QIBA CT Volumetry Biomarker Ctte (BC) Call

29 February 2016 at 11 AM CT Draft Call Summary

In attendance: RSNA:

Gregory Goldmacher, MD, PhD, MBA (co-chair)

Ritu Gill, MD, PhD

Nicholas Petrick, PhD

Joe Koudelik

Rudresh Jarecha, MBBS

Ehsan Samei, PhD

Julie Lisiecki

Andrew Buckler, MS Claudia Kirsch, MD Lawrence Schwartz, MD

Vadivel Devaraju, PhD James Mulshine, MD Ying Tang, PhD

Charles Fenimore, PhD Kevin O'Donnell, MASc

Announcements

- Call for abstracts for RSNA 2016 Deadline is Wednesday, April 13th by noon CT
- Call for next round of funded project proposals due to RSNA Staff (giba@rsna.org) by April 15th
 - o High-level project suggestions may be sent to: gregory.goldmacher@merck.com; jen.siegelman@gmail.com;
 - o Cross-modality applications are encouraged

State of the Profile (Mr. O'Donnell)

- Work continues on the Profile; Mr. O'Donnell to provide status updates on the next call, 3/7
 - Completion of the Profile is anticipated by the beginning of April 2016
 - Some minor changes are being finalized

Future Directions

- Dr. Mulshine mentioned that there is presently no systematic expectation for QC requirements
 - He also reminded the group that working toward FDA qualified biomarkers is an important undertaking that should not be forgotten, despite its challenges
- QIBA should be "industrializing" biomarkers
 - This will require the expertise of different stakeholders to pool information to make known clinically meaningful biomarkers more robust
- Future directions for CT Volumetry are under consideration with suggestions as follows:
 - 1. A new Biomarker Committee on Emerging CT Biomarkers
 - 2. CT Volumetry Density
 - 3. Separate Task Forces for the following:
 - Dual Energy CT Imaging (DECT)
 - Tissue Material Characterization
 - Image Texture Analysis
 - 4. Dr. Jarecha suggested building a platform for multi-software analysis of the previously funded inserted lesion dataset (Dr Samei's) group.
 - 5. Quantification of lesions via a 3-pronged approach per Dr. Samei's method, incorporating:
 - morphology
 - biology
 - texture analysis
 - 6. Volume estimation of lesions (one dimension of a 3-dimensional project)
 - 7. Additional groundwork projects related to data acquisition, measurands for texture and morphology, and harmonization of image feature sets, including radiomics and texture features

Action items: Mr. O'Donnell to continue updating the Profile for BC comment and review

Next Call: Monday, March 7th at 11 am CT | 2016 planning and review of the Profile and Next Steps