QIBA Vol-CT Weekly Update WebEx October 13, 2008, 11am CDT Call Overview

In attendance:

Andrew Buckler, BSEE, MSCS (Co-Chair) P. David Mozley, MD (Co-Chair) Lawrence Schwartz, MD (Co-Chair) Rick Avila, MS Martin Barth, PhD Michael McNitt-Gray, PhD James Mulshine, MD Daniel Sullivan, MD Binsheng Zhao, PhD Fiona Miller (RSNA) Joe Koudelik (RSNA)

Rick Avila provided a status report on Group 1A activities

- Goal to measure the inter and intra-reader variability with phantom lesions
- Scanning protocol nearly complete
 - Continued discussion on appropriate slice thickness
 - Methods to determine variability (metrics)
 - Reaching consensus on phantom content in protocol
- Efforts turning now on high-level issues
 - Are we setting the process up for "too easy" a job for readers (i.e., spherical nodules)
 - May need more complexity in phantom
- Beginning with statistical evaluations
- Tight experimental design moving ahead
- Definitive study proposed (not a pilot)

Dr. McNitt-Gray provided a brief status report on 1B Activities

- Goal of group is to on progressing from phantom to clinical images
- Drs. Fenimore, Ford, Scwhartz and Zhao to assist in group efforts
- Create datasets to test reader method variability

Team discussion on scaling of project as a whole

- More discussion required to determine scope
- Cases number, etc still required -- may influence each step
- Guidelines and expectations needed to steer the sub-groups
 - \circ Key stakeholders needed to endorse what is needed
- Statistical evaluation needed
- Parts 1A and 1B are seen as necessary first steps building to a whole and must be understood first
- In the end, business case needs to be straight-forward e.g.,
 - Vol-CT is more sensitive or accelerates getting to the critical decision factor (go, no-go) faster for progressive vs. stationary disease
 - Fewer patients need to be enrolled per trial
- Project proposals must be concrete with objectives and time-lines
- A comprehensive plan is needed including an estimate of scale
- Participants can build a project proposal and move from discretionary part-time to driver-mode, thus requiring funding, PPP development, etc
- This level of reality is needed to get organizations to get involved

- Dedicated resources needed to reach complete goal despite good progress is being made with current resources
- RSNA Annual Meeting a place to work f2f to develop a broader plan
 - Lead time to be used for preparation
- Dr. Lori Dodd to work on stat framework proposal and assist with the experimental design
 - Groups 1A and 1B close to forming specific questions for L Dodd to pursue
- Design needs to answer the question and include statistical support
- Needs to be considered academically and clinically sound

RSNA's Role/Participation

What is RSNA's ambition concerning this group and next steps (i.e., PPP, funding, etc)?

- To be discussed on next QIBA Planning Committee tcon
- Proposal to be drafted for RSNA Board review and consideration (group's identity)
- Move this process from a part-time effort to driver
- Need input from all to develop a strawman
- An extension of the validation plan needed
- Need to become more quantitative about group goals
- Dr. L. Dodd to assist with structural question concerning scale
- The f2f at RSNA 2008 would be an opportunity to assemble the proposal
- What study designs are needed by pharma and academic communities?

Jim Mulshine to reach-out to Drs. Mozley and Schwartz if capable to help with the study design

Next Week Agenda:

Groups 1A and 1B Updates Kevin O'Donnell's and Dr. Fenimore's reports