

MORL - Kidney Testing Requisition Form

| | |
|--|---|
| REFERRING LABORATORY USE ONLY: <i>please complete below section</i> | FOR MORL USE ONLY: MORL Case #: |
| Requisition Date: _____ Completed by: _____ Acn#: _____ | |
| Collection: Blood Date: _____ #Tubes: _____ Serum Date: _____ #Tubes: _____ Plasma Date: _____ #Tubes: _____ | |

| | |
|---|---|
| Part A) Patient Information or ID Sticker (Required) | Part A₁) Patient Demographic Information (Required) |
| Name: _____ Last First DOB: _____ / _____ / _____ month day year Sex: <input type="checkbox"/> Male <input type="checkbox"/> Female MRN: _____ | Ethnicity: <input type="checkbox"/> Hispanic <input type="checkbox"/> Not Hispanic Race: <input type="checkbox"/> Caucasian <input type="checkbox"/> Black or African American <input type="checkbox"/> Asian <input type="checkbox"/> American Indian/Alaska Native <input type="checkbox"/> Native Hawaiian or Other Pacific Islander <input type="checkbox"/> More Than One Race _____ |

| | |
|---|--|
| Part B) Reporting Information (Required) | Part C) Payment Information (Required) Institutional billing or payment by Visa or MasterCard is accepted. |
| Health Care Provider: _____ | ***The MORL will NOT submit to insurance. |
| E-mail Address: _____ | Billing Contact: _____ |
| Institution: _____ | Institution: _____ |
| Street Address: _____ | Street Address: _____ |
| City: _____ State: _____ Zip: _____ | City: _____ State: _____ Zip: _____ |
| Phone: () _____ FAX: () _____ | Phone: () _____ FAX: () _____ |

If you or your patient would like to pay by credit card please contact Jori Hendon at 319-335-6653

Part D) Pertinent Clinical Information (Required) – Complete the section below

Diagnosis: aHUS: Trigger? No Yes (if yes, describe trigger, eg. BMT, pregnancy, pneumococcal): _____
 DDD C3GN PIGN TTP STEC-HUS Other (complete): _____

Family history of renal disease? No Yes (if yes, please provide details in comment & attach a pedigree if available)

| Disease History Date of onset of symptoms: _____ C3 Level: _____ nl range: _____ Date: _____ C4 Level: _____ nl range: _____ Date: _____ Renal biopsy: <input type="checkbox"/> Yes <input type="checkbox"/> No Date: _____ Hematuria: <input type="checkbox"/> Yes <input type="checkbox"/> No Diarrhea: <input type="checkbox"/> Yes <input type="checkbox"/> No Schistocytes: <input type="checkbox"/> Yes <input type="checkbox"/> No | Specimen Information: <table border="1" style="width:100%; border-collapse: collapse; font-size: small;"> <tr> <th style="text-align: left;">Was specimen drawn pre or post:</th> <th>Procedure date:</th> <th>Pre-Procedure</th> <th>Post-Procedure</th> <th>N/A</th> </tr> <tr> <td>Eculizumab: _____</td> <td>_____</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>PLEX (*affects serologies): _____</td> <td>_____</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>Renal Tx: _____</td> <td>_____</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>BMT (*affects genetics): _____</td> <td>_____</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> <tr> <td>Liver Tx: _____</td> <td>_____</td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> <td align="center"><input type="checkbox"/></td> </tr> </table> | Was specimen drawn pre or post: | Procedure date: | Pre-Procedure | Post-Procedure | N/A | Eculizumab: _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | PLEX (*affects serologies): _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Renal Tx: _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | BMT (*affects genetics): _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | Liver Tx: _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--|---------------------------------|--------------------------|--------------------------|----------------|-----|-------------------|-------|--------------------------|--------------------------|--------------------------|-----------------------------------|-------|--------------------------|--------------------------|--------------------------|-----------------|-------|--------------------------|--------------------------|--------------------------|--------------------------------|-------|--------------------------|--------------------------|--------------------------|-----------------|-------|--------------------------|--------------------------|--------------------------|
| Was specimen drawn pre or post: | Procedure date: | Pre-Procedure | Post-Procedure | N/A | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Eculizumab: _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| PLEX (*affects serologies): _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Renal Tx: _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| BMT (*affects genetics): _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Liver Tx: _____ | _____ | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| Current Lab Values <table border="1" style="width:100%; border-collapse: collapse; font-size: x-small;"> <thead> <tr> <th style="width: 20%;"></th> <th style="width: 20%;">Value</th> <th style="width: 20%;">Normal Range</th> <th style="width: 20%;">Test Date</th> </tr> </thead> <tbody> <tr><td>Hg/Hct:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>Haptoglobin:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>Platelets:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>sCr/BUN:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>LDH:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>uProt/uCr:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>Urine Blood:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>C3 Level:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>C4 Level:</td><td>_____</td><td>_____</td><td>_____</td></tr> <tr><td>ADAMTS13:</td><td>_____</td><td>_____</td><td>_____</td></tr> </tbody> </table> | | Value | Normal Range | Test Date | Hg/Hct: | _____ | _____ | _____ | Haptoglobin: | _____ | _____ | _____ | Platelets: | _____ | _____ | _____ | sCr/BUN: | _____ | _____ | _____ | LDH: | _____ | _____ | _____ | uProt/uCr: | _____ | _____ | _____ | Urine Blood: | _____ | _____ | _____ | C3 Level: | _____ | _____ | _____ | C4 Level: | _____ | _____ | _____ | ADAMTS13: | _____ | _____ | _____ | Comments: _____ _____ _____ |
|--|-------|--------------|--------------|-----------|---------|-------|-------|-------|--------------|-------|-------|-------|------------|-------|-------|-------|----------|-------|-------|-------|------|-------|-------|-------|------------|-------|-------|-------|--------------|-------|-------|-------|-----------|-------|-------|-------|-----------|-------|-------|-------|-----------|-------|-------|-------|---|
| | Value | Normal Range | Test Date | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Hg/Hct: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Haptoglobin: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Platelets: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| sCr/BUN: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LDH: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| uProt/uCr: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Urine Blood: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C3 Level: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| C4 Level: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| ADAMTS13: | _____ | _____ | _____ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

