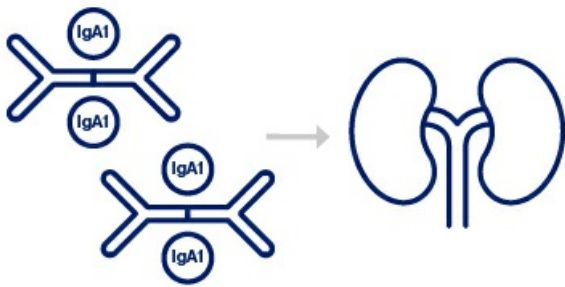


IgA nephropathy

What is IgA nephropathy?

IgA nephropathy (IgAN) is a progressive, rare kidney disease and is a major cause of chronic kidney disease and kidney failure.¹ Annually, around 25 people per million worldwide are newly diagnosed with IgAN.²

What causes IgAN?



IgAN disease is driven by four steps:^{3,4}

1. An abnormal form of immunoglobulin A (IgA) is produced.
2. Autoantibodies are made against this abnormal form of IgA.
3. Immune complexes containing IgA are formed.
4. These immune complexes deposit in the kidneys, triggering a series of downstream pathways, including an inflammatory response, leading to progressive kidney damage and loss of kidney function.

What are the symptoms of IgAN?

IgAN is particularly hard to diagnose. Individuals in the early stages of the disease often don't show symptoms, resulting in many patients receiving a diagnosis after they have already experienced significant kidney damage.^{5,6}

IgAN can only be correctly diagnosed through a medical procedure called a kidney biopsy.⁷

Common signs and symptoms include:^{5,7}



Foaming urine caused by proteinuria (protein in the urine)



Hematuria (blood in the urine)



Fatigue



Headaches



Swelling (edema) of hands, feet and ankles due to fluid retention



High blood pressure

Up to 30% of people who have IgAN with persistent higher levels of protein in their urine (≥ 1 g/day) may progress to kidney failure within 10 years.⁸ This can lead to patients requiring regular dialysis or a kidney transplant.⁹ However, diagnosing IgAN early can result in managing and potentially slowing disease progression before more kidney damage can occur.

The burden of IgAN

The daily impact of IgAN on patients extends beyond just physical symptoms. IgAN can have repercussions that also hinder their capacity to work, engage socially, and pursue activities they are passionate about.¹⁰⁻¹⁵

- 29.7% of people with IgAN experience depression.¹⁰
- Patients often experience fear and anxiety of disease progression and the potential need for kidney dialysis or transplant.^{10,15}
- Many people with IgAN can experience unemployment and productivity loss.^{11,12}

Meeting unmet patient needs

Current treatment options do not target the underlying disease drivers of IgAN.^{1,16}

IgAN is a heterogeneous disease, which means that patients may present with a variety of clinical characteristics.¹⁷

There is a need for a tailored approach to the treatment of patients with IgAN at risk of progression to kidney failure, with effective, well-tolerated treatments that can help slow or prevent progression to kidney failure and improve quality of life.^{1,4,18}

Resources from the community

Patient advocacy organizations have information and resources to help people living with kidney diseases. Visit:

IgAN.org

kidney.org

Kidneyfund.org

Nephcure.org

The organizations and websites listed above are independently operated and not managed by Novartis.

Novartis assumes no responsibility for any information they may provide.

References:

1. KDIGO 2021 Clinical Practice Guideline for the Management of Glomerular Diseases. *Kidney Int.* 2021;100(4S):S1-S276.
2. McGrogan A, Franssen CF, de Vries CS. *Nephrol Dial Transplant.* 2011;26(2):414-430.
3. Rizk DV, Maillard N, Julian BA, Knoppova B, et al. *Front Immunol.* 2019;10:504.
4. Boyd JK, Cheung CK, Molyneux K, Feehally J, Barratt J. *Kidney Int.* 2012;81(9):833-843.
5. National Institute of Diabetes and Digestive and Kidney Diseases. IgA Nephropathy. Accessed March 6, 2024. <https://www.niddk.nih.gov/health-information/kidney-disease/iga-nephropathy>
6. Haider DG, Friedl A, Peric S, et al. *BMC Nephrol.* 2012;13:34.
7. National Organization for Rare Disorders. IgA Nephropathy. Accessed March 6, 2024. <https://rarediseases.org/rare-diseases/iga-nephropathy/>
8. Reich HN, Troyanov SAA, Scholey JW, Cattran DC. *J Am Soc Nephrol.* 2007;18(12):3177-3183.
9. NHS. Chronic Kidney Disease. Accessed March 6, 2024. <https://www.nhs.uk/conditions/kidney-disease/>
10. Zhao Y, Chen YP, Wu YQ, Bao BY, Fan H. *J Int Med Res.* 2020;48(1):300060519898008.
11. Hallab A, Wish JB. *Clin J Am Soc Nephrol.* 2018;13(2):203-204.
12. Kutner NG, Zhang R, Huang Y, Johansen KL. *Clin J Am Soc Nephrol.* 2010;5(11):2040-2045.
13. Nie Y, Witten B, Schatell D, et al. *Clin Kidney J.* 2019;13(3):434-441.
14. Couser WG, Remuzzi G, Mendis S, Tonelli M. *Kidney Int.* 2011;80(12):1258-1270.
15. Pereira BDS, Fernandes NDS, de Melo NP, Abrita R, Grincenkov FRDS, Fernandes NMDS. *Health Qual Life Outcomes.* 2017;15(1):74.
16. Rajasekaran A, Julian BA, Rizk DV. *Am J Med Sci.* 2021;361(2):176-194.
17. Medjeral-Thomas NR, O'Shaughnessy MM. *Adv Chronic Kidney Dis.* 2020;27:111-119.
18. Xie J, Kiryluk K, Wang W, et al. *PLoS ONE.* 2012;7(6):e38904.

Source URL: <https://prod1.novartis.com/diseases/iga-nephropathy>

List of links present in page

1. <https://prod1.novartis.com/diseases/iga-nephropathy>
2. <https://igan.org/>
3. <https://www.kidney.org/>
4. <https://www.kidneyfund.org/>
5. <https://nephcure.org/>
6. <https://www.niddk.nih.gov/health-information/kidney-disease/iga-nephropathy>
7. <https://rarediseases.org/rare-diseases/iga-nephropathy/>
8. <https://www.nhs.uk/conditions/kidney-disease/>