

**QIBA VolCT Group 1B Update WebEx**  
**Tuesday, Feb. 10, 2009**  
**1PM (CST)**

**Draft Call Summary**

**In attendance:**

Michael McNitt-Gray, PhD  
Kristin Borradaile  
Charles Fenimore, PhD  
Robert Ford, MD  
Daniel Sullivan, MD

**RSNA**  
Susan Anderson  
Joe Koudelik

**General Discussion:**

Dr McNitt-Gray provided a brief overview of Question 1; this being the group's first project

- Accuracy and Precision (aka Bias and Variance) in measuring tumor volumes
  - Specific Aims
    - To investigate both bias and variance of both readers and algorithm-assisted readers in measuring volumes, diameters and bi-directional diameters of lesions
    - To investigate inter and intra-observer variability in each task
  - Materials and Methods
    - Use LIDC patient datasets (with known lesion sizes; already contoured by four readers)
    - Volumes and contours known
    - Single time points only
    - Still need to identify which nodules to use for study
    - Similar as in BioChange 2008, lesions are identified and coordinates provided to readers
    - These datasets have been provided to Dr Ford (RadPharm)
  - Workflow and Reader Tasks
    - Dr Ford will manually annotate (i.e., circle) lesions and forward to readers
    - Readers to manually mark two diameters (longest diam and perpendicular diam) w/o LIDC marks
    - No reader will see measurements made by other readers
    - Siemens software to assist with semi-automated contouring of lesions to assist with volume determination (w/o LIDC mark-up)
    - One volume and two diameters will be reader tasks
    - Some readers to perform duplicate case reads
    - Saving of mask boundaries - VolCT Group 1A to lead here

**Next Steps:**

Call ended due to WebEx connection drop. Follow-up call rescheduled for Thursday, February 12<sup>th</sup>, 2009 at 12:00PM CST.