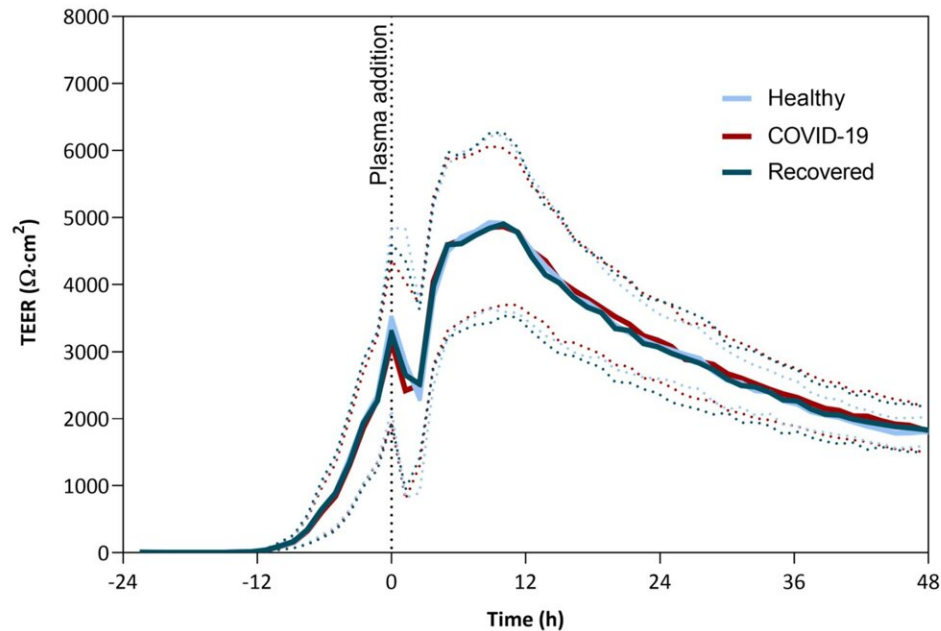
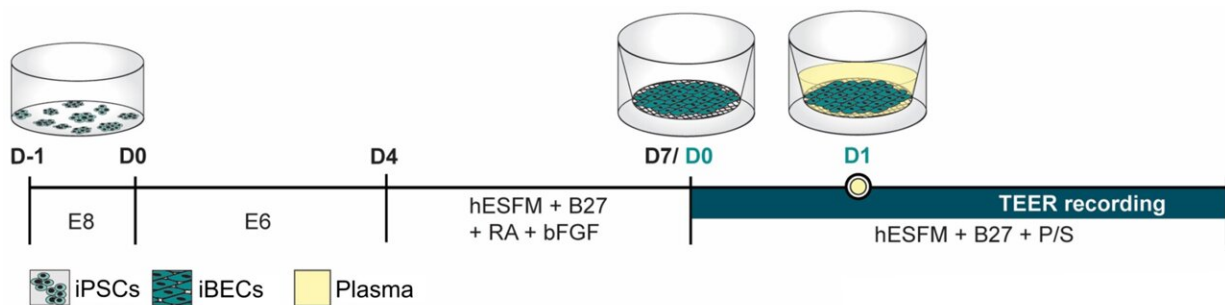


Plasma of people with COVID-19 found not to alter the protective brain barrier

January 18 2024



Graphical Abstract. Credit: *Function* (2024). DOI: 10.1093/function/zqae002

It is now well documented that the coronavirus outbreak triggered a global health crisis. In this study, researchers wanted to know whether blood-brain barrier impairment contributed to the development of neurological problems during COVID-19 progression and to what extent.

The [blood-brain barrier](#) is a filtering mechanism of the capillaries that carry [blood](#) to the [brain](#) and spinal cord tissue while blocking the passage of certain toxic substances. The findings demonstrate that "COVID-19-associated blood plasma inflammatory factors do not affect blood-brain barrier paracellular pathway directly," the researchers wrote.

In addition, the results suggest "pathological remodeling, if any, of the blood-brain barrier during COVID-19 may occur through indirect or yet unknown mechanisms." The study is published in the journal [Function](#).

"Accumulating evidence indicates that cerebral vascular dysfunction is a common feature of COVID-19," the research team wrote. "Therefore, it is important to understand the intricate connections between blood cytokine/chemokine profiles, blood-brain barrier integrity, and the severity of neurological manifestations of COVID-19."

More information: Agnė Pociūtė et al, Plasma of COVID-19 Patients Does Not Alter Electrical Resistance of Human Endothelial Blood-Brain Barrier In Vitro, *Function* (2024). [DOI: 10.1093/function/zqae002](https://doi.org/10.1093/function/zqae002)

Provided by American Physiological Society

Citation: Plasma of people with COVID-19 found not to alter the protective brain barrier (2024, January 18) retrieved 15 May 2024 from <https://medicalxpress.com/news/2024-01-plasma-people-covid-brain-barrier.html>

This document is subject to copyright. Apart from any fair dealing for the purpose of private study or research, no part may be reproduced without the written permission. The content is provided for information purposes only.