

Centre for Heart Lung Innovation Research in Progress (R.I.P.)



Cellular and Molecular Biomarkers of Long COVID: Highlights from a Scoping Review

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Monday, Feb 27th, 2023 9:00 – 10:00 a.m.

James Hogg Conference Centre RM 103 Zoom Video Conference (Meeting ID: 693 1997 7044; Passcode: 030679)

"Long-COVID (LC) is a post-infection syndrome, which encompasses diverse debilitating symptoms lasting months after the initial SARS-CoV-2 infection. The etiology of LC remains unclear, and consequently, patients may be underdiagnosed. Identification of LC specific biomarkers is therefore paramount for its diagnosis and clinical management. We conducted a scoping review to compile biomarkers that have been reported to date with potential use for diagnosis or prediction of LC. 23 cohort studies were included, involving 2211 LC patients, predominantly female sex (61.10%), from white ethnicity (75%), and non-vaccinated (99%). A total of 239 candidate biomarkers were identified, consisting mainly of immune cells, immunoglobulins, cytokines, and other plasma proteins. Only a small proportion of the candidate biomarkers (8%) were evaluated by means of receiver operating characteristic (ROC) curves, and their modest performance suggests LC may encompass many distinct etiologies, which should be explored by symptom clusters and/or sex."

This event is a Self-Approved Group Learning Activity as defined by the Maintenance Certification Program of the Royal College of Physicians and Surgeons of Canada



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