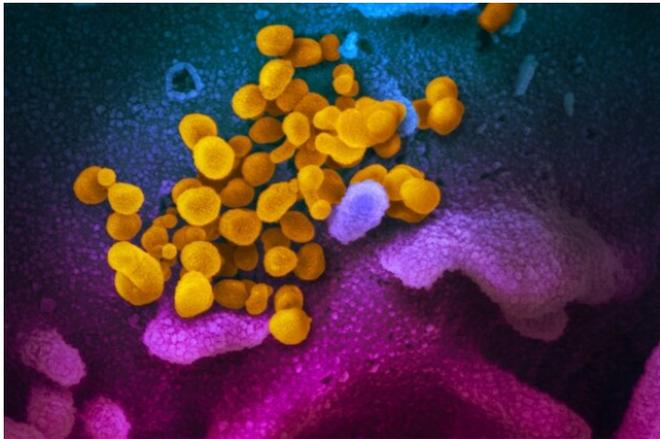


Benefits of convalescent plasma for COVID-19 are still unclear

17 June 2020



This scanning electron microscope image shows SARS-CoV-2 (yellow)—also known as 2019-nCoV, the virus that causes COVID-19—isolated from a patient, emerging from the surface of cells (blue/pink) cultured in the lab. Credit: NIAID-RML

With vaccines and therapeutic drugs for COVID-19 still under development, doctors are wondering whether antibody-rich plasma infusions from the blood of recovered patients could be a more immediate way to keep hospitalized patients alive and off ventilators. However, an article in *Chemical & Engineering News*, the weekly newsmagazine of the American Chemical Society, indicates that, despite some anecdotal evidence, scientists still don't have high-quality data showing that the treatment actually works.

The use of [convalescent plasma](#), the yellowish liquid obtained from the blood of a person recovering from an illness, has been tested in previous outbreaks over the past 100 years, including the Spanish Flu and Ebola. And now, scientists are seeing an explosion of interest in using convalescent plasma to treat COVID-19, the disease caused by the novel coronavirus SARS-CoV-2. Some recovered COVID patients may

produce high levels of neutralizing antibodies that remain in their system for a while, so when they donate plasma, those antibodies could then be infused into other patients to aid their recovery. Experts are viewing the use of convalescent plasma as a "stopgap measure" until effective antiviral drugs and vaccines are widely available, writes Associate Editor Ryan Cross.

Despite several recent clinical trials of convalescent plasma, none of the peer-reviewed or preprint studies have so far provided conclusive evidence that the treatment works. In addition to a plasma infusion, patients in these studies often received an array of drug therapies, making it unclear which treatment was most effective. Researchers have also been critical of how these trials were designed and executed. For example, few have included a placebo group or had both doctors and patients blinded to the treatment received. Also, not many studies have attempted to standardize the quantity and quality of antibodies infused into patients. Although well-designed clinical trials are now in progress, the efficacy of social distancing measures has reduced the numbers of new patients on which to test the therapy, experts say.

More information: Convalescent plasma data trickle out from COVID-19 studies, but scientists wonder if results will come too late, [cen.acs.org/pharmaceuticals/bi... ID-19-studies/98/i23](https://cen.acs.org/pharmaceuticals/biotechnology/2020/06/17/convalescent-plasma-data-trickle-out-from-covid-19-studies/98/i23)

Provided by American Chemical Society

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