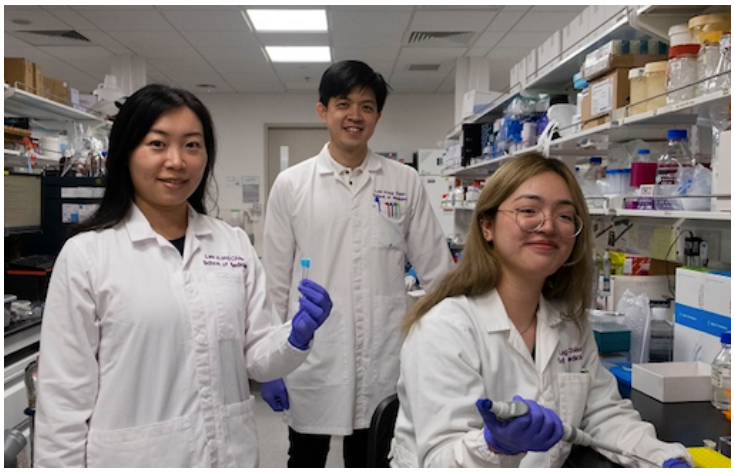
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Singapore studies risk of blood clot formation in COVID-19 patients

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People who have recovered from COVID-19, especially those with pre-existing cardiovascular conditions, may be at risk of developing blood clots due to a lingering and overactive immune response, according to a study led by NTU scientists.

The team of researchers, led by NTU Assistant Professor Christine Cheung, investigated the possible link between COVID-19 and an increased risk of blood clot formation, shedding new light on 'long-haul COVID" – the name given to the medium- and long-term health consequences of COVID-19.

The team, comprising researchers from NTU, Agency for Science, Technology and Research's (A*STAR) Singapore Immunology Network (SIgN), and the National Centre of Infectious Diseases, Singapore (NCID), collected and analysed blood samples from 30 COVID-19 patients a month after they had recovered from the infection and were discharged from hospital.

They found that all recovered COVID-19 patients had signs of blood vessel damage, with twice the normal number of circulating endothelial cells (CECs)that had been shed from damaged blood vessel walls found in their samples.

The researchers hypothesise that the body's immune system, which was activated to fight the COVID-19 virus, remains overactive and activated even after recovery. This persistently activated immune responses may attack blood vessels of recovered COVID-19 patients, causing even more damage and increasing the risk of blood clot formation further.