FAQ: Monoclonal Antibodies for Prevention or Treatment of COVID-19

Please note that this document is subject to change. Please visit the UVM Health Network Coronavirus webpage to access the latest document.

What are monoclonal antibody therapies to prevent or treat COVID-19?

Antibodies are immune molecules that help fight infections which can, among other things, provide protection from severe COVID-19. The safest and best way to make those antibodies, naturally, is by being vaccinated against COVID-19. It's riskier to get infected, of course, but people who have been infected do generate antibodies that provide protection.

Some people with weakened immune systems cannot make ideal antibody responses to protect against severe COVID-19. In response, drug companies have synthesized monoclonal antibodies that mimic what the body would make. They have been shown to help high risk people with COVID-19 be less likely to progress to severe disease, and to protect people at risk from exposure from getting infected.

Who is eligible for monoclonal antibodies to prevent or treat COVID-19?

Monoclonal antibody treatments are in scarce supply around the world, and only proven to work for the highest risk people. Therefore, clinicians have to select recipients very carefully. Monoclonal antibody treatments are reserved for people with a positive test for COVID-19 who have the highest risk of developing severe COVID-19, such as from advanced age or due to the presence of medical problems. The use of monoclonal antibodies for prevention is reserved for people with very weakened immune systems such as from treatment for cancer or autoimmune diseases, AIDS, and other similar problems.

Can everyone who is eligible for monoclonal antibodies to prevent or treat COVID-19 receive them?

Probably not. Supplies of monoclonal antibodies are extremely short. This means that institutions will have to make the challenging decision of picking which patients can receive monoclonal antibody treatments and which cannot. The details of how monoclonal antibodies will be allocated will depend on how short supply is at a given location, but UVMMC is committed to using monoclonal antibodies for the highest risk patients and also to ensuring that people of similar risk of severe COVID-19 will have equivalent chances of receiving monoclonal antibody treatments.

Has Omicron changed which monoclonal antibodies work?

Yes. The Omicron variant, which has lots of genetic mutations compared to older variants, has made multiple monoclonal antibody treatments no longer effective. So far it appears sotrovimab (Xevudy, used as treatment) and tixagevimab/cilgavimab (Evusheld, used as prevention) retain some activity, although scientists are actively studying how well they work around the world. This makes supplies of monoclonal antibodies even scarcer. The science on this topic is evolving, so updates are likely in the upcoming weeks and months.
How are monoclonal antibody treatments ordered and administered?

The process of referral is different for the use of sotrovimab as treatment vs tixagevimab/cilgavimab as prevention. In short, a clinician who knows the patient must refer them, after which the patient will be contacted in the event there is a dose available for them.

Intravenous sotrovimab for treatment. A clinician who knows the patient must confirm a positive PCR or antigen test for COVID-19, confirm eligibility for treatment according to the FDA approval document (link), and then refer the patient the UVMMC Infusion Center by calling 802-847-6275. If the clinician has ordering privileges, they can order the drug. If they do not have ordering privileges, the infusion center will arrange for one of our physicians to order the medication. For all patients who are approved, the infusion center will schedule an infusion appointment with the patient.

Intramuscular tixagevimab/cilgavimab as prevention. A clinician who knows the patient must confirm the patient has no known exposure to COVID-19 nor recent infection with COVID-19 and meets FDA eligibility criteria (link). The clinician can then refer the patient to UVMMC to enter the lottery process for scheduling by calling Patient Access 802-847-7700 or sending a fax 802-847-5261 Upon referral, a weekly lottery process among all referred patients to determine which patients can receive a dose of the limited number of available doses. The infusion center will contact all patients who were chosen to receive a dose. The following week, all patients who were not given a dose will be entered into a lottery with any newly referred patients to determine which patients receive a dose that week.

Resources

Link to FDA information about sotrovimab (Xevudy), including eligibility criteria:
Link to FDA information about tixagevimab/cilgavimab (Evusheld), including eligibility criteria