QIBA Dynamic Contrasted Enhanced (DCE) Biomarker Committee (BC) Call
Thursday, July 19, 2018 at 11 AM (CT)
Call Summary

Participants			RSNA
Hendrik Laue, PhD (Co-Chair)	Harrison Kim, PhD, MBA	Nancy Obuchowski, PhD	Susan Stanfa
Thomas Chenevert, PhD	Anthony Liu, PhD	Mark Shiroishi, MD	
Amita Shukla-Dave, PhD	Dariya Malyarenko, PhD	Gudrun Zahlmann, PhD	

Moderator: Dr. Laue

DCE Profile Update
- Profile is located at:
  https://docs.google.com/document/d/1in76va1Q96tVX97RWLHHqimOHxCeDsMqh98na8pwOb8/edit?usp=sharing
- Unless a strong scientific reason exists, a specific phantom should not be recommended
- The latest BC internal review Profile comments were discussed
- Further discussion needed regarding whether to allow both floating point DICOM representation and surgical for parametric maps in the Profile
- Section 3. Profile Activities section to be shortened
- 3.13. Image Analysis: Discussion on tumor ROI definition
  - "The extraction of quantitative DCE-MRI parameters requires a suitable software package" – there was discussion on the fact that there is some software (third party as well as vendor) for brain, prostate and breast but none for head and neck
  - Discussion occurred regarding "Algorithmic steps for parametric image calculation"
  - Revisions were made to "Analysis of DCE-MRI data is carried out in a series of distinct steps" list
    - ~~"Calculate"~~ "Determine" a vascular input function (word choice update)
    - Discussion on why the step, "Identify the region or regions of interest in the dynamic data" should remain

  - Details on the series of steps, as well as the conformance procedure for software are addressed in more detail in Appendix B

- Section 4. Assessment Procedures: additional discussion needed on what to include and what to move (and where)
  - 4.1. Assessment Procedure: Image Analysis Software
    - With proposed/available software
      - Perform T1-Mapping on DRO data from Duke/Barboriak > suggestions for required accuracy
      - Perform Ktrans mapping on DRO data from Duke

    - Check/discuss algorithm comparability for software in question

  - 4.2 R1/T1 Mapping phantom
    - Scan QIBA T1 mapping phantom
    - Compare results with dedicated software

- o Assessment in reference to Claims is needed
    - Assess assumptions underlying Claim
    - Current Profile Claim developed using phantom; discussion on whether assessment procedures should reflect human subjects
    - Sequestered data set

Next DCE BC Call: Thursday, August 2, 2018 at 11 AM CT