

# COVID-19 UPDATE

December 10, 2020

This message is for all Bozeman Health employees and medical staff from Dr. Mark Winton, infectious disease.

## **Bamlanivimab Available for Treatment of COVID-19**

### Here's what's happening...

Bozeman Health has procured the Bamlanivimab investigational medicine for the treatment of SARS-CoV-2 in non-hospitalized adults and adolescents age 12 and older with a positive test result. It is administered through outpatient intravenous infusion.

### Here's what you need to know ...

Monoclonal antibodies are tailored for a specific site of action on the viral particle. In SARS-CoV-2, this region is the spike protein. The antibodies bind to the spike protein, and allow the immune system to recognize this spike as an invader, and to subsequently produce an exponential response to this spike protein.

Antibodies are made normally by human cells, and as part of the normal human immune system, they are very safe to use. The manufacturing process eliminates other foreign proteins and allows for a safe medication. It is very rare for reactions to occur. When they do, it is often due to the cross reactivity of the antibodies to other antigens. With a monoclonal antibody, these cross reactions are also very rare. The medication is designed to target a specific region, and then screened to match the site of action.

Bamlanivimab is a monoclonal antibody that targets the SARS-CoV-2 spike protein, and when delivered, it can limit the replication of the virus. The purpose of this medication is to prevent serious illness from COVID-19 infection. When used early in the course of symptoms, it can prevent those at high risk of severe infection from progressing to the point of hospitalization and intubation. It is designed for outpatient use only, and only in those at higher risk of severe complications for the infection. The intravenous infusion of medication takes about three hours, and is a one-time dose.

Limited data is available for efficacy as it is a new medication, but there is a clear trend in those with the highest risk to prevent hospitalization and severe illness.

Bamlanivimab clinical recommendations are under review and likely will be published for providers by the end of the week.

#### Here's why...

Keeping our employees, patients, and community safe remains our number one priority and using an investigational medicine that is being shown to prevent hospitalization and severe illness helps us in meeting that goal.

Questions or comments? Contact Dr. Winton or Dr. Hinz in infectious disease at 414-4210.