Patient Name: _____ DOB: _____ MRN: _____

Please see page 3 for sample handling requirements - No Weekend Deliveries

Functional Testing Panels Requested

- C3 Glomerulopathy Complement Panel (C3G-CP)**
 (serologies for complement-mediated renal diseases)
 (CH50, APFA, C3b Deposition Assay, Fluid Phase Activity (IFE), FHAA, FBAA, Nephritic Factors (C3Nef (C3CSA), C5Nef (C3CSAP) C4Nef), C3, C3c, C4, FD, FB, Ba, Bb, C5, Properdin, Soluble C5b-9, FI and FH levels)
 - 2 mL frozen serum
 - 2 mL frozen EDTA plasma

- aHUS (complement-mediated TMA) Panel (aHUS-FP)**
 (CH50, APFA, C3b Deposition Assay, FHAA, FBAA, Fluid Phase Activity (IFE), C3, C3c, C4, FD, FB, Ba, Bb, C5, Properdin, Soluble C5b-9, FI and FH levels)
 - 2 mL frozen serum
 - 2 mL frozen EDTA plasma

- Autoantibody Panel (AAP)**
 (FHAA, FBAA, Fluid Phase Activity (IFE), Nephritic Factors (C3Nef (C3CSA), C5Nef (C3CSAP), C4Nef))
 - 2 mL frozen serum

- Complement Biomarker Panel (CBP)**
 (C3, C3c, C4, FD, FB, Ba, Bb, C5, Properdin levels, Soluble C5b-9, FH and FI levels)
 - 2 mL frozen serum
 - 2 mL frozen EDTA plasma

- Complement Pathway Activity Panel (CPAP)**
 (CH50, APFA, C3b Deposition Assay)
 - 2 mL frozen serum

Genetic Testing Requested

- Genetic Renal Panel** (DNA test for TTP, aHUS, HUS, DDD, C3G and other complement diseases)
 (CFH, CFI, MCP, CFB, CFHR5, C3, THBD, ADAMTS13, PLG, DGKE, G6PD, MMACHC, WT1 and MLPA analysis)
 - 8-10 cc EDTA whole blood (room temp or refrigerated)
OR
 - 10 µg DNA, minimum concentration 50 ng/µl

- MLPA Testing ONLY** (screening for copy number variations in the CFH-CFHR5 genomic region)
 - 8-10 cc EDTA whole blood (room temp or refrigerated)
OR
 - 10 µg DNA, minimum concentration 50 ng/µl

- Familial Testing** (site specific analysis to screen for variants previously identified in a family member)

Familial Testing Details:

