

## QIBA PET Amyloid Biomarker Committee

24 April 2015 at 9:00 AM CT (GMT-6)

*Notes provided by Dr. Smith*

### In attendance:

#### *Co-chairs:*

*Satoshi Minoshima, MD, PhD*  
*Anne Smith, PhD*

### *Participants:*

Susan De Santi, PhD  
John Hoffman, MD  
Paul Kinahan, PhD, FIEEE  
Gregory Klein, PhD  
Dawn Matthews, MS, MBA

Nancy Obuchowski, PhD  
Amy Perkins, PhD  
Rathan Subramaniam, MD, PhD  
John J. Sunderland, PhD  
Jean-Luc Vanderheyden, PhD

### RSNA

Joe Koudelik  
Julie Lisiecki

### Call Summary Points and Action Items:

- Update from Claims Task Force by Dr. Subramaniam
  - Will discuss with Drs. Perlman and Frey, and get back to group with a firm date for presenting final output from this group
- Update from Image Analysis Task Force by Ms. Matthews - Please see her slides (on page 2 of this summary)
- Update from Physics/Reconstruction Task Force
  - Dr. Smith will arrange a Net-meeting to discuss points in red text on slide, to at least finalize language for first draft
- Drs. Smith and Perlman will get complete Profile version to group before the QIBA face-to-face meeting
- Will request feedback for Profile sections
  - Will ask for volunteers to review specific sections in timely manner
  - Discuss points in Profile that need group discussion
  - Other relevant topics
- Goal to have Profile ready for Public Comment as early as September, 2015
- Designated PET Amyloid Task Forces have been formed to handle Profile sections via a “divide and conquer” approach
- Site qualification details for the Profile are being addressed by Dr. Klein and will be incorporated
  - Two levels of phantom imaging will be needed:
    - The Hoffman phantom will be used for site qualification after major software/ hardware upgrades
      - It is estimated that <5% of sites own this phantom
    - The NEMA IQ (an estimated 50% of sites have this available) or the cylinder (100% of sites have)
- In addition, a Digital Reference Object (DRO) will be needed
  - Possibly the FDG PET DRO will be used for the first release
  - A more specific DRO developed for PET Amyloid imaging will be used for future releases

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

- **May 1:** FDG-PET Biomarker Ctte
- **May 8:** No call (day after the QIBA Annual Meeting)
- **May 15:** Combined Nuclear Medicine Call (FDG-PET, Amyloid, SPECT (?))
- **May 22:** Amyloid Biomarker Ctte
- **May 29:** (proposed) SPECT Biomarker Ctte

Slides from Ms. Matthews below:

## Image Analysis Section Update (24 Apr 2015, p 1 of 2)

Creation of static image moved to (earlier) Post-Processing Section

- Flow diagram updated accordingly
- Current document recommends multi-frame but box does not impose; will treat static image generation consistently with this (i.e. may be single or multi-frame)
- Clarifying that alignment of multiple frames typically done by image analyst, not by technologist at PET site
  - In clinical trial environment, would be CRO at least until such time as standard tools available on scanners
  - In clinical diagnostic environment, “hidden” within the image analysis software
- Consistent with subject motion guidance, leaning to discuss impact of specific motion metrics but leave to protocol in box

## Image Analysis Section Update (24 Apr 2015, p. 2 of 2)

PVE Correction

- Discussed in text but no box language planned

Spatial Normalization or Template Matching Steps and beyond

- More straightforward but decision regarding whether to put specific alignment metrics in box; inclination is to discuss but leave to protocol

Updated Document

- Circulate within the next week