QIBA Multi-parametric Metrology Call 09 March 2020 at 2 PM CT Call Summary

In attendance

Nancy Obuchowski, PhD (Co-Chair) Huiman Barnhart, PhD Michael Boss, PhD Jana Delfino, PhD Nandita deSouza, MD Timothy Hall, PhD Erich Huang, PhD Rudresh Jarecha, MBBS, DMRE, DNB Marina Kondratovich, PhD David Raunig, PhD Daniel Sullivan, MD Xiaofeng Wang, PhD **RSNA** Joe Koudelik Julie Lisiecki

Moderator: Dr. Obuchowski

FDA Evaluation of New Devices Presentation:

- Dr. Kondratovich provide an overview and shared slides on risk prediction from the FDA experience
- These slides have been distributed to the Multi-parametric listserv for reference
- Dr. Kondratovich to send additional information regarding FDA/CDRH process guidance for scoring devices
- She suggested using the In Vitro Diagnostic Multivariate Index Assay (IVDMIA) as a starting point for the discussion of risk prediction
 - This tool is defined as a device that: "combines the values of *multiple* variables using an interpretation function to yield a *single*, patient-specific result or score that is intended for use in the diagnosis of disease or other conditions, or in the cure, mitigation, treatment, or prevention of disease."
- She also recommended the Monte Carlo simulation of error propagation to aid with determining precision
- Dr. Huang will moderate the next call with his presentation on risk prediction, which will be held on Wednesday, March 25th at 10 am CT

Call Schedule:

Date:	Topic:	Lead:
Wednesday, March 25 (10 am CT)	Use case 3: Risk prediction	Dr. Huang
Monday, April 6 (2 pm 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

Announcements:

Dr. Delfino mentioned that all FDA workshops and public meetings are cancelled for the month of March (this
was based on a general FDA announcement; no further specifics were available)

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