

**QIBA VoICT Update WebEx
Monday, April 6, 2009
11AM (CST)**

Call Summary

In attendance:

Andrew Buckler, MS (Co-Chair)
Maria Athelougou, MD
Prashant Bansal, PhD
Kristin Borradaile
Charles Fenimore, PhD
Dana Ghiorghiu, MD, PhD
Michael McNitt-Gray, PhD

James Mulshine, MD
Binsheng Zhao, PhD

RSNA
Fiona Miller
Susan Anderson
Joe Koudelik

General Discussion

Mr Buckler opened the floor to all callers with new participant introductions and requested feedback on projects, group direction, and expectations

Mr Buckler described the VoICT Technical Committee as 2 layers/tiers:

- (1) Specific targeted contribution to lung cancer
 - Profile/claim work
 - (2) Building a structure and procedural template applicable to other quantitative imaging biomarkers
 - Methodology to be applicable to a broad QI utilization
 - A pathway to cross-cut through biopharma, vendors, academics, regulatory agencies, physicians, etc
- Benefits of new developments in imaging , i.e. high resolution imaging (cancer / thoracic) benefits, need to be optimized
 - Neoadjuvant window trials being done - GSK pilot study for biomarker validation
 - Proof of concept
 - Phase II trial details to be released soon
 - Need to evaluate methods of how measurements are being performed now and expand to all imaging modalities
 - Need to integrate user (radiologist) opinion on software and applications
 - Need standards to follow
 - Promote the concept that companies can utilize quantitative imaging beyond exploratory endpoints
 - QIBA to help set expectations, i.e. expected sources of variance, etc
 - Need to relate phantom performance to clinical volumetric measurements - not simply imaging the phantom
 - QIBA to help determine what is / isn't important
 - Additional data analysis proposed (Mr Buckler)
Algorithms (software) from various developers encouraged to be used in data analysis

Overview of Group 1B projects (Dr McNitt-Gray)

- Inter- and Intra-reader tumor volume bias and variance using LIDC data as “gold standard”
- MSK Coffee Break experiment - Minimal detectable change under “no change” conditions
- Statistical details will be focus of Group 1B call on April 8th
- Group 1A and 1B data is or will be eventually made publicly available (QIBA Wiki)
- New methods to decrease variability are welcome from everyone

Overview of Group 1C Projects (Dr Fenimore)

- Interclinical study, how to compare cross-device and clinical aspects of volumetric CT measurements
- Many common design elements with other VolCT studies
- Strawman of Group 1C projects on Wiki - open to comment/feedback
 - http://qibawiki.rsna.org/images/b/bd/VolCT-Group1C_Strawman20090329.ppt
 - Strawman needs to be vetted by institutions like MSK and Rush for expertise
 - Dr Mulshine to approach senior radiologists and medical physicists at Rush to participate on evaluating 1C projects

Next Steps

- Dr Athellogou to determine Definiens' interest in testing their algorithm (software) on Group 1A data
- Dr Mulshine to approach senior radiologists and medical physicists at Rush to participate on evaluating 1C projects
- Continue VolCT profiling work next week
- Next call scheduled for Monday, April 13, 2009 (11 am CDT)