

# TECHNICAL BULLETIN

NEW TEST  TEST CHANGE

NOTIFICATION DATE: 05/22/2024

EFFECTIVE DATE: 06/11/2024

## Tissue Transglutaminase Antibody, IgA and IgG (TTGIGA and TTGIGG)

As part of our commitment to providing best-in-class clinical diagnostic testing services, Northwell Health Laboratories will implement a change in the assay methodology used for tissue transglutaminase (anti-TTG) IgA and IgG antibody tests to improve turnaround time. The current enzyme-linked immunosorbent assay (QUANTA Lite R h-tTG IgA and IgG ELISA) will be replaced with a multiplex flow immunoassay (BioPlex 2200 Celiac IgA and IgG).

Tissue transglutaminase IgA antibody is the recommended initial serology test for evaluation of suspected cases of celiac disease (CD) in IgA-competent individuals on a regular (gluten-containing) diet.[1] In patients with selective IgA deficiency, other CD-specific IgG serology (tissue transglutaminase antibody, IgG and/or deamidated gliadin peptide antibody, IgG) should be measured.

An in-house method comparison study conducted at Northwell Health Laboratories demonstrated acceptable qualitative clinical concordance between the two assays. *However, it is important to note that due to differences in immunoassay design and antibody epitope recognition, direct comparison of semi-quantitative values between the two assays is not feasible, as highlighted in the table below.*

Test Name	Transglutaminase IgA		Transglutaminase IgG	
Test Requirements	New	Current	New	Current
Methodology	Multiplex Flow Immunoassay	Enzyme-Linked Immunosorbent Assay	Multiplex Flow Immunoassay	Enzyme-Linked Immunosorbent Assay
Assay Manufacturer	Bio-Rad Laboratories	Inova Diagnostics (WERFEN)	Bio-Rad Laboratories	Inova Diagnostics (WERFEN)
Result Interpretation	< 15 U/mL: Negative ≥ 15 U/mL: Positive	< 4.0 U/mL: Negative 4.0 – 10.0 U/mL: Weak Positive >10.0 U/mL: Positive	< 15 U/mL: Negative ≥ 15 U/mL: Positive	< 6.0 U/mL: Negative 6.0 – 9.0 U/mL: Weak Positive > 9.0 U/mL: Positive
Computer Interface Code	PDM # 5700320	PDM # 5700320	PDM # 5700310	PDM # 5700310
Test Order	TTGIGA	TTGIGA	TTGIGG	TTGIGG

### References:

1. A Rubio-Tapia, Alberto MD et al. American College of Gastroenterology Guidelines Update: Diagnosis and Management of Celiac Disease. The American Journal of Gastroenterology 118(1): p 59-76, January 2023. | DOI: 10.14309/ajg.0000000000002075

If you have any questions, please contact Client Services at (800) 472-5757.