Fact sheet

Polyautoimmunity in focus: an opportunity to improve diagnosis and patient care

What is polyautoimmunity and why does it matter to diagnostic laboratories?

- Polyautoimmunity, where a patient has two or more autoimmune diseases, presents an opportunity for laboratories and physicians to work together to reduce time to diagnosis and prevent disease progression.[1-3]
- Avoiding misdiagnosis or underdiagnosis can expedite treatment, improve patient outcomes and reduce unnecessary follow-up testing.[1,3,4] This can increase workflow efficiency and decrease costs for laboratories, positively impacting their overall performance.[5]
- Laboratory immunologists play a crucial consulting role, supporting clinicians in ordering tests, identifying conditions and interpreting results.[3,6] This consultancy is especially helpful to non-autoimmunity specialists and general practitioners.

Polyautoimmunity: key considerations for laboratories

Prevalence and clinical implications

Autoimmunity is more common than previously thought, affecting one in 10 people.[7] An estimated 25% of patients with one autoimmune condition tend to develop additional autoimmune diseases.[8]

Diagnostic challenges

Polyautoimmunity is often under-recognized. Laboratories can support earlier detection by implementing test algorithms that prompt clinicians to investigate potential overlaps.[9,10]

Impact on patient management

Accurate identification of polyautoimmunity enables personalized treatment plans that address multiple autoimmune conditions simultaneously, improving long-term patient outcomes.[1,11,12]

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How can EliA™ autoimmune diagnostics improve your lab's efficiency while aiding clinicians?

1 Prioritize clinical specificity

High specificity is critical in autoantibody testing to minimize false-positive test results. This is particularly important in the field of autoimmune diseases, as they have low prevalence and healthy individuals may test positive for certain antibodies.[13] Prioritizing specificity over sensitivity helps avoid unnecessary treatments, reduces patient anxiety and limits additional testing, thereby supporting accurate diagnoses and improving patient outcomes.[13-15]

2 Choose smarter testing – not more

A study from the US shows that diagnostic errors led to 2.4 times more unnecessary testing. Minimizing diagnostic errors requires targeted test selection rather than increasing test quantity.[5]

3 Automate workflows

Automation is key for speeding up processing times and managing higher testing volumes. Automated methods enhance both accuracy and efficiency in autoimmunity testing.

4 Leverage disease-specific panels

Proactive testing aids in early detection and treatment of often-overlooked conditions. Disease-specific panels, such as testing for tissue transglutaminase antibodies (tTG) in thyroid autoimmune cases, can help detect celiac disease early, supporting improved patient outcomes.[16,17]

Learn more

Visit thermofisher.com/polyautoimmunity to discover how advanced diagnostic solutions can improve your lab's efficiency, accuracy and patient outcomes.

References

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