QIBA CT Volumetry Biomarker Ctte (BC) Call
24 May 2018 at 11:30 AM CT, Thursday
Call Summary

In attendance:

Rudresh Jarecha, MBBS, DMRE, DNB (Co-Chair)  Charles Fenimore, PhD  Kevin O’Donnell, MAsc
Ehsan Samei, PhD (Co-Chair)  Lubomir Hadjiiski, PhD  Nicholas Petrick, PhD
Jennifer Siegelman, MD, MPH (Co-Chair)  Hyun Grace Kim, PhD  Fabien Ricard, MD, MS
Hubert Beaumont, PhD  Yongguang Liang, PhD  Marthony Robins, PhD
Heang-Ping Chan, PhD  Nancy Obuchowski, PhD  Ying Tang, PhD

RSNA:

Joe Koudelik
Julie Lisiecki

Moderator: Dr. Samei

Updates:

- Dr. Robins provided an overview of topics discussed by the BC at the QIBA Annual Meeting
- Mr. O’Donnell, QIBA Process Committee Chair, is working on updating the voting procedures and eligibility criteria for Steering Committee consideration

Vol CT Advanced Disease Profile Technical Confirmation Feedback Efforts:

- Items that remain uncertain include:
  - Linearity testing for section 4.3
  - Completion of section 4.5 by Dr. Liang who intends to complete this section very soon
- Dr. Petrick has finalized changes to his data, which were posted to the QIDW

Voting:

- A majority vote is needed for the Profile to be considered published as technically confirmed
- After voting, negative comments will be discussed as the Profile moves forward
- Any minor issues (typos, minor corrections) can be summarized in a table or log and forwarded to BC members
- Those who are eligible to vote based on attendance data can submit their votes until Tuesday, 5/29
- The current voting procedure is based on BC call attendance: voting is extended to those who have attended 2 consecutive calls
- BC members discussed voting procedures and offered some suggestions for consideration by the Process Committee

BC Voting Suggestions to be passed on to the Process Committee:

- Rules for voting should apply only if BCs are having regular weekly calls
  - For BCs that may have more erratic schedules, the voting criteria does not seem fair
  - Participation could be graded by overall involvement and participation, e.g., Profile contributions, not just call attendance
  - Dr. Siegelman asked that the Process Committee be mindful of the spirit of QIBA: its inclusiveness and openness should be reflected in the voting procedures
- Co-chairs, co-chairs emeritus, and scientific liaisons should be allowed to vote in perpetuity due to their commitment to advancing the Profile and working with BC members, even if it may be behind-the-scenes at times
- Other suggestions included the following:
  - Using 2 out of the last 4 calls for attendance to determine voting eligibility, or
  - Having attended 50% or more of the calls over the past year could also be considered as voting criteria, or
  - All BC leaders to be allowed to vote (past and present) regardless of call attendance
  - Providing an accessible list of eligible voters for participants and co-chairs to check voter status easily
- Dr. Samei asked Dr. Jarecha to put forward these suggestions at the next Process Committee meeting
- Mr. O’Donnell suggested that ballots be sent to the entire BC membership in the future (~275 people for the CT Vol BC)
Next steps:
- Additional discussion is needed regarding future plans for the BC
- Considerations for further development include the following:
  - Use of hybrid datasets for conformance testing
    - The QIDW has four datasets with hybrid lesions
      - Each dataset has 100 patient cases, with 200 for lung, and 200 for liver
  - Clinical confirmation using a planned lung cancer trial
    - Related to this, Dr. Petrick suggested getting in touch with Dr. Amber Simpson at Memorial Sloan Kettering, as she is working with radiogenomics and texture in clinical trials for the liver
    - Dr. Petrick to contact Dr. Simpson regarding a possible collaboration to advance the Profile to the clinically-confirmed stage
  - Exploring the attributes of lesions beyond volume
    - It was unclear as to whether this would take place under the current BC or would require a new BC due to the different expertise that might be required for this topic
    - The CT Coordinating Committee leadership (Drs. Jarecha, Schwartz, and Lynch), along with the CT Scientific Liaison (Mr. Buckler) will discuss whether or not a new BC should be considered or if some of these topics can fall under CT Volumetry
    - Building a case for a new biomarker can be coordinated offline, if that is the determined direction

Actions:
- Dr. Jarecha has agreed to follow up on lung cases
- Dr. Petrick has agreed to follow upon liver cases
- Lymph node cases are on hold for now due to difficulties associated with them
- Dr. Robins to review the supporting CT Vol datasets on the QIDW with Dr. Obuchowski
- The group to consider additional radiomics beyond volume
- Feedback is welcome and any comments will be collated by RSNA Staff: jlisiecki@rsna.org
- RSNA Staff to send the CT Volumetry BC co-chairs the list of interested Texture participants

Next Call: TBD by the co-chairs