Study: Can Convalescent Plasma Treat COVID-19?

Researchers have launched a phase 2 clinical trial to study if convalescent plasma containing SARS-CoV-2 antibodies is effective in treating COVID-19 positive patients who have been hospitalized with acute respiratory symptoms.

Investigators with the Miami Clinical and Translational Science Institute (CTSI) at the University of Miami Health System are collaborating with several Clinical and Translational Science Award (CTSA) hubs, including New York University Grossman School of Medicine, Albert Einstein College of Medicine, Yale University School of Medicine and the University of Texas Health Science Center at Houston. It is funded by the National Center for Advancing Translational Sciences (NCATS).

The New York City CTSA hubs initiated the study at the height of the pandemic.

While COVID-19 cases in NY began to decrease, Miami was seeing a rise in infections and related hospitalizations.

“We knew time was of the essence because this kind of treatment has the potential to save lives,” said Ralph L. Sacco, M.D., M.S., director of the Miami CTSI, and professor and Olemberg Chair of neurology at the Miller School. “When NCATS and
our CTSA colleagues approached us to help with this critically important study, the Miami CTSI pulled together a team to rapidly launch this major effort.”

Plasma treatments with SARS-CoV-2 antibodies may be successful in helping people who are sick with COVID-19 fight the virus.

**Antibodies are what the body’s immune system makes in response to an infection.**

They are molecules that circulate in the blood and bind to the virus, preventing it from growing in the body.

Convalescent plasma has been used for more than a century to treat infectious diseases. Previous studies suggested that convalescent plasma may be a helpful treatment for other coronaviruses, including SARS.

The goal of the study is to determine if convalescent plasma can prevent the development or reduce the severity of breathing symptoms in people with COVID-19. This would reduce the need for additional oxygen, mechanical ventilation and admission to the intensive care unit.

**The trial seeks to enroll 360 people who are 18 years or older and test positive for COVID-19.**

Eligible participants will be within three days of hospitalization at UHealth Tower and Jackson Memorial Hospital, but not in the intensive care unit or on a ventilator. Participants will be randomized and receive either convalescent plasma or placebo (saline solution).

“Many clinicians at UHealth have made anecdotal observations of the benefits of convalescent plasma on hospitalized patients with COVID-19 infection, however, this
needs to be validated by a well-designed, randomized clinical trial,” said Dushyantha Jayaweera, M.D., associate director of the Miami CTSI and the Miami sites’ lead investigator. “As such, this study was designed to bring together collaborators from around the country to provide an answer to whether this is indeed an effective treatment for COVID-19.”

Additional study investigators for the Miami sites include site co-lead, Yanyun Wu, M.D., medical director of transfusion medicine at UHealth – the University of Miami Health System and Jackson Health System, Shweta Anjan, M.D., assistant professor of clinical medicine and an infectious diseases specialist at UHealth, and Jose Castro, M.D., professor of clinical medicine and medical director of infection control and the Antimicrobial Stewardship Program at UHealth.

Originally published on Inventum.
Convalescent Plasma Can Save a Life

DONATE NOW

The University of Miami Health System is working with OneBlood to make convalescent plasma available as a treatment option for patients with severe or life-threatening COVID-19.

What is convalescent plasma?
When a person contracts a virus like COVID-19, their immune system creates antibodies to fight the virus. These antibodies are found in plasma, the liquid part of blood. Plasma with these infection-fighting antibodies is called convalescent plasma. Through blood donation, this antibody-rich plasma can be collected from a person who has recovered from COVID-19, and then transfused to a sick patient who is still fighting the virus.

How can we use convalescent plasma?
Convalescent plasma is a treatment option for those with severe or life-threatening COVID-19 infection and those at risk of progression of the illness. This provides a boost to the immune system of the sick patient and may help speed the recovery process.

Who can be a plasma donor?
A donor must have:

- A prior diagnosis of COVID-19 documented by a laboratory test (e.g., nasopharyngeal swab PCR or an antibody test) and meet other criteria.
- Complete resolution of symptoms at least 14 days before donation. A negative lab test for active COVID-19 disease is not necessary to qualify for donation.

Here is how you can help:
For more information on the donation process, go to:

www.oneblood.org

We ask that you direct your donation to:
UHealth University of Miami Health System.
Progress made: Treating rare strokes in heart patients

Strokes that result from a blockage in a large blood vessel in the brain are the most common type and are known as ischemic strokes. They cause brain cells to die, and can lead to permanent disabilities, including paralysis or trouble speaking. Read more.