Celiac Disease Diagnostic Testing Algorithm

Testing for selective IgA deficiency
- IG A / Immunoglobulin A (IgA), Serum
- TTGA / Tissue Transglutaminase (tTG) Antibody, IgA, Serum
- IgA ≥1 mg/dL and below age-matched reference values
  - TSTGP / Tissue Transglutaminase (tTG) Antibodies, IgA and IgG Profile, Serum
  - DGLDN / Gliadin (Deamidated) Antibodies Evaluation, IgG and IgA, Serum

Selective IgA deficiency*
- TTGG / Tissue Transglutaminase (tTG) Antibody, IgG, Serum
- DGGL / Gliadin (Deamidated) Antibody, IgG, Serum

Any result positive or equivocal
- Proceed to biopsy
- All results normal
- Celiac disease very unlikely.
  - ~10% of patients with celiac disease are seronegative
  - If celiac disease is highly suspected, consider CELI / Celiac Associated HLA-DQ Alpha 1 and DQ Beta 1 DNA Typing, Blood

Biopsy results inconsistent with serology
- CELI / Celiac Associated HLA-DQ Alpha 1 and DQ Beta 1 DNA Typing, Blood
- Not celiac disease
- Possible false-positive tTG result

Follow-up patient for future development of celiac disease
- Possible false-positive tTG result
- Possible celiac disease

Normal or elevated IgA
- <4.0 U/mL
- 4.0–10.0 U/mL
- >10.0 U/mL

Selective IgA deficiency*
- ~10% of patients with celiac disease are seronegative
- If celiac disease is highly suspected, consider CELI / Celiac Associated HLA-DQ Alpha 1 and DQ Beta 1 DNA Typing, Blood

Celiac disease very unlikely.
- Possible false-positive tTG result
- Celiac disease possible but unlikely
  - If strong suspicion of celiac disease remains, perform HLA typing.

Possible celiac disease
- CELI / Celiac Associated HLA-DQ Alpha 1 and DQ Beta 1 DNA Typing, Blood
- Not celiac disease

* For individuals with clinical symptoms suggestive of recurrent infections, suggest further evaluation for possible primary immunodeficiency:
  - IGGS / IgG Subclasses, Serum
  - IMMG / Immunoglobulins (IgG, IgA, and IgM), Serum