QIBA CT Volumetry Biomarker Ctte (BC) Call
03 April 2017 at 11 AM CT
Call Summary

In attendance:  RSNA:

<table>
<thead>
<tr>
<th>Name</th>
<th>Title</th>
<th>RSNA:</th>
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<tr>
<td>Ehsan Samei, PhD (Co-Chair)</td>
<td>David Gustafson, PhD</td>
<td>Kevin O’Donnell, MASc</td>
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<td>Jenifer Siegelman, MD, MPH (Co-Chair)</td>
<td>Lubomir Hadjiiski, PhD</td>
<td>Nicholas Petrick, PhD</td>
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<td>Hubert Beaumont, PhD</td>
<td>Philip Judy, PhD</td>
<td>Marthony Robins, PhD</td>
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<td>Andrew Buckler, MS</td>
<td>Yongguang Liang, PhD, DABR</td>
<td>Na Sun, PhD</td>
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<td>Heang-Ping Chan, PhD</td>
<td>James Mulshine, MD</td>
<td>Ying Tang, PhD</td>
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<td>Charles Fenimore, PhD</td>
<td>Nancy Obuchowski, PhD</td>
<td>Pierre Tervé, MS</td>
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<td>Matthew Fuld, PhD</td>
<td>Michael O’Connor, PhD</td>
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Review prior call summary: March 20th summary approved as submitted

Discussion included the following:

CT 233 Testing: (Dr. Fenimore)
- Goal was to determine CT resolution with the CT accreditation phantom by comparing the Profile referenced CT 233 software to visual inspection

Modulation Transfer Function (MTF) language:
- Drs. Supanich, Robins, and Samei are collaborating on Modulation Transfer Function (MTF) and Z-axis resolution language in the Profile Checklist to aid technologists

CT Quantification Beyond Volume and Volume Change: Texture, Morphology, and Composition: Magnitudes and Changes:
1. Relevance: What is worth measuring?
2. Objectivity: What are we measuring?
3. Quantification: How do we quantify?
4. Implementation: What tool do we use to measure?
   o Currently, no standardized measure of texture exists; investigation of texture may be outside the scope of QIBA
   o Possible applications for texture might be use in surgical planning if more robust quantification is possible
     ▪ Data quality is an important factor regarding artificial intelligence (AI); QIBA may be able to help here
     ▪ Questions remain regarding how to quantify texture, and what level of data quality we need to strive for
     ▪ Determining how to produce images that are of more consistent quality could be very useful
       ▪ Discussion on this topic to continue

Action items:
- Additional spreadsheets for a regression module and coordinates for RIDER tumors are being compiled by Mr. Tervé
- Drs. Samei, Robins, and Supanich to collaborate on Z–axis resolution and Modulation Transfer Function (MTF) language for the Profile
- Those interested in a Texture/ Morphology TF are asked to email the co-chairs or RSNA Staff: jlisiecki@rsna.org

Next Call: Monday, April 10, 2017 at 11 am CT – (Biomarker Committee)