

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|---------------|-----------------|----------------|--|
| C Peptide (see <u>C-Peptide, Plasma/Serum</u>) | | | | | | |
| C-ANCA / Anti-PR3 (anti-proteinase antibody) (see <u>ANCA</u>) | | | | | | |
| C-Peptide, Plasma/Serum C Peptide | Core | <p>Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p> | As required | 370-1470 pmol/L | 2018-03-06 | <p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Increased with excess secretion of endogenous insulin. Can be used to diagnose self-induced insulin hypoglycemia.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---------------------------|------------|---|--|-----------------|----------------|----------|
| C-Reactive Protein CRP | Core | 4.5 mL Green (Lithium Heparin) top Vacutainer Pediatric: 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION | Daily - as required Also available on a STAT basis for Emergency Department patients only. | <5 mg/L | 2008-11-15 | |

C-Telo (see C-Telopeptide, Plasma)

| |
|--|
| |
|--|

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------|--|---------------------|---|----------------|--|
| C-Telopeptide, Plasma Beta Crosslaps β-CTX C-Telo | Core | <p>Adult: 4 mL Lavender top (EDTA) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Lavender top (EDTA) Microtainer 2-10 years: 2 mL Lavender top (EDTA) Vacutainer tube</p> <p>Red, Gold, or Light Green (Li-heparin) top tubes are also acceptable as long as the serum or plasma is analyzed or frozen within a few hours of collection; EDTA plasma is the preferred choice (more...)</p> | Thursday afternoons | <p><u>Male:</u> 30 - 50 years: ≤ 584 ng/L 50 - 70 years: ≤ 704 ng/L > 70 years: ≤ 854 ng/L</p> <p><u>Female:</u> Pre-menopausal: ≤ 573 ng/L Post-Menopausal: 104 - 1008 ng/L</p> | 2015-04-15 | <p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Increased levels of C-telopeptide occur in osteoporosis, Pagets disease, primary hyperparathyroidism, renal insufficiency, and bone metastases.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| C-Urea Breath Test (see <u>H. Pylori Breath Test</u> test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener) | | | | | | |
| C. difficile (see <u>Clostridioides (Clostridium) difficile toxin</u>) | | | | | | |
| C1 complement component group test (see <u>C1qrs, Serum</u>) | | | | | | |
| C1 Esterase Inhibitor (see <u>C1 Inhibitor Protein, Serum/Plasma</u>) | | | | | | |
| C1 Esterase Inhibitor functional assay (see <u>C1 Esterase Inhibitor, Function</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|---------------------------------|------------------|----------------|--|
| C1 Esterase Inhibitor, Function C1INF C1 Inhibitor function C1 Esterase Inhibitor functional assay | Core | 4.5 mL (3.2% Sodium Citrate) Light Blue top Vacutainer tube GENERAL LABORATORY REQUISITION | Referred out Monday-Thursday | 0.75 - 1.59 U/mL | 2010-03-18 | <p>This test is available exclusively to LHSC/SJH physicians.</p> <p>For more information, please contact:</p> <p>Senior Technologist Immunology Lab 519-685-8500 ext. 35541</p> <p>This test evaluates the functional activity of C1 inhibitor protein utilizing a chromogenic based method.</p> <p>For proper assessment of angioedema please correlate with other clinical features and with the results of quantitative levels of both C1 inhibitor protein and C4. (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|----------------------------|-----------------|----------------|--|
| C1 Inactivator (see <u>C1 Inhibitor Protein, Serum/Plasma</u>) | | | | | | |
| C1 Inhibitor function (see <u>C1 Esterase Inhibitor, Function</u>) | | | | | | |
| C1 Inhibitor Protein, Serum/Plasma C1 Esterase Inhibitor C1 Inactivator | Clinical Immunology | <p>Adult: 5 mL Gold top Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Light Green (Li-Heparin) or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p> | Monday Friday 0800-1600 | 0.21 - 0.38 g/L | 2010-03-12 | <p>This is a quantitative assay; it does not assess the function of C1 inhibitor.</p> <p>C1 inhibitor protein is decreased in hereditary angioneurotic edema, a genetic disease characterized by acute edema of subcutaneous tissue, the GI tract, or the upper respiratory tract.</p> |
| C1INF (see <u>C1 Esterase Inhibitor, Function</u>) | | | | | | |
| C1q (see <u>C1qrs, Serum</u>) | | | | | | |
| C1qrs components (see <u>C1qrs, Serum</u>) | | | | | | |
| C1qrs levels (see <u>C1qrs, Serum</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|--|---|---|-------------------|--|
| C1qrs, Serum C1qrs components C1q C1r C1s C1 complement component group test C1qrs levels | Clinical Immunology | <p>Both plasma and serum are required</p> <p>5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma)</p> <p>Pediatric: 0-2 yrs: Red 0.5pk. and Purple 0.5pk 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION</p> | <p>Referred out monthly.</p> <p>Total complement CH50 is performed as a screen to determine if the component assay is required.</p> | <p>C1q level: 83-125 mg/L C1r level: 61-162 % of STD C1s level: 59-297 % of STD</p> | <p>2010-01-11</p> | <p>This test is available exclusively to SJHC/LHSC physicians.</p> <p>C1QRS is a group test that includes C1q, C1r, and C1s. Also order TCOM (CH50).</p> <p>Total complement is assayed first to determine if the components evaluation is necessary. If the total complement is within the normal range, the component(s) is resulted as "not indicated".</p> <p>The group test C1qrs includes C1q, C1r, C1s protein quantitation. It does not evaluate function.</p> <p>This test does NOT include C1 est (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------------------|---|----------------|-----------------------------------|----------------|----------|
| C1r (see <u>C1qrs, Serum</u>) | | | | | | |
| C1s (see <u>C1qrs, Serum</u>) | | | | | | |
| C2,Serum Complement C2 quantitation | Clinical Immunology | 6 mL Red top Vacutainer tube or 5 mL Gold top Vacutainer tube Pediatric: 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION | Batch analysis | 14-33 mg/L; no pediatric range | 2010-01-11 | |
| C24/C22 Long Chain Fatty Acid Ratio (see <u>Long Chain Fatty Acids,Plasma/Serum</u>) | | | | | | |
| C26/C22 Long Chain Fatty Acid Ratio (see <u>Long Chain Fatty Acids,Plasma/Serum</u>) | | | | | | |
| C26:0 Long Chain Fatty Acid Concentration (see <u>Long Chain Fatty Acids,Plasma/Serum</u>) | | | | | | |
| C282Y (see <u>Hemochromatosis HFE gene</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|----------------------|---|----------------|---|
