

The role of FcRn in autoimmune disease

Understanding autoimmune disease

The immune system is a complex network of organs, cells and proteins that help to protect the body¹



Antibodies, known as immunoglobulins, help identify foreign substances and mark them for destruction by other immune cells²



Immunoglobulin G (IgG) is the most common antibody in healthy people²

In autoimmune disease, the immune system attacks the body by mistake³



Harmful IgG autoantibodies are a common cause and are specific for each type of autoimmune disease (ex: to an organ or to other cells);⁴ quantity may correlate to disease severity^{5,6}



Conditions are often chronic and unpredictable; symptoms may wax and wane in cycles, impacting overall quality of life³

Common treatments (e.g., immunosuppressive agents, steroids) broadly suppress the immune response to help manage symptoms³



For some patients, they have variable response rates and side effects, leading to cyclic therapy⁷



Invasive or surgical options are still used in severe cases (e.g., TED, Graves' Disease)⁸⁻¹⁰



There are more than 80 types of autoimmune disease, which can affect almost any part of the body³



Neurology



Rheumatology



Dermatology



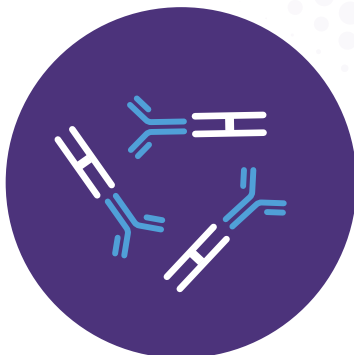
Hematology



Endocrinology

Targeting FcRn in autoimmune disease

The neonatal Fc receptor (FcRn) keeps IgG antibodies in circulation so they can help protect against foreign substances¹¹



FcRn-targeted therapies may help transform care for people with autoimmune disease



FcRn can be found throughout the body (e.g., in the circulatory system, on the skin, in the liver, in the blood, etc.)²



By blocking FcRn, the body removes harmful IgG autoantibodies, potentially alleviating moderate to severe symptoms in various autoimmune diseases²



Inhibiting the FcRn mechanism may:²

- Provide more targeted immune modulation vs. broad-spectrum immunosuppressants
- Impact free-floating IgG as compared to immunosuppressants that impact B-cell or T-cell function

At Immunovant, we understand different patients have different needs.

As a trailblazer in anti-FcRn technology, we are developing innovative, targeted therapies to meet the complex and variable needs of people with autoimmune disease.

Learn more about how we're reframing expectations in autoimmune disease at [Immunovant.com](https://www.immunovant.com)

References: 1. Office of Women's Health. Autoimmune diseases. Available at: <https://www.womenshealth.gov/a-z-topics/autoimmune-diseases>. Accessed June 3, 2022. 2. Patel DD, Bussell JB. Neonatal Fc receptor in human immunity: Function and role in therapeutic intervention. *J Allergy Clin Immunol*. 2020. 3. National Library of Medicine. Autoimmune diseases. Available at: <https://medlineplus.gov/autoimmunedisases.html>. Accessed June 3, 2022. 4. Silosi I et al. The role of autoantibodies in health and disease. *Romanian Journal of Morphology and Embryology*. 2016. 5. Masuda T et al. Antibodies against the main immunogenic region of the acetylcholine receptor correlate with disease severity in myasthenia gravis. *J Neurol Neurosurg Psychiatry*. 2012. 6. Sanders DB et al. Does change in acetylcholine receptor antibody levels correlate with clinical change in myasthenia gravis? *Muscle Nerve*. 2014. 7. Lallana E et al. Toxicities of immunosuppressive treatment of autoimmune neurologic diseases. *Curr Neuroparmacol*. 2011. 8. Bartalena L et al. Management of Graves' Ophthalmopathy: *Reality and Perspectives*. *Endocrine Reviews*, 2000. 9. Smith et al. Graves disease. *N Engl J Med*, 2016. 10. National Heart, Lung and Blood Institute. Hemolytic Anemia. Available at: <https://www.nhlbi.nih.gov/health-topics/hemolytic-anemia>. Accessed June 3, 2022. 11. Rooperian DC, Akilesh C. FcRn: the neonatal Fc receptor comes of age. *Nature Reviews Immunology*. 2007.