**INDICATIONS FOR TESTING**

**Symptomatic adults**
- Lesional for histopathology
- Perilesional for Direct Immunofluorescence, Tissue Biopsy (Cutaneous, Mucosal, Epithelial)*

**Obtain serum specimen for Immunobullous Disease Antibody Panel**
- OR, if strong clinical suspicion for pemphigus, order Pemphigus Antibody Panel, IgG
- OR, if strong clinical suspicion for pemphigoid, order Basement Membrane Zone Antibody Panel b,c
- OR, if strong clinical suspicion for dermatitis herpetiformis, order Epidermal Transglutaminase (eTG/TG3) Antibody, IgA by ELISA and Celiac Disease Reflexive Cascade a

**Test for immunobullous diseases (pemphigus, pemphigoid, EBA, linear IgA disease, or dermatitis herpetiformis)**
- Obtain biopsy specimen(s) of intact skin or mucosa
  - Lesional for histopathology
  - Perilesional for Direct Immunofluorescence, Tissue Biopsy (Cutaneous, Mucosal, Epithelial)*

**Consider porphyria or pseudoporphyria** (perilesional skin biopsy is not specific but will not be consistent with immunobullous disease).

**Repeat testing:**
- In approximately 3-6 mos for persistent unexplained disease
- In approximately 6-12 wks for rapidly evolving or changing disease

**Testing will likely demonstrate antibodies to bullous pemphigoid antigens (180 kDa and 230 kDa, BP180, BP230)**

**Consider anti-p200 pemphigoid, anti-laminin-332 pemphigoid, type VII collagen-negative EBA**

**Consider treatment status and test repetition, as dietary gluten restriction may reduce/eliminate detectable antibodies, and/or consider seronegative disease**

**Test for dermatitis herpetiformis/celiac disease serologies**

**Monitor for developing immunobullous disease**

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*For all suspected immunobullous disease, biopsy sample should be obtained from perilesional tissue because immunoreactants may not be present in lesional (blistered or eroded) tissue; perilesional tissue is defined as immediately adjacent to, but not involving, a blister or erosion and may include inflamed, intact skin or mucosa.

*The Basement Membrane Zone Antibody Panel includes epithelial IgG and IgA BMZ antibody testing by IIF as well as bullous pemphigoid antigens, BP180 and BP230, IgG antibody and type VII collagen IgG antibody testing by ELISA. These same test components are included in the Immunobullous Disease Antibody Panel, along with cell surface (pemphigus) antibody testing components. The Pemphigus Antibody Panel can be ordered separately (but this panel does not include type VII collagen IgG antibody testing by ELISA), and the IIF and ELISA components can be ordered separately.

*IIF pattern is determined on BMZ split-skin substrate, also known as salt-split skin.

*The Celiac Disease Reflexive Cascade assesses IgA and IgG IgA; reflex testing may include EMA IgA and/or DGP IgA, or IG IgA and DGP IgG.

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*Collagen Type VII Antibody, IgG by ELISA is included in the Immunobullous Disease Antibody Panel and the Basement Membrane Zone Antibody Panel, or can be ordered separately.

*Desmoglein 1 and desmoglein 3 antibody IgG testing (performed and reported for both desmoglein 1 and desmoglein 3 antibody levels) is included in the Immunobullous Disease Antibody Panel and the Pemphigus Antibody Panel, IgG, or can be ordered separately. Patients with pemphigus can be negative and have antibodies to cell-cell adhesion molecules other than desmoglein 1 and desmoglein 3.

*Patients with pemphigoid can be negative for bullous pemphigoid antigen (BP180 and BP230) antibodies.

*Additional laboratory testing not available for these diagnoses; >30% of patients with antilaminin-332 pemphigoid have an associated malignancy.