**QIBA Volumetric CT Colorado Planning Group, Project Update**

Tuesday, March 20, 2012 at 11 AM CDT

Call Summary

| **In attendance** | | **RSNA** |
|---|---|---|
| *Kavita Garg, MD (Chair)* | Nicholas Petrick, PhD | Joe Koudelik |
| Andrew Buckler, MS | Ann Scherzinger, PhD | |
| David Miller, PhD | Daniel C. Sullivan, MD | |

**Status Update**

- Semi-solid nodules expected to arrive April 10th; Dr. Miller to request earlier delivery, if possible
- Positioning/ scanning with solid lesions deemed a good starting point while waiting for semi-solid lesions
- Siemens Sensation 64 scanner at U Colorado capable of 0.6, 1, 2, 3mm slice thicknesses; due to time constraints, only 2mm slices to be acquired for this study (keeping under 2.5mm as per the CT Volumetry Profile performance requirements)
- 80 vs. 140 kVP dual energy levels to be pursued at a later date, if continued funding is available
- Drs. Scherzinger and Kim to follow-up on power study design and acquisition parameter progress (study details being finalized)
- Study design is to focus on what *should* be done (question-based), not what *can* be done
- Single vs. multiple lesions per image discussed; either deemed acceptable; goal is to get as much utility out of data as possible
- Lesions random lesions segmentation is not a concern with multiple lesions
- 10 lesions to be embedded within an invisible (radiographically invisible) foam without touching internal phantom vasculature
- "Lesion seeding tabs" to be included as location points within all lesion margins (centers not necessary)

**Timeline for the Colorado QIBA/NIBIB Round-1 Project**

*Start – February 20, 2012*

- Determine collaborative group members and initial meetings.
- Study design 1-3
- Expedited IRB Approval
- Phantom purchase and delivery
- Nodule purchase and delivery

*February 4 - April 10, 2012*

- Study Design 4 (statistical design)
- ADDED: Procedure optimization with solid nodules – phantom, scanning, reading sessions

*April 10 – May 1, 2012*

- Scan phantom.
- Prepare datasets, including randomization of cases for readers.
- Reader training

*May 1 – June 15, 2012*

- Read studies; do volumetric analysis

*June 15 – July 15*

- Perform primary statistical analysis

*July 15 – August 15*

- Follow up analysis performed based on primary results

*August 15 – September 15*

- Report results

**Next steps:**

- Dr. Miller to follow-up with lesion manufacturer to determine if earlier delivery date is possible
- Drs. Scherzinger and Kim to follow-up on power study design and acquisition parameter progress

**Next Call:**

- April 17, 2012 at 11 am CT