

# Cardiovascular considerations for patients with COVID-19 and candidate drugs against SARS-CoV-2

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## Abstract

The coronavirus disease-2019 (COVID-19) is an infectious respiratory disease attributed to severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2), which has rapidly spread globally leading to a pandemic. Frequently, COVID-19 contributes to multiple cardiovascular diseases (CVD) including acute myocardial injury, myocarditis, arrhythmias and thromboembolism, due to excessive inflammation and endothelial dysfunction. Moreover, a large proportion of affected patients, especially for elderly patients have been reported to pre-exist comorbidities such as hypertension, diabetes and CVD. However, although some antiviral drugs targeted SARS-CoV-2 have been applied to clinical trial, a few of these investigational agents are associated with excess risk for cardiovascular events in prior studies of non-COVID-19 populations. The objective of this document is to introduce the cardiovascular complications caused by COVID-19 and related investigational therapies, as well as the potential consequences in patients with antiviral drugs and cardiovascular drugs, and then provide recommendations for a systematic approach on the care of patients with CVD during COVID-19 pandemic.

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