

**Columbia University-QIBA Funded Project Update T-Con**  
20 August 2012 at 4 PM CDT (GMT-5)  
Call Summary

**In attendance:**

*P. David Mozley, MD (Co-Chair)*  
*Lawrence Schwartz, MD (Co-Chair)*  
Andrew Buckler, MS  
Kavita Garg, MD  
Robert J. Gillies, PhD

Hyun Grace Kim, PhD  
Shing Lee, PhD  
Ann L. Scherzinger, PhD  
Sarah Sherlock, PhD  
Bingsheng Zhao, DSc

**RSNA:**

Julie Lisiecki  
Madeleine McCoy

**NIBIB funded project update—Columbia (Dr. Zhao)**

- Columbia Medical Center Project-Dr. Zhao—Validation of Volumetric CT as a biomarker for predicting patient survival
  - Goals of the project are:
    - to validate the use of volumetric CT in predicting patient survival
    - to correlate biological and genetic changes of tumors treated with target therapy using a retrospective dataset from a large, multicenter Phase II/III clinical trial in advanced colorectal cancer.
  - Progress is on track though more discussion on how to analyze the data is needed
- Dr. Zhao described the dataset available for this study and the experiments (all completed) and reviewed statistical analysis with Dr. Shing Lee (CU statistician) and Dr. Schwartz
- Data is currently *not* for public domain
- Study design discussed in greater detail:
  - Three metrics were measured on the target lesions with computer-assisted algorithms:
    - Unidimensional (1-D), bidimensional (2-D), and volumetric (3-D)
  - Intra- and inter-reader variability of the three measurements was explored in a subset of patients
  - Minimal variation observed between inter- and intra-reader measurements
    - Novel analysis approach used based on biologic heterogeneity
      - Group starts to analyze the total tumor burden, possible variability in each measurement technique, and to determine the most important metrics
      - No data progression in the dataset - study might not meet FDA biomarker qualification requirements
- The CU team is cleaning up the received clinical outcome data
- Novel statistical methods to analyze both measurement variability and clinical correlations are welcome.
- Project leaders agreed to meet as a small working group – approximately every two weeks; time TBD

**Next steps**

RSNA staff will follow-up with Drs. Schwartz, Mozley, Zhao and Mr. Buckler to schedule update t-cons. RSNA Staff to schedule regular calls. The next call is scheduled for Thursday, September 13, 2012 at 3pm (CT).