**Complement Functional Testing**

**Biomarkers & Acquired Drivers of Disease**

- **CH50eq**
- **Alternative Pathway Functional Assay (APFA)**
- **Hemolytic Assay**
- **C3b Deposition Assay**

**AUTOANTIBODIES**

- **Nephritic Factors** (C3Nef, C5Nef, C4Nef, IFE)
- **Autoantibodies** (FHAA, FBAA)

**BIOMARKERS**

- **C3 Level** (Complement C3 Plasma Assay)
- **C3c Level** (Plasma C3c Fragment Assay)
- **C4 Level** (Plasma Complement C4 Assay)
- **FB Level** (Plasma Complement Factor B Assay)
- **Ba Level** (Plasma Ba Fragment Assay)
- **Bb Level** (Plasma Bb Fragment Assay)
- **C5 Level** (Complement C5 Assay)
- **Properdin Level**
- **Soluble C5b-9 Level**
- **FH Level** (Plasma Complement Factor H Assay)
- **FI Level** (Plasma Complement Factor I Assay)

**Molecular Otolaryngology and Renal Research Laboratories**

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**Understanding and ordering complement testing for your patients with Thrombotic Microangiopathies OR C3 Glomerulopathy**
In the past, persons diagnosed with complement-mediated kidney disease required multiple tests to attempt to identify the genetic cause of their disease. The Genetic Renal Panel is a comprehensive test for patients with:

- **Thrombotic Microangiopathies (TMAs)**
  - Thrombotic thrombocytopenic purpura (TTP)
  - Atypical hemolytic uremic syndrome (aHUS)
- **C3 Glomerulopathy**
  - Dense Deposit Disease (DDD)
  - C3 Glomerulonephritis (C3GN)

### BENEFITS OF COMPLEMENT FUNCTIONAL TESTING

The University of Iowa Molecular Otolaryngology & Renal Research Laboratories offers the Complement Functional Testing - a panel of tests that is:

- **Comprehensive** – tests for complement alternative pathway biomarkers that can inform the state of the disease in a variety of TMAs, C3Gs and other complement-mediated renal diseases.
- **Easy** – patient provides one blood sample.
- **Fast** – one panel of tests shorten wait time for results.
- **Convenient** – blood sample is taken in local doctor’s office.
- **Accurate** – 99% analytical specificity.
- **Diagnostic** – provides a diagnosis and guide to treatment, transplantation and genetic counseling.
- **Personalized** – results are discussed at a multidisciplinary meeting that includes clinical experts, scientists, bioinformaticians, human geneticists and genetic counselors.
- **Collaborative** – MORL will work directly with your physician or genetic counselor to ensure that test results are interpreted appropriately.
- **Inexpensive and efficient** – a panel of biomarkers and functional analysis versus one biomarker or functional test at a time.

### CLINICAL INDICATIONS FOR COMPLEMENT FUNCTIONAL TESTING

Helping you **solve** the puzzle of complement-mediated diseases

To order comprehensive testing for your patient please visit our website at:

https://morl.lab.uiowa.edu