

**QIBA Volumetric CT Group 3A Update**  
Thursday, 10 April 2014 at 11:30 AM CT  
Draft Call Summary

**In attendance**

*Maria Athelougou, PhD (Chair)*  
Hubert Beaumont, PhD  
Andrew Buckler, MS  
Heang-Ping Chan, PhD

Marios Gavrielides, PhD  
Lubomir Hadjiiski, PhD  
Rudresh Jarecha, MBBS  
Hyun Grace Kim, PhD

Leon Lenchik, MD  
Adele Peskin, PhD  
Ying Tang, PhD

**RSNA**

Joe Koudelik  
Julie Lisiecki

**Update: Status of the Paper for the Pilot/Pivotal Phantom Challenge**

- NIST reviewers have approved the paper.
- Dr. Peskin anticipates a final version with reviewer comments will be available by Tuesday, April 15<sup>th</sup> for distribution to Drs. Athelougou and Gavrielides, and Mr. Buckler for final edits.
- *Radiology* was proposed as the first option for submission
- Medical conferences/ additional presentation opportunities were also discussed to maximize the visibility of the 3A Challenge efforts.

**Update: Paper for the Clinical Challenge**

- Mr. Buckler has completed the analysis and produced a first draft of the clinical challenge paper for review and comment by the QIBA CT Volumetry Technical Committee Co-Chairs, and Drs. Athelougou, Gavrielides, and Peskin.
- Analysis from this paper will help to inform the claim for the QIBA CT Volumetry Profile on Advanced Disease/Tumor Volume Change
  - The summary chart of reproducibility results is especially important to the claim.
  - There are four components of variance to consider:
    - Subject
    - Residual (all that cannot be explained via datasets)
    - Algorithm/ reader
    - Subject/ tumor
- It is hoped that the Clinical Challenge paper will soon be submitted for review.

**Future work of Group 3A**

- Dr. Athelougou asked group members to consider practical suggestions for the future work of Group 3A.
- Questions to consider include :
  - What is the most important work that should continue?
  - What are the necessary conditions and context?
    - Suggestions welcome to Dr. Athelougou: [Mathelougou@definiens.com](mailto:Mathelougou@definiens.com).

**Action items:**

- Mr. O'Donnell to draft a survey for QIBA 3A Challenge participants regarding performance parameters; Dr. Athelougou to review and approve for dissemination
  - RSNA staff to follow up with Mr. O'Donnell regarding the status of this item
- Dr. Athelougou to invite a MICCAI representative to present a comparison of challenge methodologies concerning the statistical evaluation of algorithm results.
- Dr. Peskin to forward final NIST-approved draft of the paper for the first challenge (pilot + pivotal) to Drs. Athelougou and Gavrielides, and Mr. Buckler by Tuesday, April 15<sup>th</sup>.

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**Next call:** Thursday, **April 24, 2014** at 11:30 AM CT.