QIBA MRE Biomarker Committee Call
Tuesday, August 11, 2015 at 3 PM CT
Call Summary

Participants
Patricia Cole, PhD, MD (Co-Chair)  Nancy Obuchowski, PhD  RSNA
Richard Ehman, MD (Co-Chair)  Mark Palmeri, MD, PhD  Susan Weinmann
Thomas Chenevert, PhD  Suraj Serai, PhD
Edward Jackson, PhD  Claude Sirlin, MD
Frank Miller, MD

RSNA

Discussion

- Literature Search - Reproducibility Evaluation
  o Readers determined how COV was calculated from the Methods section in each article, and calculated and recorded the repeatability coefficient in the reproducibility evaluation spreadsheet
  o Dr. Obuchowski volunteered to review all of the recorded data, calculate the repeatability coefficient based upon her formula, and record her results and methodology, for comparison
  o Further discussion will be deferred until the September 8 meeting

- Literature Review Process
  o A summary re: the literature search process (e.g., search criteria) was provided by Dr. Samei
    - Search performed at two institution libraries
      o Mayo Clinic, Rochester
      o Cincinnati Children’s Hospital
    - Databases used to search for articles:
      o PubMed (MEDLINE)
      o EMBASE
      o SCOPUS
      o The Cochrane Library
      o Web of Science
      o SCOPUS
      o CINAHL
      o Google Scholar
  - Publish period of articles was approximately May 2005 – May 2015
  - Search terms used:
    o hepatic fibrosis
    o MR elastography
    o magnetic resonance elastography
    o liver
    o liver parenchyma
    o liver/anatomy and histology
    o liver/physiology
    o hepatic
    o liver stiffness
    o liver elasticity
    o elastic modulus
    o elasticity imaging techniques/methods
    o sensitivity and specificity
    o reproducibility
    o repeatability
    o reliability
  - Limited to studies done on humans, published in English
  - To identify additional studies, the following were done:
o used a sensitive and precise search strategy in the PubMed database and in regular Google search to locate any existing systematic reviews on magnetic resonance elastography - none was identified
o manual searching of reference lists from primary studies
o experts in the field were consulted

- Identified studies were screened independently and then verified reciprocally by Drs. Serai and Venkatesh
- Dr. Serai agreed to provide numbers of search results yielded per database
- Dr. Cole suggested a follow-up search for papers that may have been published since May

Next steps / Action Items:
- Discuss which papers should be eliminated from literature review
- Revisit and add to Profile
- Decide final set of parameters in Profile
- Compare readers’ and Dr. Obuchowski’s repeatability coefficients as provided in the reproducibility evaluation spreadsheet

- Next MRE BC Call: Tuesday, September 8 at 3 PM CT