



BioMed Research International

Special Issue on
**Validation of Quantitative Measurements in
Cardiovascular Imaging**

CALL FOR PAPERS

Recent developments in cardiovascular imaging have shown a trend towards quantitative measurement of findings. These quantitative measurements could eventually be the basis to obtain quantitative imaging biomarkers that could be used to predict, diagnose, and treat disease. However, the first step to achieve quantitative imaging biomarkers is to establish proper validation of these quantitative measurements to ensure that the numbers obtained from the imaging data are reliable, reproducible, accurate, and clinically useful.

We invite investigators to contribute original research articles as well as review articles that will increase the evidence required to achieve quantitative imaging biomarkers in cardiovascular imaging by validation of those quantitative measurements in phantoms, animal models, and clinical data. The scope of this special issue concerns all quantifiable cardiovascular measures, ranging from 2D and 3D measurements such as stenosis and plaque quantification to 4D measurements such as myocardial perfusion and left and right ventricular function. The scope also includes all imaging modalities used in cardiovascular imaging (CT, MR, angiography, and ultrasound).

Potential topics include, but are not limited to:

- Validation of algorithms
- Effect of acquisition protocols on quantitative imaging
- Validation of (commercial) software tools
- Exploration of novel quantitative measurements

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