



EFFECTIVE JANUARY 3, 2018

NEW CELIAC DISEASE TESTING

Effective January 3, 2018, Wisconsin Diagnostic Laboratories (WDL) will be performing celiac disease serology using an in-house assay on the BioPlex 2200 (Bio-Rad) multiplex platform. Testing will be performed Monday through Friday, 3rd shift. Please see the American College of Gastroenterology (ACG) recommended algorithm and clinical performance of each serologic marker attached.

Panel/Individual Test Name	Mnemonic	Components	CPT	Test Code
Celiac antibody panel*	CELIAC AB PN	tTG IgA, DGP IgA tTG IgG, DGP IgG	83516x4	1003606
Tissue Transglutaminase, IgA*	TRANSGLU A	tTG IgA	83516	3520665
Tissue Transglutaminase, IgG	TRANSGLU G	tTG IgG	83516	3520666
Deamidated Gliadin, IgA*	DEAMGLIAD A	DGP IgA	83516	3520656
Deamidated Gliadin, IgG	DEAMGLIAD G	DGP IgG	83516	3520659

* Tests including an IgA marker also contain an internal control for total IgA to identify patients with low IgA or selective IgA deficiency (IgA < 7 mg/dL), removing the need to order a quantitative total IgA test. Only IgG serotypes will be reported for samples with IgA < 7 mg/dL.

Clinical implications:

- Numeric results between current and new assays cannot be used interchangeably.
- Cut-off for the new assay is 15 U/mL for all serologic markers.
- Clinical performance between current and new assays is comparable, with the following sensitivities and specificities.

Marker	Current - Inova Diagnostics		New - BioPlex 2200	
	Sensitivity	Specificity	Sensitivity	Specificity
tTG IgA	97%	98%	100%	100%
DGP IgA	77%	79%	98%	99%
tTG IgG	34%	57%	100%	100%
DGP IgG	75%	75%	99%	99%

The following panels will be inactivated:

Panel Name	Mnemonic	Components
Gluten Sensitivity Evaluation	Gluten EV	tTG IgA, DGP IgA, tTG IgG, DGP IgG, total IgA, EMA IgA
Gliadin Antibodies, IgA and IgG	GLIAD AB	DGP IgA, DGP IgG

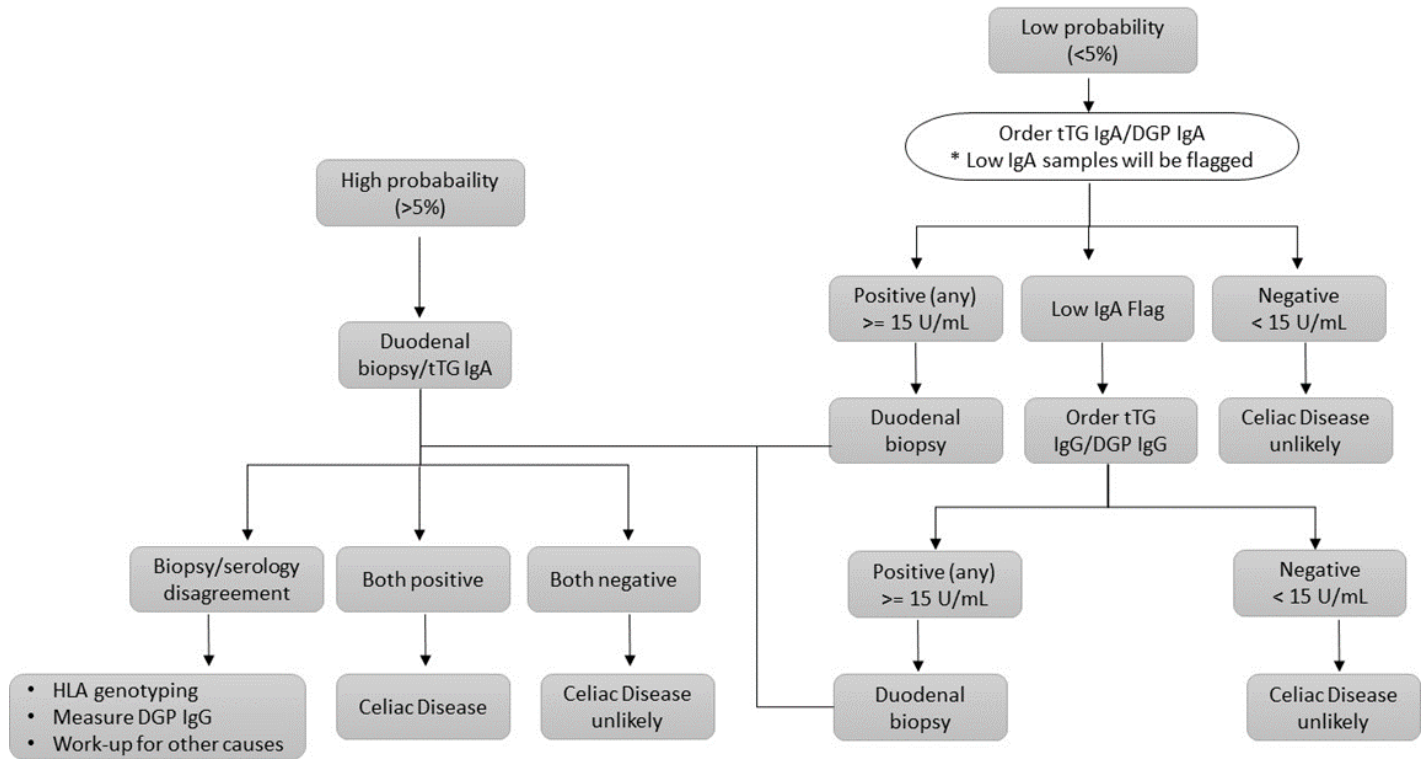
NOTE: EMA Endomysial Antibody, IgA (ENDO IGA) will continue to be available as a stand-alone test.

For questions and additional information, please contact:

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ACG recommended testing algorithm¹:



Clinical performance of each serological marker²:

Serologic Tests	Sensitivity	Specificity
tTG IgA	98%	98%
EMA	95%	99%
DGP IgA	88%	95%
tTG IgG	70%	95%
DGP IgG	80%	98%

NOTE: tTG IgA and EMA have comparable sensitivity and specificity.

References:

- Rubio-Tapia A, Hill ID, Kelly CP, Calderwood AH, Murray JA. Diagnosis and Management of Celiac Disease. Am J Gastroenterol. 2013; 108:656-676.
- Leffler DA, Schuppan D. Update on Serologic Testing in Celiac Disease. Am J Gastroenterol. 2010; 105: 2520-2524.