Gene/s: _____

MORL ID# or Variant/s: _____

Relationship to previously tested person: _____

If you are interested in ordering Custom Testing please contact Amy Weaver at 319-335-6623 or amy-weaver@uiowa.edu

a la carte Testing Requested

Autoantibody Tests – 1 mL Frozen Serum

- FH autoantibody (FHAA)
- FB autoantibody (FBAA)
- Fluid Phase Activity (IFE)
- C3Nef (C3CSA)
- C5Nef (C3CSAP)
- C4Nef

Biomarker Tests – 1 mL Frozen EDTA Plasma

- C3 Level (1 mL frozen serum)
- C3c Level
- C4 Level (1 mL frozen serum)
- FD Level
- FB Level
- Ba Level
- Bb Level
- Properdin Level
- C5 Level
- Soluble C5b-9
- FI Level
- FH Level

Complement Pathway Function Tests – 1 mL Frozen Serum

- CH50
- C3b Deposition Assay
- APFA (Alternative Pathway Functional Assay)

ADAMTS-13 Tests – 1 mL Frozen Citrate Plasma

- ADAMTS-13 Activity
- ADAMTS-13 Activity with reflex to Inhibitor (when activity <25%)

Important Information for ALL Requests

All serum and plasma samples MUST be processed and frozen down to -80°C immediately after collection (please see instructions on page 3). Sample **type** must be clearly labeled (either serum or plasma) and shipped out **overnight** on at least 5 lb dry ice (Monday – Thursday).

If samples arrive thawed they will be **REJECTED**.
No Weekend Deliveries

Molecular Otolaryngology & Renal Research Laboratories

For test inquiries please call: 319-335-6623 • Fax: 319-353-5869
 For billing inquiries please call: 319-335-6653 • Fax: 319-353-5869
 Email: morl@uiowa.edu • <https://morl.lab.uiowa.edu>

Ship to:

Dr. Richard Smith
 Molecular Otolaryngology & Renal Research Laboratories
 The University of Iowa
 285 Newton Rd., 5270 CBRB
 Iowa City, IA 52242-1078

