QIBA Musculoskeletal (MSK) Biomarker Committee (BC) Meeting

Tuesday, November 23, 2021, at 10 a.m. CT Meeting Summary

In attendance RSNA

Xiaojuan Li, PhD (Co-chair) Maggie Fung, MEng Edwin Oei, MD Joe Koudelik Thomas Link, MD, PhD (Co-Chair) Ali Guermazi, MD, PhD Yuxi Pang, PhD Susan Stanfa

Michael Boss, PhD Peter Hardy, PhD Chris Peng, PhD

Robert Boutin, MD Kecheng Liu, PhD, MBA Rianne van der Heijden, MD, PhD

Majid Chalian, MD Nancy Obuchowski, PhD Cory Wyatt, PhD Ruud de Boer, PhD Kevin O'Donnell MASc Yansong Zhao, PhD

Cathy Elsinger, PhD

Topics Discussed

- Planning for Profile <u>Stage 3: Technically Confirmed (TC)</u> (Mr. O'Donnell)
 - o Profile stages and Profile conformance
 - o A specification with no impact on biomarker performance does not need to be included in the checklist
 - o Checklist items as requirements to achieve the Claim rather than common practice tasks
- Recruiting non-academic and international sites by leveraging existing relationships and opportunities through RSNA, e.g., annual meeting and R&E Foundation grants
- Access to clinical vs. research scanner sequences

Additional notes:

- **Feedback forms** are important to further optimize protocols, important to involve new people, get feedback from outside committee members, should protocols be more lean
- Dr. Li provided updates on the sequence and the study design, accelerated sequences are developed, currently not a
 product but a research sequence; research agreement is required to use the sequence
- Dr. Li's study will be conducted with traveling and local volunteers, which is the next step
- Dr. Peng provided updates on his site at Einstein Hospital
- Dr. Boss provided insights from DWI BC with collaborations in Brazil, Cornell, and Washington University
- Discussion whether stage 3 and 4 (technical and claim confirmation) can be combined

Next Steps

- This iteration of the MSK Profile will be based in part on results from Dr. Li's NIH R01 grant project / multicenter study which includes four sites and three major vendors: Cleveland Clinics (Drs Li and Winalski), University of Kentucky (Dr. Hardy), Albert Einstein University Hospital (Dr. Peng) and UCSF (Dr. Link)
- The T1rho/T2 sequence has been installed at the four sites and performance will be assessed; traveling volunteers to be scanned at all four sites
- Additional sites to implement the sequence include Cleveland Clinics Florida (suggested by Dr. Winalski) and University of Washington, Medical Center (Dr. Chalian) and Erasmus (Dr. Oei)
- Due to the availability of resources, a combination of stages 3 and 4 is an option for the MSK BC, however, if significant changes to the procedures need to be made in response to stage 3 site feedback, a new iteration of the Profile would be required
- Feedback from non-academic and international sites is strongly encouraged
- Practice run for long term conformance process is an important aspect of stage 3

Next Meeting: Tuesday, January 25, 2022, at 10 a.m. CT [4th Tuesday of each month] - No Dec. 28 meeting (RSNA closed)