**QIBA SPECT Task Force**  
**Friday, March 20, 2014, 9 AM (CT)**  
**Call Summary**

**In attendance:**  
*Richard Wahl, MD (Moderator)*  
Richard Laforest, PhD  
Nancy Obuchowski, PhD  
Joe Koudelik  
Marojeet Bhattacharya, PhD  
Michael Lassman, PhD  
Eric Perlman, MD  
Julie Lisiecki  
Yuni Dewaraja, PhD  
Michael Ljungberg, PhD  
John Seibyl, MD  
John Dickson, PhD  
Robert Miyaoka, PhD  
Anne M. Smith, PhD  
Eric Frey, PhD  
P. David Mozley, MD  
Daniel Sullivan, MD  
Paul Kinahan, PhD, FIEE  
Aaron Nelson, MD  
Zsolt Szabo, MD, PhD  
Michael King, PhD, DABR  
Dennis Nelson, PhD  
Brian Zimmerman, PhD  

**Moderator:** Dr. Richard Wahl

**Discussion Topics**

- Dr. Seibyl summarized the current state-of-the-art in quantitative SPECT dopamine imaging citing two major multicenter initiatives involving standardization procedures for quantitative ioflupane SPECT: the EANM normal database project and the PPMI study (Parkinson's Progression Marker Initiative). Both involve use of anthropomorphic striatal calibration phantoms for technical standardization across cameras, central processing of raw projection data, and rigorous VOI sampling strategy to determine specific binding ratios. This tissue ratio has been vetted to some extent with pk modeled outcomes and reproducibility. There is more data for beta CiT than ioflupane regarding quantitative validity.
- What unmet needs exist, and what groundwork to pursue for a quantitative Profile
- What data there are regarding test/re-test quantitative SPECT analyses
  - Numbers needed to help provide a sense of repeatability of the method and help to draft a Profile and claim
  - Whether or not there is something viable to pursue for a claim
- Reviewed cross-sectional vs. longitudinal claim language challenges with DaTscan
- Absolute, or relative, claim, with normalization to the other side, or to a reference brain region were reviewed, although extensive literature exists, to some extent validated regarding the value of specific binding ratios (SUVr – 1) as outcome measure offering certain advantages for regional striatal assessment of DAT density.
- Use of an I-123 phantom was also considered as well as the special issues of 123-I with its roughly 2% high energy emissions.
- Discussion to continue on next call regarding quantitative steps needed for dosimetry
- On next call, Dr. Dewaraja will review the data on organ dosimetry with Tc99m, in part based on her work on the MIRD committee.
- On a future call, the criteria for categorizing the Quantitative SPECT domain as a “biomarker” per QIBA definitions will be reviewed, in anticipation of securing that designation.

**Upcoming Nuclear Medicine Calls (Fridays, 9 am CT):**

- **March 27** – PET Amyloid Biomarker Ctte
- **April 3** – FDG-PET Biomarker Ctte

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