

Hashimoto's
thyroiditisCeliac
disease

Introduction to polyautoimmunity: a visual guide for general practitioners

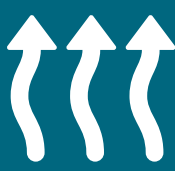
What is polyautoimmunity?

Polyautoimmunity refers to the occurrence of two or more autoimmune diseases in the same patient.¹

1 in 10

people suffer from one or more autoimmune diseases.

— Established by a population-based cohort study of 22 million in the UK.²

**25%**

of patients diagnosed with one autoimmune disease are at risk of developing a second.

— Derived from a population study with more than 5 million individuals in Denmark.^{3,4}

Demographics and risk factors

Approximately

80%

of autoimmune patients are women.⁵



Risk factors associated with polyautoimmunity include:^{6,7}

- Female gender
- Genetic predisposition
- Environmental factors and lifestyle
- Family history for autoimmune diseases
- Positivity for certain autoantibodies
- Vitamin D deficiency

Symptoms and comorbidities

Patients with polyautoimmunity often present with overlapping and unspecific symptoms.⁸ In fact, certain autoimmune disease combinations are more prevalent.³

Most common signs and symptoms in polyautoimmunity⁹

- Arthralgias and arthritis
- Xerophthalmia and xerostomia
- Menstrual disorders
- Myalgia
- Miscarriage
- Gastritis
- Anemia
- Photophobia
- Raynaud's phenomenon

Autoimmune diseases frequently associated with polyautoimmunity¹

- Autoimmune thyroid diseases: Graves' disease, Hashimoto's thyroiditis
- Celiac disease
- Connective tissue diseases: Sjögren's syndrome, systemic lupus erythematosus
- Inflammatory bowel diseases: Crohn's disease, ulcerative colitis
- Psoriasis and psoriatic arthritis
- Rheumatoid arthritis
- Type 1 diabetes mellitus

Early recognition of polyautoimmunity is key. Timely symptom identification and referrals by general practitioners can improve patient outcomes and shorten the diagnostic journey.^{8,10,11}



4 doctors, 4 years:

The average number of doctors and years it takes from the first visit for a patient to receive an autoimmune diagnosis.

— Collected from the Autoimmune Association survey data.^{12,13}



Individuals with autoimmune diseases are at a **higher risk for mental health issues**, including anxiety or depression.

— Based on a literature review and meta-analysis of patients with autoimmune thyroid diseases, rheumatoid arthritis and systemic lupus erythematosus.^{14,15}



99% of individuals with autoimmune diseases say fatigue impacts their quality of life, while **89%** say it also hinders their ability to work.

— Collected from the Autoimmune Association survey data.¹⁶

Resources and further learning

Visit thermofisher.com/polyautoimmunity for further insights on polyautoimmunity and how targeted testing decisions can aid in more accurate autoimmune disease diagnoses.



References

1. Anaya JM. Autoimmun Rev. 2014;13(4):423-426. 2. Conrad N, et al. Lancet. 2023;401(10391):1878-1890. 3. Samuels H, et al. J Clin Med. 2022;11(15):4345. 4. Eaton WW et al. J Autoimmun. 2007;29(1):1-9. 5. Angum F, et al. Cureus. 2020;12:e8094. 6. Shamriz O. Autoimmun Rev. 2018;17:842-843. 7. Miller FW. Curr Opin Immunol. 2023;80:102266. 8. Tripathi P, et al. Cureus. 2024;16(4):e57799. 9. Rojas M, et al. Autoimmune Disease Diagnosis. 2024;81-87. 10. Matusiewicz A, et al. Int J Rheum Dis. 2019;22(3):386-391. 11. Urruticoechea-Arana A, et al. Reumatol Clin. 2020;16(5):373-377. 12. Gunning JN. J Soc Pers Relat. 2023;40(6):2008-2030. 13. Autoimmune Association. Published 2025. Available from: <https://autoimmune.org/resource-center/diagnosis-tips/> 14. Pryce CR, et al. Curr Top Behav Neurosci. 2016;31:139-154. 15. Siegmund EM, et al. JAMA Psychiatry. 2018;75(6):577-584. 16. Autoimmune Association. Published 2022. Available from: <https://autoimmune.org/beyond-tired-fatigue-and-autoimmune-disease/>