QIBA Multi-parametric Metrology Call
20 May 2020 at 10 AM CT
Call Summary

In attendance   **RSNA**
Nancy Obuchowski, PhD (Co-Chair)   Alex Guimaraes, MD, PhD   David Raunig, PhD   Joe Koudelik
Huiman Barnhart, PhD   Erich Huang, PhD   Daniel Sullivan, MD   Julie Lisiecki
Nandita deSouza, MD   Gene Pennello, PhD   Xiaofeng Wang, PhD

Moderator: Dr. Obuchowski

Approval of Call Summary
- The notes from May 4, 2020 were approved as presented

Use Case #3, Risk Prediction: (Dr. Huang)
- Dr. Huang created a table to summarize how he is rearranging the essential components of the paper and track section updates
- The table includes sections on background, rationale, how QIBs are measured, performance claims, details behind the methodology, etc.

Discussion topics included the following:
- Dr. Raunig asked whether Letters of Intent (LOIs) had been reviewed for drug development tools, to be used as a model for the background and rationale section
- Dr. Raunig to send Dr. Huang a link to LOI examples
- Dr. Huang is working on the following:
  - Inclusion of protocols for imaging acquisition and processing
  - Fully specified regression equation
  - Software code used for computation
  - Patient population – high-risk vs. low-risk
  - Performance claims for the underlying model, including confidence intervals and specific criteria/conditions needed to validate each model
- Dr. Huang to email the latest draft to the group once he has incorporated changes based on the call discussion

Next call: Dr. Delfino to present on Phenotype classification (Use case 2) on Monday, June 1st at 2 pm CT

Call Schedule:

Date:	Topic:	Lead:
Monday, June 1 (2 pm CT)	**Use case 2:** Phenotype classification	Dr. Delfino
Wednesday, June 17 (10 am CT)	**Use case 4:** Radiomics	Dr. Wang
Monday, June 29 (2 pm CT)	**Use case 1:** Multi-dimensional descriptor	Dr. Raunig
Wednesday, July 15 (10 am CT)	**Use case 2:** Phenotype classification	Dr. Delfino
Monday, July 27 (2 pm CT)	**Use case 3:** Risk prediction	Dr. Huang
Wednesday, Aug 12 (10 am CT)	**Use case 4:** Radiomics	Dr. Wang

Use cases:
- **Use case 1**: (Multi-dimensional descriptor) a panel to determine how to care for a patient
- **Use case 2**: (Phenotype classification) rule or decision tool to diagnose phenotype
- **Use case 3**: (Risk prediction) several biomarkers will be evaluated to create a prediction or risk score
- **Use case 4**: (Radiomics) may not have a specific biomarker for reference