

COV/LTE/20/10 - Prevention and early treatment of COVID-19 long term effects: a randomised clinical trial of resistance exercise

Many people have long-lasting symptoms after COVID-19, such as breathlessness, fatigue and chest pain. So far, research studies of treatments for COVID-19 have focused on the life-threatening acute illness; few studies look at treatments to improve long-term health after COVID-19.

COVID-19, particularly when this requires a hospital admission, can lead to weight loss and muscle wasting, contributing to worse outcomes. Muscle strengthening (resistance-based) exercise could improve outcomes in the long-term.

We are looking to do two things:

- 1) To undertake a research trial of pragmatic resistance-based exercise for 220 people recovering from COVID-19.
- 2) Create a platform for rapid trials of new treatments after COVID-19. This will cut the costs of doing future trials and allow more patients the opportunity to contribute to medical research that will improve outcomes for people recovering from COVID-19.

Our team is multidisciplinary, multi-ethnic, gender-balanced and drawn from across NHS Scotland, and the University of Glasgow. We are currently leading the CISCO-19 study, funded by the CSO, in the West of Scotland, using medical imaging of the hearts, lungs, and kidneys of patients, to understand the impact of COVID-19. We have consulted with members of the public, including people with COVID-19, in designing this study.