

**QIBA VOL-CT Weekly Update WebEx
Monday, December 15, 2008, 11am CDT**

Call Summary

In attendance:

Andrew Buckler, MS (Co-Chair)
P. David Mozley, MD (Co-Chair)
Lawrence Schwartz, MD (Co-Chair)
Harris Ahmad, MD
Alaaddin Akkaya, MD
Martin Barth, PhD
Charles Fenimore, PhD
David Gustafson, PhD
Despina Kontos, PhD
Riccardo Lencioni, MD
Louis Marzella, MD, PhD

Michael McNitt-Gray, PhD
James Mulshine, MD
Kevin O'Donnell
Nicholas Petrick, PhD
Daniel Sullivan, MD
Hiro Yoshida, PhD
Binsheng Zhao, PhD
Linda Bresolin, PhD, MBA, CAE
(RSNA)
Susan Anderson (RSNA)
Joe Koudelik (RSNA)

Introduction (Mr. Buckler)

- Dr. Despina Kontos, an investigator at the University of Pennsylvania working in the area of predictive quantitative biomarkers for breast CA risk assessment, joined the call for the first time.
- Mr. Buckler described two models of effort:
 - The spiral model with several concurrent activities - may serve the VolCT TC better due to the urgency of projects
 - The waterfall model in which work is sequential, e.g. Part 1 ends, Part 2 begins
- Would like current efforts to be alive, vibrant and relevant now and in future
- Per Dr. Mozley, Merck is starting three new trials in lung cancer this month, drawing from existing trials and specified outputs
- Dr. McNitt-Gray posted info on wiki
http://qibawiki.rsna.org/index.php?title=Volumetric_CT
<http://qibawiki.rsna.org/images/1/1b/Rsna2009-ssk04-04-PhantomReaderStudy.doc>

Discussion of using NLST vs. ACRIN Protocol 6678 (*Lung Cancer: Evaluation of Treatment Response with PET*, <http://www.acrin.org/TabID/162/Default.aspx>)

- National Lung Screening Trial (NLST) work can provide good guidance for Part 1C and more broadly
- Discussion for group: should we put forward several image acquisition protocols as strawmen?, e.g. NLST as first default
- Do we need a subset of specifications?

ACRIN 6678:

- Would parameters such as 6678 be more relevant than NLST for pharmaceutical company use?

- 6678 data could be restructured for quantitative analysis-framework for discussion
- Check table of input parameters for 6678 (ie, slice thickness, etc)
- 6678 field of view (FOV) has been problematic--large voxels not good for volumetrics

NLST:

- Advantage of NLST is that everything for inputs is specified for outputs; can make additions and deletions
- We may want to extend the NLST slice thickness for use in Stage I up to Stage IV technology has moved since NLST was set down; does ACRIN have more parameters?
- Agreement that a composite of NLST and 6678 would be possible with little effort or harmonizing

Wiki

- Dr. Schwartz will put a link for NLST and 6678 on the wiki
- Mr. O'Donnell has populated the wiki with several documents
- Authentication needed for wiki? Accounts needed to post and edit; not needed to simply view wiki material.

Groups and Planning

- We have a validation plan for VolCT as a better method for therapy response measurements
- Part II is hinge pin of validation plan; lay down standards. Use NLST and ACRIN 6678 to fill-in details; has value for pharma stakeholders
- In Parts III-VI, conduct increasing levels of validation for standards; conduct in parallel sequence and not strictly sequentially
- Keep the planning fluid and avoid inertia; want to be able to change momentum
- Will need versioning for profiles and specs as time progresses
- Groups 1A-C providing background for tech parameters and expected outcomes for those setting
- Unlike groups 1A and 1B, group 1C is at very beginning (Dr. Fenimore)
- For Group II, what placeholders should be in the Profile; claims are limited presently without data
- Group 1B relating subsets of clinical needs in trial setting; put together organically but continue to address http://qibawiki.rsna.org/images/5/53/Proposed_Group_1B_Questions_and_Datase_ts_2008-11-05v2.ppt (Dr. Mulshine)
- There are barriers for accrual if acquisition parameters are too high
 - Repeating baselines done on different equipment
 - Include acceptable deviations with suggestions of expected variance; this is key for gradually raising the bar

Next Steps

VolICT weekly call resumes on Monday, January 5th, 2009

Dr Mulshine to circulate comments for feedback

Subgroup (1A-C) updates next time

Subgroups to continue scheduling their respective group calls to maintain momentum