| C3 Nephritic Factor C3NF | Clinical Immunology | 6 mL Red top Vacutainer tube. Gel barrier tubes are not acceptable. Pediatric: 0-2 yrs: Red 0.5pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION | Referred out monthly | Normal Ratio 0.00 to 0.26 Equivocal Ratio 0.27 to 0.33 Positive Ratio greater than or equal to 0.34 | 2010-01-11 | This test is available exclusively to SJHC/LHSC physicians. C3 Nephritic Factor is an autoantibody that binds to the alternative pathway C3 convertase and prolongs its activity in vivo. Allow the filled red top tube to clot at 22-37oC for 30-60 minutes. Centrifuge at room temperature. Aliquot into 2 storage tubes and freeze as soon as possible. Store at -20oC (preferably -70oC). |
| C3c (see <u>Complement C3, Plasma</u>) | | | | | | |
| C3NF (see <u>C3 Nephritic Factor</u>) | | | | | | |
| C4 (see <u>Complement C4, Plasma</u>) | | | | | | |
| C5 complement component level (see <u>C5, Serum</u>) | | | | | | |
| C5 Level (see <u>C5, Serum</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|---|-----------------|----------------|--|
| C5, Serum C5 complement component level C5 Level C5L | Clinical Immunology | 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) Pediatric: 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION | Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required. | 55-113 mg/L | 2010-01-11 | <p>This test is available exclusively to SJHC/LHSC physicians.</p> <p>Total complement is assayed first to determine if the components evaluation is necessary. Only if the total complement is less than the lower limit of normal will the complement component be processed. Otherwise the component(s) is cancelled with the Comment: "Test not indicated."</p> <p>Also included in group test CCOMPG (includes, C1qrs, C5, C6, C7, C8, C9).</p> <p>Total complement (TCOM, CH50) is a screen for cla (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| C5L (see <u>C5, Serum</u>) | | | | | | |
| C6 complement component level (see <u>C6, Serum</u>) | | | | | | |
| C6 Level (see <u>C6, Serum</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|--|-----------------|----------------|--|
| C6, Serum C6 complement component level C6 Level C6L | Clinical Immunology | 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) Pediatric: 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION | Referred out monthly. Total complement CH50 is performed as a screen to determine if the component assay is required. | 28-69 mg/L | 2010-01-11 | <p>This test is available exclusively to SJHC/LHSC physicians.</p> <p>Total complement is assayed first to determine if the components evaluation is necessary. Only if the total complement is less than the lower limit of normal will the complement component be processed. Otherwise the component(s) is cancelled with the Comment: "Test not indicated."</p> <p>Also included in group test CCOMPG (includes, C1qrs, C5, C6, C7, C8, C9).</p> <p>Total complement (TCOM, CH50) is a screen for classical pathway function. (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| C6L (see <u>C6, Serum</u>) | | | | | | |
| C7 complement component level (see <u>C7, Serum</u>) | | | | | | |
| C7 Level (see <u>C7, Serum</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|---|-----------------|----------------|---|
| C7, Serum C7 complement component level C7 Level C7L | Clinical Immunology | 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) Pediatric: 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION | Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required. | 35.3-96.5 mg/L | 2010-01-11 | <p>This test is available exclusively to SJHC/LHSC physicians.</p> <p>Total complement is assayed first to determine if the components evaluation is necessary. Only if the total complement is less than the lower limit of normal will the complement component be processed. Otherwise the component(s) is cancelled with the Comment: "Test not indicated."</p> <p>Also included in group test CCOMP (includes, C1qrs, C5, C6, C7, C8, C9).</p> <p>Total complement (TCOM, CH50) is a screen for classical pathway function. (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| C7L (see <u>C7, Serum</u>) | | | | | | |
| C8 complement component level (see <u>C8, Serum</u>) | | | | | | |
| C8 Level (see <u>C8, Serum</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|---|-----------------|----------------|--|
| C8, Serum C8 complement component level C8 Level C8L | Clinical Immunology | 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) Pediatric: 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION | Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required. | 49-106 mg/L | 2010-01-11 | <p>This test is available exclusively to SJHC/LHSC physicians.</p> <p>Total complement is assayed first to determine if the components evaluation is necessary. Only if the total complement is less than the lower limit of normal will the complement component be processed. Otherwise the component(s) is cancelled with the Comment: "Test not indicated."</p> <p>Also included in group test CCOMPG (includes, C1qrs, C5, C6, C7, C8, C9).</p> <p>Total complement (TCOM, CH50) is a screen for cla (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| C8L (see <u>C8, Serum</u>) | | | | | | |
| C9 complement component level (see <u>C9, Serum</u>) | | | | | | |
| C9 Level (see <u>C9, Serum</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|---|-----------------|----------------|--|
| C9, Serum C9 complement component level C9 Level C9L | Clinical Immunology | 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) Pediatric: 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION | Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required. | 33-95 mg/L | 2010-01-11 | <p>This test is available exclusively to SJHC/LHSC physicians.</p> <p>Total complement is assayed first to determine if the components evaluation is necessary. Only if the total complement is less than the lower limit of normal will the complement component be processed. Otherwise the component(s) is cancelled with the Comment: "Test not indicated."</p> <p>Also included in group test CCOMPG (includes, C1qrs, C5, C6, C7, C8, C9).</p> <p>Total complement (TCOM, CH50) is a screen for cla (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------|---|---------------|--|----------------|----------|
| C9L (see <u>C9, Serum</u>) | | | | | | |
| C14 Breath test (see <u>H. Pylori Breath Test</u> test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener) | | | | | | |
| CA 153 (see <u>CA15-3, Serum</u>) | | | | | | |