Monday – Friday ONLY – No Weekend Deliveries

Molecular Otolaryngology & Renal Research Laboratories Sample Requirements

Questions? Contact Amy Weaver at 319-335-6623 or amy-weaver@uiowa.edu

| | |
|---|--|
| Genetic Renal Panel/MLPA/DNA Testing Sample Requirements: | |
| <ul style="list-style-type: none"> 8-10 cc. EDTA whole blood (minimum amount of 3-4 cc. is accepted for children under age 4) OR 10 µg DNA, minimum concentration 50ng/µl (A260/A280 1.8-2) resuspended in 0.1mM EDTA (10mM Tris HCl, 0.1mM EDTA, pH 8, Teknova Cat# T0220) <i>Note: MORL is not responsible for broken tubes.</i> *Please note: blood samples drawn from a bone marrow transplant patient will result in genetic results for the <u>donor</u> rather than the patient. Overnight delivery, room temperature or refrigerated (DO NOT FREEZE WHOLE BLOOD) Samples are accepted Monday-Friday. Samples may be refrigerated if delivery is delayed (stability – 1 week) | |
| Serum (FB & FH autoantibody, C3b Deposition, APFA, CH50, Fluid Phase Activity (IFE), C3Nef (C3CSA), C5Nef (C3CSAP), C4Nef, C3 and C4 Levels) Collection Protocol (minimum volume 2ml) *PLEX treatments will affect serum tests, please wait ~14 days after PLEX to draw samples: | |
| <ol style="list-style-type: none"> Follow standard phlebotomy techniques to collect at least 6 cc of whole blood drawn in a red-top vacutainer tube. <i>Note: Serum separators with “clot activators” should not be used for the serum samples.</i> Allow the blood in the red-top tube to clot at room temperature for 30 minutes. Centrifuge the clotted blood at room temperature (1000 x g for 10 minutes). Label “Serum” or “Red-top” on clean screw top-tube (s). Pipette <u>cell-free supernatant</u> (at least 2 mL) to each labeled tube(s). Place the tube immediately at -80°C (or on dry ice). Sample must remain deep frozen. <i>Note: Do not transfer cells with serum. If necessary centrifuge a second time.</i> | |
| Plasma (soluble C5b-9, C3c, Ba, Bb, Properdin, C5, FD, FB, FH, FI levels) Collection Protocol (minimum volume: 2ml) *PLEX treatments will affect plasma tests, please wait ~14 days after PLEX to draw samples: | |
| <ol style="list-style-type: none"> Follow standard phlebotomy techniques to collect at least 6 cc of whole blood drawn in a lavender-top (EDTA) vacutainer tube. Centrifuge at room temperature immediately after blood draw (1000 x g for 10 minutes). Label “Plasma” or “Lavender-top” on clean screw top-tube(s). Pipette <u>cell-free supernatant</u> (at least 2 mL) to each labeled tube (s). Place the tube immediately at -80°C (or on dry ice). Sample must remain deep frozen. <i>Note: Do not transfer cells with plasma. If necessary centrifuge a second time.</i> | |
| Plasma (ADAMTS-13 Activity/Inhibitor) Collection Protocol (minimum volume: 0.5ml): | |
| <ol style="list-style-type: none"> Follow standard phlebotomy procedure to collect blood in buffered sodium citrate (light blue-top, 3.2%) plastic tubes (available in 4.5 mL, 2.7 mL or 1.8 mL full draw tubes). After collection, invert the tube gently 5 to 6 times. Label “Citrate Plasma” or “Blue-top” on clean cryovial screw-top tubes. Store the blue-top tube upright at room temperature until centrifugation. Samples should be centrifuged between 15 to 60 minutes after blood collection for best results. Re-mix the blood sample immediately prior to centrifugation by gently inverting the tube 5 to 6 times. Centrifuge blood sample at room temperature in a horizontal rotor (swinging bucket rotor) for 15-20 minutes at 1500 to 1800 x g with the <i>brake off</i>. | <ol style="list-style-type: none"> Following centrifugation, transfer the top two-thirds of the plasma layer into a new plastic tube. Re-centrifuge the collected plasma at 1500 to 1800 x g with the <i>brake off</i> for an additional 15-20 minutes to remove any red cells or platelets. Transfer the top two-thirds of the plasma into the previously labeled cryovials, taking care not to disturb any cells at the bottom of the tube. Place the tube immediately at -80°C (or on dry ice). Sample must remain deep frozen. <i>Note: if the sample arrives at room temperature a new sample will be required.</i> |
| Serum & Plasma Shipping Requirements: | Ship all samples to: |
| <ul style="list-style-type: none"> Serum and plasma must be frozen and shipped OVERNIGHT with a minimum of 3 kg (or 6 lbs) of dry ice. Cryovials should be put in zip lock bags and completely covered in dry ice to keep the sample frozen until it arrives in the lab. Delivery: Monday-Friday. NO WEEKEND DELIVERIES Thawed OR unlabeled samples will be REJECTED for testing. | <p>Dr. Richard Smith Molecular Otolaryngology & Renal Research Laboratories The University of Iowa 285 Newton Rd., 5270 CBRB Iowa City, IA 52242-1078 Phone: 319-335-6623</p> |

