

Introducing quantitative imaging biomarker alliance (QIBA) certification to improve PET/CT conformance

EANM Forschungs GmbH (EARL) set up the EARL FDG PET/CT accreditation programme, which was launched in July 2010, to help imaging sites meet the standard requirements indicated in the EANM PET/CT guidelines by Boellaard et al. (1)

In 2007, RSNA organised the Quantitative Imaging Biomarkers Alliance® (QIBA) to unite researchers, healthcare professionals and industry to advance quantitative imaging and the use of quantitative imaging biomarkers in clinical trials and clinical practice (2).

EARL signed a Memorandum of Understanding with QIBA in August 2020. Both organisations have mutually identified areas of key importance in oncologic nuclear medicine clinical studies and clinical practice. Collaboration areas include:

- Harmonisation of PET/CT scanner performances in multicentre clinical trials and clinical practice;
- Advancing PET/CT quantification as an imaging biomarker;
- Establishing a network of harmonised PET/CT scanners and clinical sites ready to implement the QIBA PET/CT profile;
- Development of a proposal to the European Medicines Agency (EMA) and U.S. Food and Drug Administration ensuring wider implementation of PET/CT as an imaging biomarker in clinical trials.

The first mutual pilot project resulted in several of the EARL Centres of Excellence sites successfully achieving QIBA conformance to the QIBA FDG PET/CT profile (2) through self-

attestation. EARL and QIBA expanded this self-attestation to the entire EARL Centers of Excellence network in 2022.

For more than ten years, EARL has been widely known for its longstanding PET system accreditation program (3,4). As of today there are more than 360 systems accredited. By EARL's collaboration with QIBA, both EARL and QIBA aim not only to harmonise the systems' performance, but also help sites in improving the way oncology quantitative FDG PET studies are performed, and to assist with correct implementation of the EANM oncology FDG PET/CT quantitative imaging guideline (1). The QIBA certification specifically checks adherence to the EANM oncology FDG PET/CT guideline (2).

The significance of this collaboration is an attestation for:

- Differentiating clinical sites from showing they can achieve high-quality quantitative imaging results;
- Sites receive a QIBA Conformance Registered Mark demonstrating they can perform quantitative imaging with high levels of precision;
- There are already 27 EARL Centres of Excellence who have been recognised for this achievement.

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References

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