| CA125, Fluid | Core | Fluid GENERAL LABORATORY REQUISITION | As required | No reference range available for fluid | 2017-11-07 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|------------------------|------------|---|---------------|-----------------|----------------|--|
| CA125, Plasma/Serum | Core | <p>Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p> | As required | ≤ 35 U/mL | 2018-03-06 | <p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Elevations in serum CA125 occur in patients with ovarian carcinoma or adenocarcinoma of the endometrium or fallopian tubes. A rising value may be associated with progression of the disease. CA125 may also increase in pregnancy, breast carcinoma, liver cell carcinoma, bronchial carcinoma, benign ovarian tumours, peritoneal carcinoma, and liver cirrhosis. Mild increases also in renal failure. (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|---------------|--|------------------------------|--|----------------|----------|
| CA15-3 (see <u>CA15-3, Serum</u>) | | | | | | |
| CA15-3, Serum CA 153 CA15-3 CA153 | Endocrinology | Adult: 5 mL Gold top Vacutainer tube Light Green (Li- Heparin) or Lavender (EDTA) top tubes are NOT acceptable GENERAL LABORATORY REQUISITION | Monday - Friday 0800-1600 | ≤30 kU/L | 2020-07-20 | |
| CA153 (see <u>CA15-3, Serum</u>) | | | | | | |
| CA19-9, Fluid | Core | Fluid GENERAL LABORATORY REQUISITION | As required | No reference range available for fluid | 2009-02-12 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-------------------------|------------|---|---------------|-----------------|----------------|---|
| CA19-9, Plasma/Serum | Core | <p>Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p> | As required | ≤ 34 U/mL | 2009-12-01 | Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration. |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|--------------------------|--|---|-----------------|----------------|--|
| CADASIL Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy . | Molecular Diagnostics | Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION | As Required Monday - Friday 0800 - 1600 h | See report | | For more information click on: MOLECULAR DIAGNOSTIC LABORATORY N/A Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy (CADASIL)(PMID:9388 399) is a cause of stroke and vascular dementia. It is a condition of mid- adulthood that can result from mutations in the Notch 3 gene on chromosome 19. These mutations can be identified by direct sequence analysis of the Notch3 coding sequence (PMID:16009764). The CADASIL screen offered in this laboratory involves analysis of the (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------------------|----------------|--|------------------|--|----------------|--|
| Cadmium, Erythrocytes | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): Non Smokers 00.0-56.1 nmol/L Smokers 0.0-87.2 nmol/L Conventional Units: Non Smokers 0.00-6.30 µg/L Smokers 0.00-9.80 µg/L Blood Cadmium reflects average intake over the previous few months. | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---------------|----------------|---|------------------|---|----------------|--|
| Cadmium,Urine | Trace Elements | 24 hour urine collected in an unused 24 hour urine container or random urine TRACE ELEMENTS REQUISITION | Batched analysis | <u>SI Units:</u> Random Urine: 0-13.4 nmol/L Ageµmol/mol creatinineFemale Male0-110-1.590-1.5212-190-0.970-0.9420-290-1.090-0.8330-390-1.320-0.9740-490-1.570-1.0350-590-1.850-1.1860-690-1.830-1.2470-790-1.910-1.34≥800-2.340-1.52 24 Hour Urine: 0-17.8 nmol/d <u>Conventional Units:</u> Random Urine: 0-1.5 µg/L Ageµg/g (more...) | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|----------------------|----------------|--|------------------|--|----------------|--|
| Cadmium, Whole blood | Trace Elements | Reference number 368381- HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): Non Smokers 0-16 years: 0.0-6.3 nmol/L ≥17 years: 0.0-32.0 nmol/L Smokers 0.0-48.1 nmol/L Conventional Units: Non Smokers 0-16 years: 0.00-0.71 µg/L ≥17 years: 0.00-3.60 µg/L Smokers 0.0-5.4 µg/L Blood Cadmium reflects average intake over the previous few months. | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------------------------|--|------------------------------|-----------------|----------------|----------|
| Caffeine, Serum | Toxicology/Special Chemistry | 6 mL Red top Vacutainer tube or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION | Monday - Friday 0800-1600 | 25-80 µmol/L | | |
| Calcidiol (see <u>25-Hydroxy Vitamin D, Serum</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------|--|----------------------------|---|----------------|---|
| Calcitonin, Fine Needle Aspirate Thyrocalcitonin | Endocrinology | Two samples: The first is uncontaminated Plasma-Lyte and serves as a blank. The second is 1 mL of Plasma-Lyte that has been used to rinse the biopsy needle as described below. GENERAL LABORATORY REQUISITION | Monday Friday 0800-1600 | There is no reference interval available for this specimen type. Interpretation should be made based on comparison with the Plasma-Lyte control and cytology results. | 2017-09-18 | <p>The limit of quantitation of the assay is 3 ng/L. If a blank result of > 3 ng/L were to be obtained, a technical investigation would be performed prior to reporting of result.</p> <p>This test is only available at the request of Dr. Stan Van Uum or Dr. Deric Morrison. Any other physicians ordering this test will require biochemist approval from Dr. Angela Rutledge at extension 77626.</p> <p>Once the samples are received by the Core Laboratory, they will be aliquoted and centrifuged and the supernatants will be frozen as soon as possible.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------|--|----------------------------|--|----------------|----------|
| Calcitonin, Serum Thyrocalcitonin | Endocrinology | <p>Adult: 5 mL Gold top Vacutainer tube</p> <p>Pediatric: 0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Light Green (Li- Heparin) or Lavender (EDTA) top tubes are NOT acceptable GENERAL LABORATORY REQUISITION</p> | Monday Friday 0800-1600 | Males: ≤ 12 ng/L Females: ≤ 5 ng/L | 2017-09-18 | |
| Calcitriol (see <u>1,25-Dihydroxy Vitamin D, Serum/Plasma</u>) | | | | | | |
| Calcium, 24-Hour Urine | Core | 24 Hour urine GENERAL LABORATORY REQUISITION | As required | 2.5-7.5 mmol/d | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------------------|----------------|--|------------------|---|----------------|--|
