

QIBA FDG_PET Reporting Standards Writing Group Call

Wednesday, April 23, 2014 at 10 AM CT

Call Summary

Notes provided by Drs. Kinahan and Marsden

General discussion

Agreed to use dropbox to share information – Paul K has set this up

Some relevant documents resulting from previous work by group members in this area were added to the dropbox folder:-

RW - SIRQI design and reporting document

OH/PK - Starp

AC - Reporting guidelines for imaging biomarker validation studies [updated version is 23/3/2014]

AC - Assessment of the reporting quality of imaging biomarkers studies (abstract & poster)

OH - Guidelines/Standards for the reporting of quantitative PET studies

LM - (post call) added a review of the uptake of reporting guidelines (in particular REMARK), several papers on the development of guidelines, and a summary document

AC described recent experience of meta-analysis of FLT v Ki67 studies :- different tools served different purposes (QUADAS for methodological quality assessment and modified STARD for reporting assessment); the current tools have no modality specific information/guidance in terms of methods or techniques etc.; these studies lacked adequate reporting of basic aspects of study design

The following points were agreed:

The group should address the task of guidelines for PET only but with a view to doing this in a form that should also be applicable to other modalities

Goals of reporting guidelines is to enable

1. 1 Replication of studies
2. 2 Guidelines that if followed would permit studies to be usefully entered into meta-analyses
3. 3 Motivation and guidance to characterize effect size and variability to increase trust in small studies, and provide confidence in using this data to base larger studies on

Reporting guidelines should not address study design explicitly (existing tools cover this), or the quality of the study itself, but that reporting guidelines would make it possible to assess the quality of study design and implicitly help with study quality.

Specific Focus

There was discussion of the specific focus of PET imaging, including:

- Tracer: FDG vs. others
- Clinical vs. trials vs. research
- Metrics: SUV vs. MTV vs. TLG etc.
- Use: Diagnostic vs. prognostic vs. assessment of response (e.g. more similar to STARD or REMARK)

It was agreed that the focus would be on quantification, i.e. reporting studies using a quantitative imaging biomarker (QIB), which is potentially applicable to all of the above applications. This will be reviewed at the upcoming May 25 call

Deliverables

1. A paper motivating and describing the proposed guidelines for reporting of PET studies
 - Establish interaction with publishers

- Possibly via the Medical Imaging publishers forum of which DD is a member
2. Specific guidelines that can be attached to an existing standard (if possible)
 - Engage with the STARD initiative (meeting later this summer (CC will attend))
 - Create an example structure that would also be applicable to other imaging modalities
 - Structure could be in the form of an appendix to existing standards
 - Brevity and concise will be very important

Proposed timelines

Stick to same monthly slot for these TCs

Aim to produce draft paper within 5 months from now

Next call

1. Review of specific goals and deliverables
2. Discussion of AC's article 'Reporting guidelines for imaging biomarker validation studies: an unmet need' (and the associated abstract and poster) as a starting point for guidelines development (23/3/2014 version)
3. Action plan

Date of next call: Wed 28 May