



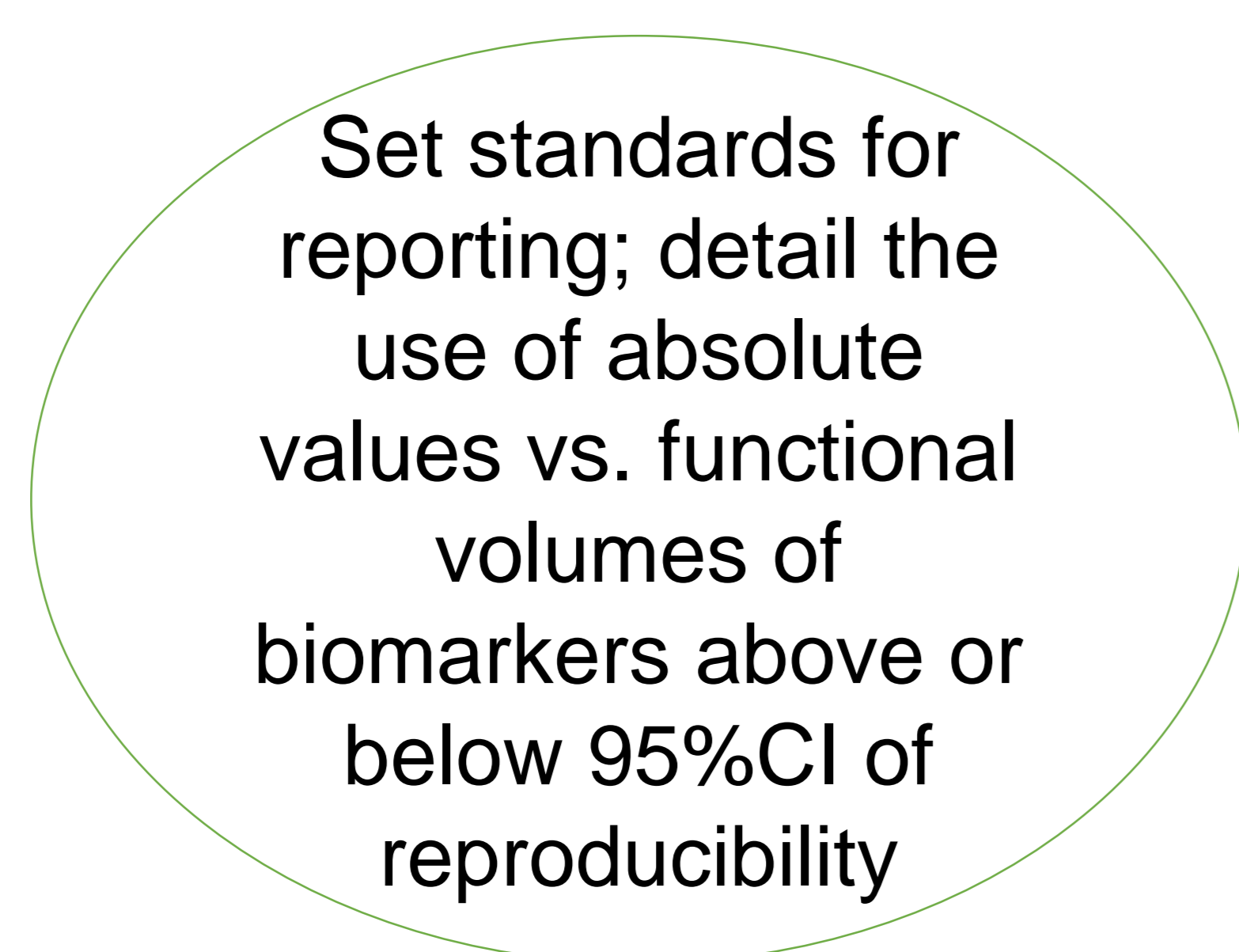
For more information on EIBALL

Mission Statement:

To facilitate imaging biomarker development and standardization, and promote their use in clinical trials and in clinical practice by collaboration with specialist societies, international standards agencies, and trials organizations to develop a network of excellence.

EIBALL Roadmap

PILLAR 1 - Establish	PILLAR 2 - Standardize	PILLAR 3 - Educate
Establishing a functional biomarker profile that is current and relevant	Enabling clinical use of biomarkers by setting standards for data acquisition and image processing	Education on appropriate use of functional imaging biomarkers and their interpretation



Action: Partner with members of EORTC who liaise with disease oriented groups to establish inventory

Action: Work with QIBA to enable reporting standards. Commence initiative with ESHI to develop thresholds for combined biomarkers