| Calcium, Erythrocytes | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 0.33-0.64 mmol/L Conventional Units: 13.2-25.7 mg/L | 2010-01-14 | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|----------------|--|------------------|---|----------------|--|
| Calcium, Urine: Random and 24 hour collection (tested by Trace Elements Lab) | Trace Elements | 24-Hour Urine Sample or random urine TRACE ELEMENTS REQUISITION | Batched analysis | <u>SI Units:</u> Random Urine: 1.7-5.0 mmol/L Agemmol/mol creatinineFemale Male0-11189-594189-56712-19121-362117-35120-29137-409104-31230-39165-494122-36440-49196-587128-38450-59231-693147-44260-69228-684154-46270-79238-713167-499≥80292-875189-567 24 Hour Urine: 2.5-7.5 mmol/d <u>Conventional Units:</u> Random Urine: 67-200 mg/L (more...) | 2010-01-14 | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|----------------|--|------------------|---|----------------|--|
| Calcium, Whole Blood (tested in Trace Elements) | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 1.43-1.95 mmol/L Conventional Units: 57.5-78.0 mg/L | 2014-11-17 | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |
| Calcium,Urine | Core | Random Urine GENERAL LABORATORY REQUISITION | As required | | 2008-11-16 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------|--|---------------|------------------|----------------|----------|
| Calcium-Ionized, Whole blood Ionized Calcium | Core | 4.5 mL Green (Lithium Heparin) top Vacutainer tube or Electrolyte-balanced heparin in blood gas syringes Dark Green (Sodium Heparin) top Vacutainer tube is also acceptable. GENERAL LABORATORY REQUISITION | As required | 1.09-1.30 mmol/L | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------------------|------------------------------|--|------------------------------|--|----------------|---|
| Calcium-Total,Plasma | Core | <p>4.5 mL Light Green top Vacutainer tube</p> <p>Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable.</p> <p>Pediatric: 0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION</p> | As required | <p>0-10 days: 1.89-2.59 mmol/L</p> <p>11 days-2 years: 2.24-2.74 mmol/L</p> <p>2 years-Adult: 2.20-2.55 mmol/L</p> | 2008-11-15 | <p>If Gadolinium-containing contrast media for MRI has been administered wait 48 hours before blood collection.</p> <p>Calcium:<1.5 or >3.3 mmol/L (Report Albumin, if available) About 45% of calcium is albumin bound. Depressed albumin levels are the most common cause of low total calcium values. Suggested approximate correction factor: add 0.25 mmol/L to calcium value for each 10 g/L that albumin falls below 40 g/L.</p> |
| Calculi, Renal Stones | Toxicology/Special Chemistry | <p>Calculi or Fragments GENERAL LABORATORY REQUISITION.</p> | Monday - Friday 0800-1600 | See report | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|--------------|---|--------------------------------|---|----------------|----------|
| Calprotectin, Stool Fecal Calprotectin | Core | 10 mL - 50 mL stool - collected in screw capped clean container GENERAL LABORATORY REQUISITION | Referred out Monday - Thursday | Adult: 18 years and over: Normal <50 mg/kg Pediatric: 1 month - <6 months: Normal <538 mg/kg 6 months - <3 years: Normal <214 mg/kg 3 years - <4 years: Normal <75 mg/kg 4 years - 17 years: Normal <50 mg/kg | 2016-06-27 | |
| Candida (see <u>Fungus Culture-Systemic or Subcutaneous</u>) | | | | | | |
| Cannabinoids (see <u>Cannabinoids Screen,Urine</u>) | | | | | | |
| Cannabinoids Screen,Urine Cannabinoids | Core UH & VH | Random Urine GENERAL LABORATORY REQUISITION | As required | Negative | 2008-11-15 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|--------------|---|--|-----------------|----------------|---|
| Carbamazepine, Serum/Plasma-Total Anticonvulsant Tegretol | Core | 4.5 mL Green (Lithium Heparin) top Vacutainer tube Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable. Pediatric: 0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION | As required Other times by prior arrangement. | 17 - 51 µmol/L | 2009-09-14 | CRITICAL VALUE to be phoned to Nurse or Physician immediately Toxic: >64 µmol/L |
| Carbapenemase Producing Enterobacteriaceae Screen CPE Screen | Microbiology | Rectal Swab Feces MICROBIOLOGY REQUISITION | Daily Specimens received after 2 pm will not be processed until the next day | | 2019-02-20 | |
| Carbon Monoxide (see <u>Co oximetry</u>) | | | | | | |
| Carboxyhemoglobin (see <u>Co oximetry</u>) | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|----------------------|--|---------------|---|----------------|----------|
| Carcinoembryonic Antigen (see <u>CEA, Fluid, CEA, Plasma/Serum</u>) | | | | | | |
| Carnitine (Free) - Quantitative, Urine | Biochemical Genetics | Random Urine BIOCHEMICAL GENETICS LAB REQUISITION | As required | 0-500 umol/g creatinine | 2010-11-26 | |
| Carnitine (Free) and Acyl Carnitine - Quantitative, Plasma | Biochemical Genetics | 6 mL Green (Sodium or Lithium Heparinized) top Vacutainer tube Pediatric: 0-2 yrs: 2 x 0.5 mL Green top 2-10 yrs: 3 mL Green top BIOCHEMICAL GENETICS LAB REQUISITION | As required | Acylcarnitine: <1 month: 5-15 µmol/L >1 month: 5-20 µmol/L Free Carnitine: <1 month: 10-30 µmol/L >1 month: 20-53 µmol/L | 2010-11-26 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|----------------------------------|---------------------|--|---------------|--|----------------|----------|
| Carotene, Serum Beta Carotene | Core (all campuses) | 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION | As required | 6 to 11 years: 0.08 to 0.9 umol/L 12 to 19 years: 0.05 to 0.7 umol/L 20 to 39 years: 0.05 to 1.1 umol/L 40 to 59 years: 0.05 to 1.5 umol/L ≥60 years: 0.05 to 1.9 umol/L | | |

Cat Scratch Disease (see [Bartonella Serology](#))

| |
|--|
| |
|--|

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|------------------------------|--|----------------|--|
| Catecholamines, Plasma (Norepinephrine, Epinephrine) Epinephrine Norepinephrine Adrenaline Noradrenaline | Core | 4 mL Lavender top Vacutainer tube GENERAL LABORATORY REQUISITION | Referred out Monday-Thursday | Norepinephrine: Normotensive Adult, Supine: 0.8 - 3.4 nmol/L Epinephrine: Normotensive Adult, Supine: < or = 0.8 nmol/L | 2009-11-25 | Contact: Endocrinology Laboratory x 77676 Either steadily or paroxysmally elevated in pheochromocytoma. Antihypertensive medication should be discontinued at least 24 hrs before collection. Vasodilating drugs increase plasma catecholamine levels and some beta blockers cause analytical interference. When feasible, these agents should be withdrawn for 48 hours prior to sampling. This test is highly sensitive for diagnosis of pheochromocytoma during periods of hypertension. Circulating Norepinephrine and Dopamine are (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|---------------------------------|--|----------------|----------|
