QIBA CT Volumetry Technical Committee Update Call
January 23, 2012 at 11 AM CST

DRAFT Call Summary

In attendance:
P. David Mozley, MD (Co-chair)  Philip Judy, PhD  RSNA:
Lawrence Schwartz, MD (Co-chair)  Hyun Grace Kim, PhD  Joe Koudelik
Andrew Buckler, MS  Michael McNitt-Gray, PhD  Madeleine McCoy
Paul Carson, PhD  James Mulshine, MD
David Clunie, MBBS  Kevin O’Donnell, MASc
Barbara Croft, MD  Guillaume Orieux
Alden Dima, MS  Nicholas Petrick, PhD
Heidrun Endt  Neil Steinmetz, MD, JD
Charles Fenimore, PhD  Daniel Sullivan, MD
Paul Garrett, MD  Ying Tang, PhD
Gregory Goldmacher, MD, PhD
David Gustafson, PhD

Project Updates – Group 1B
• Dr McNitt-Gray plans to submit an updated project plan by the end of February and complete 1B groundwork by September 2012; timeline to extend through September
• Overview of Project 1B (past/future) provided
• Original inter-reader study using coffee break data (ie, 32 cases, no-change condition, two time point read) measuring lesion diameter, area and volume
• Pessimistic reproducibility results have led to an extension project under clinical conditions (ie, allowing side-by-side reads)
• New study to include RIDER cases (50% of new image data to be non-coffee break in format)
• Drs McNitt-Gray and Clunie to determine a reader schedule at CoreLab Partners; new reader mark-ups expected to take 2-3 months to complete

Project Updates – Group 1C
• Dr Fenimore reported that image/data collection and reader study has been completed for all sites
• Drs Kim and Lu are working on the statistical analysis segment, including equivalence testing and multi-comparisons
• Endpoint of study will be the bias component to be studied on the device effect on readout variance
• Nodule size effect has been identified, but consistency seen across scanner platforms
• Drs Fenimore, Kim and Lu to correlate 1C statistical results (ie, integrate into one document) and present to the Tech Ctte by the end of February
• Draft of analysis portion to be ready soon, but a quick sketch (informal email) suggested within two weeks
• Variation in measuring lesion volume due to segmentation suggested; to be pursued at a later time; Dr Petrick and Mr Dima to follow-up off-line

QIBA Vol-CT AdvDisease v2 Public Comment Profile Feedback (led by Mr. O’Donnell)
• Section IV: Compliance discussed
• Scanner speed and breath hold
• Requirements for CT technologists suggested; text could also be circulated to technologists for their feedback
• Move to convert $mm^3$ to CC for uniformity of unit throughout Profile ($mm^3$ deemed too small to be a useful measurement)
• Mr O’Donnell to incorporate text submitted by Drs Steinmetz and Kim
• 15% and 30% references to lesion volume to be removed from Claim language; Dr Kim to determine how to best apply this statistical language

Next steps:
• Mr. O’Donnell to post the updated versions of the profile and comment resolution document to the WIKI
• Agenda items for the next t-con:
  o Continue brainstorming for 2012/2013 NIBIB Funding Projects
  o Profile public comments and resolution to continue
• Next call scheduled for Monday, January 30th at 11 am CST