QIR-MR for COVID-19 research

In the current world pandemic, CASIS - CArdiac Simulation & Imaging Software is offering free access to QIR-MR to all institutions studying COVID-19 and its effects on the heart.

QIR-MR is a stand-alone, clinical decision support software for the quantitative analyses of cardiovascular Magnetic Resonance images (cMRI). Our cMR software offers a set of modules, including Cine Cardiac, DE (late gadolinium enhancement), T1- and T2-weighted mapping, designed to study heart conditions such as myocarditis and other myocardial injuries. Our latest version of QIR-MR will present the first AI-based fully automatic solution for myocardial viability assessment following a myocardial infarct in DE MRI sequences, along with new features for fibrosis detection and quantification.

An optimal patient management requires the best possible understanding of the disease. Many scientific studies now highlight the effect of the virus on the heart:

> *"Cardiovascular complications are relatively frequent, reaching 20% of COVID-19 patients and 43% of COVID-19 patients admitted in Intensive Care Unit. Cardiac injury mechanisms are multiple, including hyperinflammation, pro-coagulant and pro-thrombotic states, sepsis related cardiomyopathy, hypoxia in relation with lung severity, hemodynamic instability, cytokine storm, critically illness, direct myocardial insult by acute respiratory syndrome coronavirus 2 (SARS-CoV-2), and stress cardiomyopathy. "**

Our knowledge of the impact of COVID-19 on heart disease is still evolving and requires collaboration at all possible levels between radiologists and members of the health care community.

Please contact us if you are interested in using QIR-MR to study the effect of COVID-19 on the heart.

Jean-Joseph CHRISTOPHE - CEO

* https://doi.org/10.1016/j.ancard.2020.11.004