| Catecholamines, Urine Epinephrine Norepinephrine Dopamine Adrenalin Noradrenalin | Core | 24-hour urine GENERAL LABORATORY REQUISITION | Referred out Monday - Friday | <p>Epinephrine (nmol/day):</p> <p><1 year: 0-14 1-<2 years: 0-19 2-<4 years: 0-33 4-<10 years: 1-55 10-<16 years: 3-109 ≥16 years: 0-120</p> <p>Norepinephrine (nmol/day):</p> <p><1 year: 0-59 1-<2 years: 6-100 2-<4 years: 24-171 4-<7 years: 47-266 7-<10 years: 77-384 ≥10 years: 66-660</p> <p>Dopamine (nmol/day): (more...)</p> | 2017-07-04 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|---------------------|--|---|--|----------------|----------|
| Catheter Tip Culture (see <u>Vascular Tip Culture</u>) | | | | | | |
| CBC (see <u>Complete Blood Count</u>) | | | | | | |
| CCOMPG (see <u>Complement Components</u>) | | | | | | |
| CD34-Stem cells/Progenitor cells | Flow Cytometry (VH) | Mobilized peripheral blood, apheresis product from stem cell mobilized patient GENERAL LABORATORY REQUISITION | Monday-Friday 0800-1600 Fridays or prior to STAT holidays, routine specimens must be received in the Flow Cytometry Laboratory at Victoria Hospital by 1300. | N/A | 2006-06-01 | |
| CDIFT (see <u>Clostridioides (Clostridium) difficile toxin</u>) | | | | | | |
| CEA, Fluid Carcinoembryonic Antigen | Core | Fluid GENERAL LABORATORY REQUISITION | As required | No reference range available for fluid | 2018-03-06 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------|---|---------------|---|----------------|---|
| CEA, Plasma/Serum Carcinoembryonic Antigen | Core | <p>Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p> | As required | <p>20 - 40 years: non-smokers (past/never smokers): ≤ 3.8 g/L smokers (current): ≤ 5.5 g/L all subjects: ≤ 4.7 g/L</p> <p>40 - 69 years: non-smokers (past/never smokers): ≤ 5.0 g/L smokers (current): ≤ 6.5 g/L all subjects: ≤ 5.2 g/L</p> | 2009-12-01 | <p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Useful in monitoring patients with colorectal, bronchogenic, and breast carcinoma. Not recommended for cancer screening in the general population.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|---------------|---|----------------|----------|
| Cell Count and Differential, Fluid (other than CSF) Body Fluid Analysis (other than CSF) | Core | Eligible fluids types include: synovial, pericardial, pleural, peritoneal tap, peritoneal dialysate, peritoneal lavage GENERAL LABORATORY REQUISITION | As required | Total Nucleated Cell Count: Red Cell Count: Appearance: TNC X 109/L RBC X 1012/L Appearance Synovial Normal: ≤ 0.2 NA Normal: Group I: ≤ 3.0 yellow, Group II: 3.0-75 clear or Group IV: 0.5-200 slightly Group V: 0.05-10 cloudy Pleural Normal: < 1.0 NA Normal: (more...) | 2006-12-27 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|---------------|--|----------------|----------|
| Cell Count and Differential,CSF CSF Analysis | Core | Cerebrospinal Fluid GENERAL LABORATORY REQUISITION | As required | Cell Counts: TNC x 106/L RBC x 106/L < 1 year 0-30 few 1-5 years 0-20 few 6-16 years 0-10 few Adult 0-5 few Differential: Neonate(%) Adult(%) Lymphocytes 2-38 63-99 Monocytes 50-94 3-37 Neutrophils 0-8 0-2 | 2006-12-27 | |
| Cell Storage (see <u>Cells for Dispatch</u>) | | | | | | |
| Cellcept (see <u>Mycophenolic Acid</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|--------------------------|--|--------------------|-------------------------|-------------------|--|
| <p>Cells for Dispatch Cell Storage Cells for DNA Isolation/Banking Cells for Metabolic Studies</p> | <p>Cytogenetics (VH)</p> | <p><u>Amniotic Fluid:</u> 15 mL-20 mL of amniotic fluid in two sterile containers (see Comments).</p> <p><u>CVS:</u> At least 20-25 mg chorionic villi collected in a sterile container, containing Hank's balanced salt solution (HBSS) (see Comments).</p> <p><u>Skin and POCs:</u> Skin (0.5-1cm²), amnion (0.1-5cm²), cord (1cm³), or chorionic villi. Ship in a sterile container, containing Hank's (more...)</p> | <p>As required</p> | <p>See final report</p> | <p>2011-05-11</p> | <p>Contact the Cytogenetics Lab for aliquots of Hanks balanced salt solution for skin and POC samples.</p> <p>The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab).</p> <p>For additional information please refer to the Molecular Diagnostics website See final report N/A As products of conception are prone to microbial contamination, collect sample as aseptically as possible and send to the laboratory within 24 hours. Turnaround times are dependent on the success of cul (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|---------------|--|----------------|--|
| Cells for DNA Isolation/Banking (see <u>Cells for Dispatch</u>) | | | | | | |
| Cells for Metabolic Studies (see <u>Cells for Dispatch</u>) | | | | | | |
| Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy. (see <u>CADASIL</u>) | | | | | | |
| Ceruloplasmin, Plasma | Core | <p>Adult: 4.5 mL Green (Lithium Heparin) top Vacutainer</p> <p>Serum from a 5 mL Gold top or 6 mL Red top is also acceptable.</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>GENERAL LABORATORY REQUISITION</p> | Daily | 0.16-0.45 g/L Female 0.15-0.30 g/L Male | 2010-01-11 | <p>Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes.</p> <p>Approximately 95% of patients with Wilsons Disease have decreased levels. Low levels may also be found in nephrotic syndrome, liver disease and malabsorption. Increased in acute phase reaction, pregnancy and with oral contraceptives</p> |
| CESD (Cholesterol Ester Storage Disease) (see <u>Acid Lipase</u>) | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|-----------------------|---|------------------------------|----------------------------|----------------|--------------------------------|
| CF (see <u>Cystic Fibrosis</u>) | | | | | | |
| CF8 (see <u>Chromogenic factor VIII assay</u>) | | | | | | |
| CH50 (see <u>Complement Total, Serum</u>) | | | | | | |
| Charcot Marie Tooth Disease CMT Charcot Marie Tooth Neuropathy | Molecular Diagnostics | Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION | Monday-Friday 0800-1600 h | See report | 2010-06-16 | For more information click on: |
| For more information click on: | | | | | | |
| For more information click on: | | | | | | |
| | | BIOCHEMICAL GENETICS LAB REQUISITION | As required | 6-121 nmol/hr/mL plasma | 2008-06-10 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-------------------|-------------------|--|---|-----------------|----------------|----------|
