Radiomics in PET/CT: state-of-the-art and future developments

Mathieu Hatt*†1

LaTIM INSERM UMR 1101 – LaTIM INSERM UMR 1101 – University of Brest, IBSAM, Brest, France

Résumé

Introduction: Radiomics [1] has been a very active field of research during the last five years. There have been very promising results in CT, MRI and PET/CT image modalities. There are, however, also numerous issues and limitations that have been identified.

Methods: This talk will review the currently available results of radiomics with a focus on PET/CT imaging, and highlights the identified limitations, issues and potential solutions for the future [2,3].

Results: Numerous encouraging results regarding PET/CT radiomics have been published in various types of tumors. However, major limitations include (but are not limited to) statistical power of the studies, lack of methodological standardization, and complexity of the workflow.

Conclusions: Although radiomics is a fast evolving field of research and encouraging results have been published, caution is required and in order to ensure the future of radiomics, efforts should be focused on methodological standardization, large prospective validation studies, and automatization/simplification of the analysis workflow.

References:


*Intervenant
†Auteur correspondant: hatt@univ-brest.fr