Action: Discuss possibility of this with organizing committees of these meetings

Develop on-line inventory

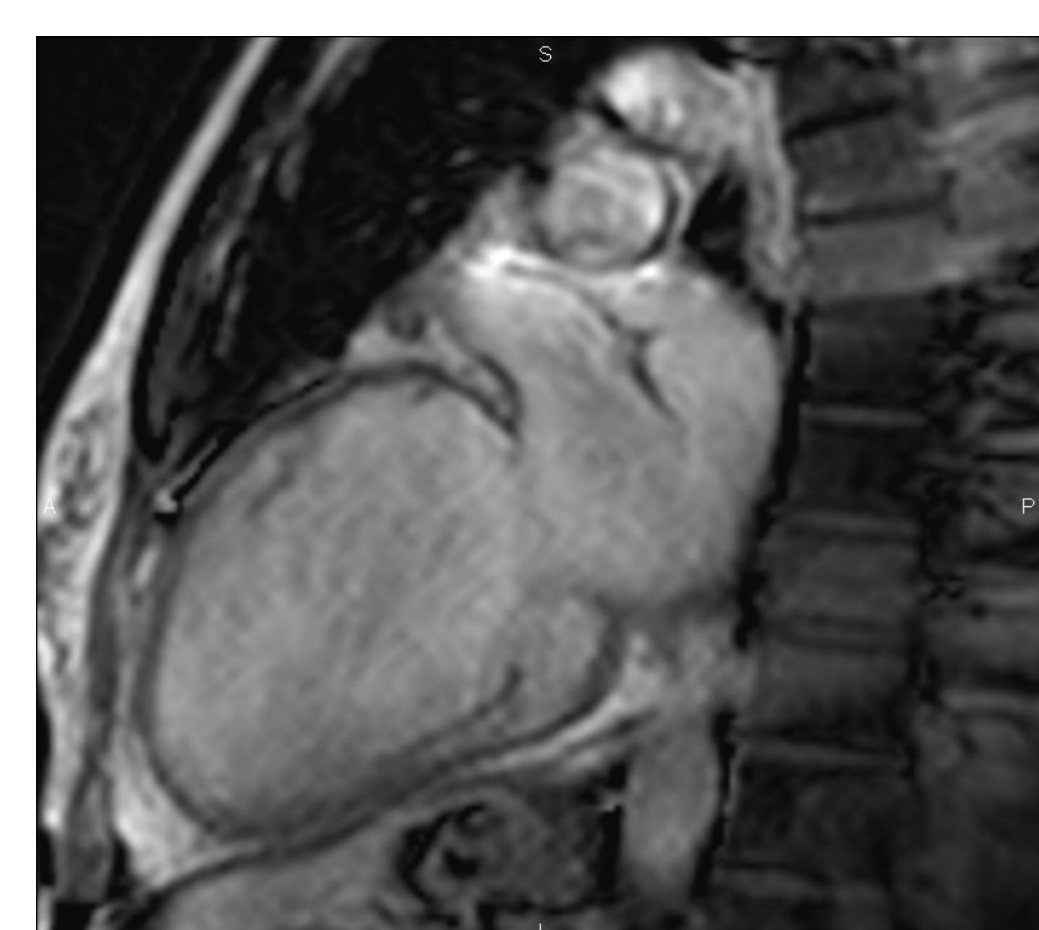
Establish validity of functional volumes as robust biomarkers

Plan work-shops for 2019/2020

On-line inventory made available to partners

Manuscript on functional biomarkers as decision-support tools

Delivery of workshops, engagement of young investigators



LVEF



RECIST 1.1



SUV_{max}

Biomarkers Inventory:

- Currently in draft for 8 organs: prostate, renal, breast, liver, pancreas, gynaecological (ovary, cervix, endometrium)
- Developed by EIBALL committee members in conjunction with QIBA input from EIBALL subcommittee representatives
- Working with specialist European Societies to refine input: European Society of Oncological Breast Imaging (EUSOBI), European Society of Gynaecological Oncology (ESGO), European Society of Gastro and Abdominal Radiology (ESGAR)
- Inventory hosted on European Society of Radiology website and to be reviewed annually
- Links to QIBA profiles



EIBALL Biomarkers Inventory

Publications with QIBA:

- Validated Imaging Biomarkers as Decision-Making Tools in Clinical Trials and Routine Practice: Current Status and Recommendations from the EIBALL Subcommittee of the European Society of Radiology (ESR) (Insights into Imaging 2019, <https://doi.org/10.1186/s13244-019-0764-0>)**

This article reviews the current evidence for the use of semi-quantitative and quantitative biomarkers in clinical settings at various stages of the disease pathway including diagnosis, staging, and prognosis, as well as predicting and detecting treatment response. It critically appraises current practice and sets out recommendations for using imaging objectively to drive patient management decisions.

Other Publications:

- ESR Statement on the Validation of Imaging Biomarkers (Insight into Imaging, 2019, forthcoming)**

This statement aims to be the reference for performance testing algorithms that measure imaging biomarkers. Consideration is given to: 1) thresholds for evaluating precision (repeatability and reproducibility); 2) accuracy (measurement error); and, 3) clinical utility (short-term detection, diagnosis; long-term prognosis, treatment-response).



<https://doi.org/10.1186/s13244-019-0764-0>

Educational workshops:

- European School of Radiology (ESOR) – EIBALL workshop November 16th, 2019 : Vienna, Austria : Research in Diagnostic Radiology – How to Build the Perfect Study**

Sessions will be dedicated to basics on imaging biomarkers, principles of measurement and statistical analysis, as well as to design of clinical trials that incorporate imaging biomarkers. Additionally, participants will present a research project and work in small groups to develop a work plan for their study. At the end of this course, participants will have acquired the basic knowledge required for designing and conducting a research study involving quantitative imaging.



ESOR-EIBALL workshop