| Chlamydia Culture | Microbiology (VH) | Conjunctiva* Fluids or Aspirates (epididymal, fallopian, prostatic, seminal, synovial) Genital* (cervix, urethra) - vaginal samples are only acceptable in cases of children, sexual assault or abuse. Rectal* Respiratory (throat swabs, bronchial wash, nasopharyngeal swab*/transtrachial aspirate (newborns) Tissue (endometrial or tubal biopsy, surgic (more...)) | Referred weekdays to Public Health Laboratory | | 2006-07-01 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-------------------|--|---|-----------------|----------------|--|
| Chlamydia Nucleic Acid Amplification Test | Microbiology (VH) | -Cervix or Urethra Swab -Urine PUBLIC HEALTH LABORATORY TEST REQUISITION | Referred weekdays to Public Health Laboratory | | 2010-09-13 | <p>Faulty collection and delays in transport of specimen are the primary causes of test failure.</p> <p>Paediatric and medical-legal assault cases and test of cure situations must be investigated by culture technique.</p> <p>However, nucleic acid amplification tests (NAATs) may be acceptable if positive results are confirmed by a second set of primers. If available, both tests (culture and NAAT) should be taken. Molecular diagnostic tests, especially NAATs are more sensitive than culture. Genprobe Aptima® Assay confirmatory testing is available for both Chlamydia tra (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| Chloride (see <u>Electrolytes,Plasma</u>) | | | | | | |
| Chloride (fluid) (see <u>Electrolytes,Fluid</u>) | | | | | | |
| Chloride (urine) (see <u>Electrolytes,Urine</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-------------------------|------------|---|---------------|-----------------|----------------|--|
| Chloride, 24-Hour Urine | Core | 24 Hour Urine GENERAL LABORATORY REQUISITION | As required | 170-250 mmol/d | | <p>High urine values of other halide ions (e.g. bromide, fluoride and iodide) may lead to falsely high readings on the chloride ion-selective electrode.</p> <p>Useful in diagnosing disorders of acid-base and water balance.</p> <p>Monitoring compliance with a low salt diet. Urine chloride excretion approximates the dietary intake.</p> <p>An increase in urine chloride may result from water deficient dehydration, diabetic acidosis, Addison's disease and salt-losing renal disease.</p> <p>Decreased urine levels are seen in congestive heart failure, severe diaphoresis a (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|---------------|--|---------------|---|----------------|----------|
| Chloride, Sweat Sweat Chloride | Endocrinology | See Collection Information. | | <30 mmol/L - (negative) Cystic Fibrosis is unlikely 30-59 mmol/L - (indeterminate) Cystic Fibrosis is possible ≥60 mmol/L - (positive) Diagnostic of Cystic Fibrosis | 2008-11-15 | |
| Chloride,Fluid | Core | 5 mL Fluid GENERAL LABORATORY REQUISITION | As required | See Report | 2010-05-17 | |
| Chloride,Urine | Core | Random Urine GENERAL LABORATORY REQUISITION | As required | 100-200 mmol/L | | |
| Cholesterol, Triglyceride, HDL, LDL (see Lipid Profile) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|--------------|--|---------------|---|----------------|----------|
| Cholesterol-HDL,Plasma High Density Lipoprotein Cholesterol | Core UH & VH | 4.5 mL Green (Lithium Heparin) top Vacutainer tube Pediatric: 0-2 yrs: 0.5 mL Green pk. 2-10 yrs: 3 mL Green top GENERAL LABORATORY REQUISITION | As required | * See interpretation of lipid profile. | 2008-11-15 | |
| Cholesterol-LDL (see Cholesterol-LDL,Plasma) | | | | | | |
| Cholesterol-LDL,Plasma Low Density Lipoprotein Cholesterol Cholesterol-LDL LDL | Core UH & VH | 4.5 mL Green (Lithium Heparin) top Vacutainer Pediatric: 0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION | As required | * Target levels are dependent on 10 year risk of developing coronary artery disease. See interpretation of lipid profile. | 2008-11-15 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|------------------------------|------------|--|---------------|------------------------------|----------------|----------|
| Cholesterol- Total,Plasma | Core | 4.5 mL Green (Lithium Heparin) top Vacutainer Pediatric: 0-2 years: 0.5 mL Green pk. 2-10 years: 3 mL Green top GENERAL LABORATORY REQUISITION | As required | See Interpretive comments | 2008-11-15 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------|---|------------------------------|---------------------|----------------|--|
| Cholinesterase Phenotype (includes Cholinesterase, Total Activity) CHOLINP Pseudo-cholinesterase Dibucaine Number | Core | 6 mL Red top Vacutainer tube or 5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION | Referred out Monday-Thursday | Total: 620-1370 U/L | 2010-01-11 | To investigate prolonged apnaea following suxamethonium administration during surgery. To screen patients at risk of suxamethonium sensitivity (eg. first degree relatives of a known atypical phenotype). To investigate acute or chronic occupational exposure to organophosphates. Interpretation is provided with the laboratory report |
| CHOLINP (see <u>Cholinesterase Phenotype (includes Cholinesterase, Total Activity)</u>) | | | | | | |
| Chondrodysplasia Punctata (X-Linked Recessive) (see <u>Aryl Sulfatase E, Fibroblasts</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|---------------|---|----------------|--|
| Chorionic Gonadotropin (Quantitative), Plasma/Serum hCG Beta hCG | Core | <p>Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION</p> | As required | <p>Adult male: < 2 IU/L</p> <p>Non-pregnant pre-menopausal female: < 5 IU/L</p> <p>Post-menopausal female: ≤ 7 IU/L</p> | 2009-06-04 | <p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Assay detects intact hCG, nicked forms of hCG, the beta-core fragment, and the free beta-subunit of hCG.</p> <p>May be used for the early detection and monitoring of pregnancy or as a tumour marker for ovarian, placental, testicular, or other tumours.</p> |
| Chorionic Gonadotropin, Fluid hCG Beta hCG | Core | Fluid GENERAL LABORATORY REQUISITION | As required | No reference range available for fluid | 2018-07-10 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|--------------------------|--|--------------------|-------------------------|----------------|--|
