

## Corona virus and cold agglutinin disease

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The Covid-19 pandemic has raised questions from people with CAD regarding risk and need for precautions. Unfortunately, there are no specific scientific data on Covid-19 disease in patients with CAD. Still, it is possible to provide some information that I hope will be useful.

In contrast to what is seen in several other autoimmune diseases, people with CAD who are not being treated have an intact immune system. In general, therefore, they do not have an increased susceptibility to virus infection, probably including Covid-19. That said, there are some exceptions, risk situations and specific precautions:

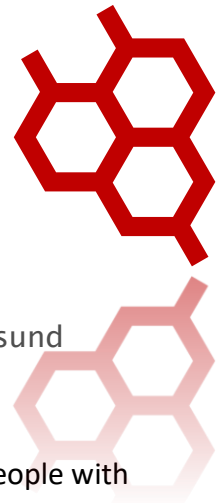
#### **1. Age**

Many people with CAD are old. Advanced age is a risk factor for experiencing severe disease if infected with corona virus, especially if the person has chronic diseases at the same time. Observe the guidelines from the health authorities in your country in order to protect yourself from being infected, and protect others if you are already infected. In the unlikely case that symptoms of severe disease should develop, seek medical attention.

#### **2. Influence of treatment for CAD**

Treatment for CAD may affect the immune system.

- a) If you are receiving therapy with rituximab, rituximab plus bendamustine, or similar chemoimmunotherapy, or have been given such medications during the last 3-6 months, your antibody response may be weaker than normal in case of an infection. Some of these therapies may also temporarily reduce the ability to produce more white blood cells to attack microorganisms. Again, observe the precautions to avoid being infected. Ask your hematologist whether the treatment you are receiving will affect the immune system, and try to be even more careful than recommended for the general population. Seek medical advice in case of fever.





b) Some patients with CAD are participating in clinical trials with so-called complement inhibitors (sutimlimab, pegcetacoplan). The complement system is part of the immune system. However, while the complement system is important for the body's ability to resist certain bacterial infections, it does probably not play a critical role for the defense against virus infections. As far as we know, therefore, treatment with complement inhibitors should not result in an increased risk of being infected with Covid-19 or developing a more severe disease in case of such infection.

**3. Can Covid-19 result in temporary worsening (“acute exacerbation”) of CAD?**

In general, the hemolytic anemia (breakdown of red blood cells) in CAD can get worse if you experience an infection with fever. Some patients will even need transfusion in such situations. However, this risk is highest in bacterial infections that lead to activation of the complement system, often accompanied by very high CRP. As far as we know, this risk is much lower (but not totally absent) in virus infections. Do not worry, therefore, but have a phone consultation with your hematologist or doctor in case you develop extreme fatigue or other symptoms of anemia, followed by a hemoglobin measurement.