

**Article**

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## **CARDIOVASCULAR CONSEQUENCES AND COVID-19 INFECTION: ESTABLISH THE MODEL**

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### **Abstract**

Recent studies have highlighted that the risks for developing cardiovascular alterations are significantly increased in patients who previously suffered from Covid-19. This study aims at determining the functional and structural long-term effects of Covid-19 disease on the cardiovascular system using a specific and original humanized mouse model recapitulating the endogenous cardiovascular expression of the SARS-CoV-2 main receptor ACE2 (Angiotensin Converting Enzyme 2). We will focus on studying the systemic and pulmonary vessels and the cardiac tissue to understand how SARS-CoV-2 infection leads to cardiac and vascular tissue remodelling and function alteration.

**Keywords:** virus, cardiovascular, SARS-CoV-2 infection

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