| <p>Chorionic Villi Sampling (CVS) Chromosome Analysis QF-PCR Prenatal Microarray</p> | <p>Cytogenetics (VH)</p> | <p>~10-20 mg chorionic villi in a sterile container with RPMI media for QF-PCR, Microarray (if required) and back-up culture (additional sample required for external testing)</p> <p>3ml EDTA Maternal Blood Sample CYTOGENETICS REQUISITION (must include patient's name, address, Ontario Health Insurance Number, PIN (if applicable), originating location, Dr's full na (more...))</p> | <p>As required</p> | <p>See final report</p> | | <p>Contact the Cytogenetics Lab for aliquots of RPMI medium.</p> <p>The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab).</p> <p>For additional information please refer to the Cytogenetics Webpage. See final report Prenatal diagnostic test performed at ~9-12 weeks gestation Must prearrange with Cytogenetics Lab.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---------------------------|----------------|--|------------------|--|----------------|--|
| Chromium, Erythrocytes | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 0.8-12.3 nmol/L Conventional Units: 0.04-0.64 µg/L | 2010-01-14 | Reference Ranges are based on Non- Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------------|----------------|--|------------------|--|----------------|--|
| Chromium,Plasma | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 2.5-6.0 nmol/L Conventional Units: 0.13-0.31 µg/L Concentration of Chromium is much higher in erythrocytes than in plasma or serum. The results of these elements in plasma or serum may be falsely elevated if not separated within 30 minutes and/or hemolysis is present. | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| |
|--|
| |
|--|

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|----------------|----------------|--|------------------|--|----------------|--|
| Chromium,Serum | Trace Elements | Reference number 368380 - HMMS# 260 - 6 mL Non Additive Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 1.9-3.8 nmol/L Conventional Units: 0.10-0.20 µg/L Concentration of Chromium is much higher in erythrocytes than in plasma or serum. The results of these elements in plasma or serum may be falsely elevated if not separated within 30 minutes and/or hemolysis is present. | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| |
|--|
| |
|--|

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|----------------|----------------|---|------------------|---|----------------|--|
| Chromium,Urine | Trace Elements | 24 hour urine collected in new 24 hour urine container or random urine TRACE ELEMENTS REQUISITION | Batched analysis | <u>SI Units:</u> Random Urine: 1.7-10.0 nmol/L Ageµmol/mol creatinineFemale Male0-110.20-1.190.20-1.1412-190.13-0.720.12-0.7020-290.14-0.820.11-0.6230-390.17-0.990.13-0.7340-490.20-1.180.13-0.7750-590.24-1.390.15-0.8860-690.24-1.370.16-0.9370-790.25-1.430.17-1.00≥800.30-1.750.20-1.14 24 Hour Urine: 3.8-15.4 nmol/d <u>Conventional Units:</u> Random Urine: 0.09-0.52 µg/L Ageµg/g (more...) | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------------------|----------------|--|------------------|--|----------------|--|
| Chromium, Whole Blood | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 2.3-7.7 nmol/L Conventional Units: 0.12-0.40 µg/L | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--------------------------------------|--|---|--------------------------|--|----------------|---|
| Chromogenic factor VIII assay CF8 | Hemostasis and Thrombosis Laboratory (Victoria Hospital) | <p>2 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes</p> <p>Pediatric: 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: Contact HAT lab ext. 52526 for number of tubes required prior to sampling GENERAL LABORATORY REQUISITION</p> | Routine/Stat as required | <p>0 Min - 5 Days: 0.50-1.78 U/mL</p> <p>5 Days - 1 Month: 0.50-1.54 U/mL</p> <p>1 Month - 3 Months: 0.50-1.57 U/mL</p> <p>3 Months - 6 Months: 0.50-1.25 U/mL</p> <p>6 Months - Adult: 0.50-2.00 U/mL</p> | 2013-02-01 | <p>Please direct any questions or concerns to: Hematology Scientist 519-685-8500 x 55402 Pager 17716</p> <p>All test requests, regardless of whether the patient is an adult or pediatric, must be authorized by a Hematologist. Contact by Paging Adult or Pediatric Hematologist on call through the switchboard.</p> <p><u>It is the responsibility of the Hematologist or Pediatrician to communicate their decision to the HATLAB.</u></p> <p>Blue (Sodium Citrate) top tubes sho (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|------------------------|---------------|---|------------------------------|-----------------|----------------|---|
| Chromogranin A, Plasma | Endocrinology | <p>Adult: 4 mL Lavender top (EDTA) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Lavender top (EDTA) Microtainer 2-10 years: 2 mL Lavender top (EDTA) Vacutainer tube</p> <p>Red, Gold, or Light Green (Li-heparin) top tubes are NOT acceptable. GENERAL LABORATORY REQUISITION</p> | Monday - Friday 0800-1600 | ≤ 76 ng/mL | 2018-08-20 | Chromogranin A levels may be elevated in patients treated with proton pump inhibitors. Patients should refrain from taking proton pump inhibitors for at least one week prior to sample collection. |

Chromosome Analysis (see Amniotic Fluid, Chorionic Villi Sampling (CVS), Products of Conception, Skin / Fetal Tissue)

| |
|--|
| |
|--|

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-------------------|---|---------------|------------------|----------------|--|
| Chromosome Analysis, Blood Chromosomes Karyotype Banding G-Banding Prophase Banding High Resolution Banding | Cytogenetics (VH) | <p>3-6 mL peripheral venous blood in a sterile, sodium heparin Vacutainer. If <3 mL is collected, it must be in a 3 mL Vacutainer to allow for appropriate sample to anticoagulant ratio.</p> <p>Newborn babies: 1-2 mL of blood aseptically collected into blood chromosome media (see comments).</p> <p>Cord Blood: May be collected in either (more...)</p> | As required | See final report | | <p>Solution for Specimen Collection: Contact the Cytogenetics Laboratory in advance for sterile aliquots of blood chromosome media for collection of babys blood. This media may be frozen, and thawed at room temperature (15-25C) as needed. Media must be used by the expiry date written on the tube.</p> <p>The Cytogenetics Laboratory is staffed from 0700-1700 (Monday-Friday), Ext. 78974, or 75714 (lab).</p> <p>For additional information please refer to the Molecular Diagnostics Laboratory. See final report See requisition for common clinical indicators. (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-------------------|--|---------------|------------------|----------------|--|
