

Medical Information Response

The Use of Novo Nordisk Products in Patients with Suspected or Confirmed Coronavirus Disease (COVID-19)

Coronavirus Disease (COVID-19)

COVID-19 is a respiratory illness that can spread from person to person and can cause mild to severe respiratory illness with symptoms including fever, dry cough, and shortness of breath. Severe complications may include pneumonia, multi-organ failure, and in some cases death; however, some people become infected but do not develop any symptoms and do not feel unwell.^{1,2} Most people (about 80%) recover from the disease without needing special treatment; however, approximately 1 out of every 6 people who becomes infected with COVID-19 becomes seriously ill and develops difficulty breathing.^{1,2} Older people (65 years and older), people who live in a nursing home or long-term care facility, and those of any age with underlying medical conditions (**Table 1**) may be more likely to develop serious illness with COVID-19 infections.²⁻⁴ Some patients with COVID-19 may develop signs of a hypercoagulable state and be at increased risk for venous and arterial thrombosis of large and small vessels. Laboratory abnormalities commonly observed among hospitalized patients with COVID-19-associated coagulopathy include mild thrombocytopenia, increased D-dimer levels, increased fibrin degradation products, and prolonged prothrombin time.⁵

Table 1. Underlying Medical Conditions that May Increase the Risk of Serious COVID-19 Infection for Individuals of Any Age^{3,4}

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| <ul style="list-style-type: none">• Severe obesity (body mass index [BMI] of 40 kg/m² or higher)• Blood disorders (sickle cell disease or on blood thinning medications)• Chronic kidney disease• Chronic liver disease as defined by a doctor (e.g., cirrhosis, chronic hepatitis)• Compromised immune system (immunosuppression) (e.g., cancer and treatment such as chemotherapy or radiation, received an organ or bone marrow transplant, taking high doses of corticosteroids or other immunosuppressant medications, HIV or AIDS)• Current or recent pregnancy in the last two weeks• Endocrine disorders (e.g., diabetes mellitus)• Metabolic disorders (such as inherited metabolic disorders and mitochondrial disorders)• Heart disease (such as congenital heart disease, congestive heart failure and coronary artery disease)• Lung disease including asthma or chronic obstructive pulmonary disease (chronic bronchitis or emphysema) or other chronic conditions associated with impaired lung function or that require home oxygen• Neurological and neurologic and neurodevelopment conditions [including disorders of the brain, spinal cord, peripheral nerve, and muscle such as cerebral palsy, epilepsy (seizure disorders), stroke, intellectual disability, moderate to severe developmental delay, muscular dystrophy, or spinal cord injury] |
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Abbreviations: HIV: human immunodeficiency virus; AIDS: acquired immune deficiency syndrome

Novo Nordisk Products in Patients with COVID-19

Access to Novo Nordisk Products

Novo Nordisk continues to provide support and deliver medications to patients worldwide. Currently, there is no impact on the manufacturing and distribution of our products worldwide.

People with diabetes facing financial difficulties as a result of the pandemic can access a free 90-day supply of insulin under Novo Nordisk's enhanced Patient Assistance Program (PAP). For more information on this program please visit [NovoCare.com](https://www.novonordisk.com). The press release containing additional information on this program can be found by visiting <https://www.novonordisk-us.com/media/news-releases.html>

Use of Novo Nordisk Products in Patients with COVID-19

At this time, Novo Nordisk has not conducted studies in patients with confirmed or suspected COVID-19 to evaluate the safety and efficacy of Novo Nordisk products including:

- Insulin and noninsulin antidiabetic drug (NIAD) products
- Glucagon
- Obesity products
- Growth hormone products
- Coagulation factor products
- Women's hormone replacement therapy
- Refillable insulin delivery devices
- Pen needles

We conducted a computer-assisted literature search of the National Library of Medicine and other relevant medical databases regarding the use of Novo Nordisk products and COVID-19. This search did not yield any relevant citations. It is important to recognize that this search was conducted using identified keywords and may not be comprehensive. There is currently no published data to indicate the impact of taking Novo Nordisk insulin or glucagon-like peptide-1 receptor agonist (GLP-1 RA) products in patients with diabetes or obesity and COVID-19 infection. Additionally, there is no data to indicate any impact on taking Novo Nordisk medications if patients with hemophilia or growth hormone disorders become infected with COVID-19. However, common coagulation assays that may be used to diagnose and monitor patients with COVID-19-associated coagulopathy may be affected by Rebinyn® (coagulation factor IX, recombinant, glycoPEGylated). Novo Nordisk has released a statement surrounding this topic which is noted below.

Rebinyn®

At this time, the statement pertains to Rebinyn® and not other Novo Nordisk products for hemophilia and rare bleeding disorders. The statement containing additional information can be found by visiting National Hemophilia Foundation (NHF): [Statement from Novo Nordisk on Rebinyn® and COVID-19](#)

Resources for Healthcare Providers

As patients with diabetes, obesity, hemophilia or growth hormone disorders may be at increased risk of COVID-19 infection or have other comorbidities, it is critical they follow specific COVID-19 precautions and prevention guidance from the following organizations in conjunction with healthcare providers:

- [Centers for Disease Control and Prevention \(CDC\)—United States](#)
- [World Health Organization \(WHO\)](#)

Additional Professional Resources

- [American Diabetes Association—COVID-19](#)
- [American Association of Clinical Endocrinologists Position Statement on COVID-19 and People with Diabetes](#)
- [Juvenile Diabetes Research Foundation—Coronavirus and Type 1 Diabetes](#)
- [Diabetes Disaster Response Coalition—Diabetes Management and COVID-19](#)
- [World Obesity Foundation –COVID-19 Outbreak for People Living with Obesity](#)
- [World Federation of Hemophilia—COVID-19 Pandemic: Practice Recommendations for People with Hemophilia](#)

- [American Society of Hematology—COVID-19 Resources](#)
- [National Organization for Rare Disorders—Coronavirus Prevention and Risk for the Rare Community](#)
- [European Society for Paediatric Endocrinology—COVID-19 Information for Children and Adolescents Living with Endocrine Conditions, Including Type 1 Diabetes Mellitus](#)
- [European Society of Endocrinology—COVID-19 and Endocrine disease: Clinical Information and Comment from ESE](#)

For more information from Novo Nordisk regarding COVID-19, please visit <https://www.novonordisk-us.com/media/COVID19.html>.

If you would like to receive a copy of any of the published references cited in the response, please contact Novo Nordisk Medical Information at (800) 727-6500 or NNMedicalInformation@novonordisk.com.

References

1. Centers for Disease Control and Prevention (CDC). Coronavirus (COVID-19). Available at: <https://www.cdc.gov/coronavirus/2019-ncov/index.html>. Accessed March 20, 2020. 2020.
2. World Health Organization (WHO). Coronavirus disease (COVID-19) outbreak. Available at: <https://www.who.int/emergencies/diseases/novel-coronavirus-2019>. Accessed March 20, 2020. 2020.
3. Centers for Disease Control and Prevention (CDC). Implementation of Mitigation Strategies for Communities with Local COVID-19 Transmission, Appendix A. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/downloads/community-mitigation-strategy.pdf>. Accessed May 8, 2020.
4. Centers for Disease Control and Prevention (CDC). People who are at higher risk for severe illness. Available at: <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/people-at-higher-risk.html>. Accessed May 8, 2020.
5. Centers for Disease Control and Prevention (CDC). Interim Clinical Guidance for Management of Patients with Confirmed Coronavirus Disease (COVID-19). Available at: <https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-guidance-management-patients.html>. Accessed May 26, 2020.