

QIBA SPECT TC^{99m} Biomarker Committee (BC) Call
Tuesday, April 14, 2020, 2 PM (CT)
Call Summary

In attendance:

Yuni Dewaraja, PhD (Co-chair)
Robert Miyaoka, PhD (Co-chair)
Denis Bergeron, PhD

John Dickson, PhD
P. David Mozley, MD

Nancy Obuchowski, PhD
Brian Zimmerman, PhD

RSNA Staff

Joe Koudelik
Julie Lisiecki

Moderator: Dr. Miyaoka

SPECT TC^{99m} Public Comment – Feedback Resolution Update

- BC members continued to address public comment feedback
- The BC plans to have another call in May

Comments Resolved:

- Dr. Obuchowski's revisions regarding coefficient of variation (COV) values were accepted and text revised
- Lines 120 – 135 were accepted as is
- The reference for the 8% COV value in Table 3.2 was accepted
- In line 525 reference to a LEHR (low-energy high resolution) collimator was removed, as these are no longer available
- Line 604 described laying a subject on a calibrator (?)
 - Text was removed as context and source were not clear
- Dr. Miyaoka to re-check AAPM comments regarding 5 mm voxel size measurements
- Line 925 was revised as follows:
 - The CV of the total counts in the volume of interest thus determined shall be recorded and the upper bound of the 95% CI for the CV should be <8%. If the upper 95% confidence bound for the CV is above 8%, the acquisition parameters should be adjusted accordingly.
- Dr. Miyaoka is working on a detailed response to AAPM, addressing each of their points

Next steps to Technical Confirmation:

- The BC would like to conduct feasibility testing at three or more sites
- Dr. Dickson suggested working on a site checklist to aid with this process
- Publications detailing potential results would also be helpful to advance the group's work, and are encouraged
- Dr. Mozley suggested parking the Profile once TC is attained until a business driver or champion is identified to advance the Profile further

Other news:

- Dr. Dewaraja has a Research Project Grant (R01) in progress re: quantitative imaging (unrelated to TC99m)
- Industry interest is high re: quantitative imaging for theranostics and radionuclides ([Yttrium-90](#))
- The objective is to develop methods for accurate quantitative Y-90 imaging of lesions and normal organs and to apply these tools in a patient study to develop predictive dosimetric models for future RE treatment planning.
- She is also conducting researching on DOTATE
- Other possibilities for future research include an altropane trial looking at dopamine transporters and PE2I, a fluorinated compound being used in Europe as a radiopharmaceutical for in vivo exploration of the dopamine transporter

Profile Consensus Steps:

- In the near future, a vote will be taken at the BC level, followed by a vote at the NM CC level to publish the Profile as "Consensus," Stage 2 on the QIBA wiki
- Before this can happen, a [comment resolution sheet](#) must be prepared to accompany the ballot
- Profiles and respective comment resolution sheets and checklists must be updated
- [Profile writing guidelines](#) are available on the wiki – and on the [Process Committee](#) wiki page

Next BC call – Tuesday, May 12, 2020 at 2 PM CT