



Machine Learning in Cardiac Imaging

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Message from the Guest Editors

For many years, machine learning algorithms are having a significant impact on cardiac imaging. A simple query to search engines allows us to verify that, during the last few years, the number of articles published on machine learning applied to cardiac imaging has exponentially grown. Ultrasounds (US), computed tomography (CT), magnetic resonance (MR), and single photon emission computed tomography (SPECT) are some radiology techniques used in cardiology for morphological and functional evaluations. Machine learning-based methods applied to images and data provided by these techniques have allowed the development of tools to aid clinicians in the diagnosis and prognosis of cardiovascular diseases. Deep learning, adaptive algorithms, extreme gradient boosting, and decision trees are some of the machine learning procedures used for the quantitative assessment of images as well as risk analysis in cardiac patients.

In this situation, this special issue of *Diagnostics* is planned for providing information about the state-of-the-art of cardiac imaging by quantitative analysis obtained using machine learning approaches.





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