

September 27, 2021

IMMUNOLOGY

Celiac Screen Testing Algorithm**Date effective:** October 4, 2021**Background Information:**

Shared Health Diagnostic Services (LAB) have established new testing protocols to reflect best practice and testing algorithms.

Clinical Practice Change:

Endomysial Antibody (IgA) testing will no longer be orderable as a stand-alone test.

- Screening for celiac disease and dermatitis herpetiformis should begin with serum IgA quantitation by nephelometry to determine IgA levels before testing for tissue transglutaminase (tTG) antibodies.
- If IgA levels are less than 0.07 g/L then order Tissue Transglutaminase IgG (Test Code:TTG) to prevent false-negative antibody results.
- If IgA levels are greater than 0.07 g/L order Tissue Transglutaminase IgA (Test Code: GLUG).

A positive tTG IgA test will reflex to Endomysial IgA antibody testing by Immunofluorescence. Positive EMA samples will be reported with a titre.

The same algorithm can be used to monitor adherence to gluten-free diet.

Some patients may have positive tTG IgA but negative EMA IgA which may be associated with false positivity or may indicate early disease. Close clinical correlation with continued testing may be indicated in patients with a family history of or who are at increased risk for celiac disease. A positive serology but normal biopsy may also indicate a gluten-free diet (GFD) prior to testing, latent disease, or early enteropathy.

References/Resources:

Test: [Laboratory Information Manual](#)

Requisition: <https://apps.sbgf.mb.ca/labmanual/test/loadDocumentPdf?documentId=2401>

The Immunology Autoimmune Test Requisition will reflect these changes in the next version.

Patient Impact:

- Improve appropriateness of gluten sensitivity investigations.

System Improvements:

- Improved sustainability
- Decreased operating costs

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Testing Algorithm

