideration:
 - protocol
 - IRB approval
 - statistical analysis plan
 - applications of the QIBA Metrology Study
 - Dr. Obuchowski and Mr. Buckler will offer their metrology expertise to Drs. Armato and Siegelman, who
 are working on a simplified protocol / checklist
 - o Dr. Siegelman volunteered to translate the Profile's "Shall" language into a check-list for site testing
 - Dr. Perlman volunteered to assist with lessons learned from the FDG-PET Biomarker Committee's Profile efforts to help CT Volumetry
 - Dr. Perlman has developed a spreadsheet to help organize the normative text from the Profile and provide an at-a-glance view of remaining requirements and tasks
 - Drs. Boellaard, Kinahan, Lodge, and Turkington are leading the field test effort for the FDG-PET
 Profile at their respective institutions and may also be willing to provide some insight
 - Dr. Goldmacher would like a simplified protocol that describes the basics of the field test
 - A blinded volunteer site will be Moffitt Cancer Center via Dr. Gillies' offer

Next Call: January 23rd – QIBA-QIN Collaboration Discussion (CT Volumetry Biomarker Committee)