| Complement Panel tests offered by the MORL: | Test Code: |
|---|-------------------|
| C3 Glomerulopathy Complement Panel (serologies for DDD, C3GN), Serum and Plasma - CH50, APFA, C3b Deposition Assay, Fluid Phase Activity (IFE), FHAA, FBAA, Nephritic Factors (C3Nef (C3CSA), C5Nef (C3CSAP), C4Nef), C3, C3c, C4, FD, FB, Bb, Ba, C5, Properdin, Soluble C5b-9 (sC5b-9), FI and FH levels | C3G-CP |
| aHUS (complement-mediated TMA) Panel (serologies for TTP, aHUS, HUS), Serum and Plasma - CH50, APFA, C3b Deposition Assay, FHAA, FBAA, Fluid Phase Activity (IFE), C3, C3c C4, FD, FB, Ba, Bb, C5, Properdin, Soluble C5b-9 (sC5b-9), FI and FH levels | aHUS-FP |
| Autoantibody Panel, Serum - Fluid Phase Activity Assay (IFE), FHAA, FBAA, Nephritic Factors (C3Nef (C3CSA), C5Nef (C3CSAP), C4Nef) | AAP |
| Complement Biomarker Panel, Serum and Plasma - C3, C3c, C4, FB, Ba, Bb, C5, FD, Properdin levels, Soluble C5b-9 (sC5b-9), FI and FH levels | CBP |
| Complement Pathway Activity Panel, Serum - CH50, APFA, C3b Deposition Assay | CPAP |
| Autoantibodies to Complement Components | Test Code: |
| Fluid Phase Activity Assay, Serum (IFE) | 07FPA |
| FH Autoantibody, Serum (ELISA) | 07FHAA |
| FB autoantibody, Serum (ELISA) | 07FBAA |
| C3Nef (C3CSA), Serum (Hemolytic) | 06C3NEF |
| C5Nef (C3CSAP), Serum (Hemolytic) | 06C5NEF |
| C4Nef, Serum (Hemolytic) | 06C4NEF |
| Functional Assays of Complement Activity - Pathways | Test Code: |
| CH50, Serum (Liposome-based method) | 07CH50 |
| Alternative Pathway Functional Assay (APFA), Serum (ELISA) | 06APFA |
| C3b Deposition Assay (Cell-based assay) | 01C3BDA |
| Complement Protein Biomarkers (including split products) | Test Code: |
| C3 Level, Serum (Turbidimetry) | 07C3L |
| C3c Level, Plasma (ELISA) | 06C3CL |
| C4 Level, Serum (Turbidimetry) | 07C4L |
| FD Level, Plasma (ELISA) | 01FDL |
| FB Level, Plasma (RID) | 07FBL |
| Ba Level, Plasma (ELISA) | 06BAL |
| Bb Level, Plasma (ELISA) | 06BBL |
| C5 Level, Plasma (ELISA) | 06C5L |
| Properdin Level, Plasma (ELISA) | 06PL |
| Soluble C5b-9, Plasma (ELISA) | 06SMAC |
| FI Level, Plasma (ELISA) | 07FIL |
| FH Level, Plasma (ELISA) | 06FHL |
| ADAMTS-13 | Test Code: |
| ADAMTS-13 Activity (a la carte only), Citrate Plasma (FRET) | 01ATS13 |
| ADAMTS-13 Activity with reflex to Inhibitor Assay (if activity is <25%), Citrate Plasma (FRET) | 01ATS13RFX |
| Genetic Tests Offered by the MORL: | Test Code: |
| Genetic Renal Panel: NGS + MLPA (CNVs) for Complement-Mediated Kidney Disease | GRP08 |
| MLPA (CFH-CFHR5): Multiplex Ligation Dependent Probe Amplification | MLPA02 |

ALL requested information must be provided or testing will not be performed

We request extensive patient demographic and clinical information. This information is required as it is very valuable in the interpretation of your patient's results.

Patient information:

- Patient date of birth and gender
- Patient ethnicity and race
- Patient's clinical information and family history of kidney disease

Specimen information:

- Patient identifiers (**full name, date of birth, sex and medical record number**)
- Date of collection
- **Sample type – frozen samples must be CLEARLY LABELED as either serum or plasma and type (i.e. EDTA or Citrate)**
- Ordering physician

Billing information:

- We are not able to bill insurance, Medicare or patient directly.
- Institutional billing accepted. Visa and Mastercard accepted.
- Personal checks NOT accepted
- Please include contact information including phone and fax number for billing questions.

Reporting Information:

Because of confidentiality issues, reports will only be released to the individual indicated on the page 1 of the testing requisition form.

Research Participation:

If your patient's genetic and functional testing results are inconclusive, they may qualify for research studies on complement-mediated renal diseases that are ongoing at the MORL. If you would like your patient to be considered for this opportunity, please contact Amy Weaver at amy-weaver@uiowa.edu.

IMPORTANT INFORMATION FOR PHYSICIAN OR GENETIC COUNSELOR:

DNA tests may detect an abnormality. Detection methods are greater than 99% accurate. Many of these tests are relatively new. The analysis and interpretation represents our best knowledge and understanding of the genetics of these diseases.

There is a small possibility that a test may not work properly or an error may occur. You may be asked for an additional sample if it is felt that confirmatory testing is needed.

An error in diagnosis may occur if incorrect information is provided with the sample.

Kidney diseases are complex disorders and penetrance of a phenotype (the degree of kidney disease, for example) may be variable. Research to determine whether a genotype-phenotype correlation exists is ongoing.

Because of the complexity of DNA testing, results should be discussed with a genetic counselor or physician.

Note: Kidney diseases are very complex disorders. This complexity means that variants in many different genes can lead to kidney disease. It is possible that no variants will be detected in the variant screens (the genes) you have requested.

DISCLAIMER:

This request to order molecular diagnostic tests from the MORL certifies to the MORL that the ordering physician has obtained informed consent from the patient as required by applicable state or federal laws for each test ordered, that the ordering physician has authorization from the patient permitting the MORL to report results for each test ordered to the ordering physician, and that the ordering physician assumes responsibility for providing the patient with all associated guidance and counseling regarding the test results.