| Chromosome Analysis, Bone Marrow/Blood Oncology Studies Chromosomes Karyotype Banding G-Banding | Cytogenetics (VH) | <p>1-2 mL of bone marrow in a 3 mL Sodium Heparin Vacutainer (see Collection Information) Note: Bone Marrow is the preferred sample for chromosome studies</p> <p>or</p> <p>3-6 mL peripheral venous blood in a sterile, Sodium Heparin Vacutainer. If <3 mL is collected, it must be in a 3 mL Vacutainer to allow for appropriate sample to antico (more...)</p> | As required | See final report | | <p>The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab).</p> <p>For additional information please refer to the Molecular Diagnostics Laboratory. See final report Useful in diagnosing various types of leukemias and for other malignancies. Used to monitor bone marrow transplants. Culture success is dependent on receipt of the sample immediately.</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------|---------------|---------------|-----------------|----------------|----------|
| Chromosome Analysis, Breakage Study, Ataxia Telangiectasia (see <u>Ataxia Telangiectasia, Breakage Study</u>) | | | | | | |
| Chromosome Analysis, Breakage Study, Fanconi Anemia (see <u>Fanconi Anemia, Breakage Study</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|-------------------|---|---------------|------------------|----------------|---|
| Chromosome Analysis, Lymph Node/Tumor Chromosomes Karyotype Banding G-Banding Lymphoma | Cytogenetics (VH) | 2-3 mm2 Lymph Node or Tumor Biopsy in RPMI (see Collection Information and Comments) CYTOGENETICS REQUISITION must include patient's name, address, Ontario Health Insurance Number, PIN (if applicable), originating location, Dr's full name and address, test requested, specimen type and pertinent clinical information. | As required | See final report | | <p><u>Solution for Specimen Collection:</u></p> <p>Contact the Cytogenetics Laboratory in advance for sterile aliquots of RPMI media for lymphomas/tumors for collection. This media may be frozen, and thawed at room temperature (15-25C) as needed. Media must be used by the expiry date written on the tube.</p> <p>The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab).</p> <p>For additional information please refer to the Molecular Diagnostics Laboratory. See final report</p> <p>Collect sampl (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|----------------|---|---|---|----------------|----------|
| Chromosomes (see <u>Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor</u>) | | | | | | |
| Chronic Granulomatous Screening Investigation Neutrophil Oxidative Burst Index (NOBI) | Flow Cytometry | 4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube Pediatric: 0-2 years: 0.5 mL Lavender pk. 2-10 years: 3 mL Lavender top Referred-In Samples: FLOW CYTOMETRY REQUISITION | <u>Monday to Thursday only</u> 0800-1300 Do not send samples on Fridays. Prior to STAT holidays, routine specimens must be received in the Flow Cytometry Laboratory at Victoria Hospital by 1300. | Neutrophils demonstrate normal oxidative burst following stimulation by PMA, not suggestive of a diagnosis of CGD | 2009-10-23 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-------------------|--|---------------|------------------|----------------|--|
| Chronic Myelogenous Leukemia, by Karyotype/FISH CML BCR/ABL Philadelphia Chromosome | Cytogenetics (VH) | 1-2 mL of bone marrow in a 3 mL Sodium Heparin Vacutainer (see Collection Information) or 3-6 mL peripheral venous blood in a sterile, Sodium Heparin Vacutainer. If <3 mL is collected, it must be in a 3 mL Vacutainer to allow for appropriate sample to anticoagulant ratio. Peripheral blood samples require >10% blasts for chromosome study. CYTO (more...) | As required | See final report | 2010-01-13 | The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab). For additional information please refer to the Cytogenetics Web Page @ http://www.lhsc.on.ca/lab/cytogen/ See final report CML is diagnosed by detecting the Philadelphia chromosome. This characteristic chromosomal abnormality can be detected by routine cytogenetics, by <u>Fluorescent In Situ Hybridization (FISH)</u> (Cytogenetics Lab) or by PCR (Molecular Diagnostics Lab). Controversy e (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|--------------------------|--|---|-----------------|----------------|--|
| Chronic Myelogenous Leukemia, by PCR CML BCR/ABL Philadelphia Chromosome | Molecular Diagnostics | Bone marrow or 2 x 4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube MOLECULAR DIAGNOSTICS REQUISITION | As Required Monday - Friday 0800 - 1630 h | See report | 2010-01-13 | <p>Retesting of samples received less than 3 months after initial testing need to be approved by the Laboratory Director.</p> <p>For more information click on: Molecular Diagnostic Laboratory. N/A Chronic myelogenous leukemia is invariably associated with a cytogenetic abnormality involving a reciprocal translocation of chromosomes 9 and 22, in which the downstream portion of the abl proto oncogene on chromosome 9 is brought into close proximity to the upstream portion of the bcr gene on chromosome 22. It is possible to detect this translocation (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| CIC (see <u>Immune Complexes</u>) | | | | | | |
| Circulating immune complexes (see <u>Immune Complexes</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--------------------------------|----------------|---|----------------------------|---------------------------|----------------|---|
| Circulating Tumor Cells CTC | Flow Cytometry | Venous Whole Blood For further information and/or to enquire about ordering CTC tests, please contact: Dr. Alison Allan Tel: (519) 685-8600 x55134 Email: alison.allan@lhsc.on.ca | Monday-Friday 0800-1600 | See Interpretive Comments | 2014-09-08 | <p>After sample processing ferrofluid aggregation and/or non-ferrofluid aggregation may be seen in the sample tube. According to manufacturers recommendations sample is therefore unsatisfactory for processing. Sample must be redrawn.</p> <p>Our ISO-15189 accredited laboratory offers circulating tumor cell (CTC) analysis using the FDA- and Health Canada- approved CellSearch System (Menarini Silicon Biosystems, Inc).</p> <p>The CellSearch is intended for clinical use in the enumer (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|------------------------|------------|--|------------------------------|--|----------------|----------|
| Citrate, 24-Hour Urine | Core | 24-hour urine Collect urine with no preservative - acidified specimens are also acceptable. GENERAL LABORATORY REQUISITION | Referred out Monday-Thursday | 20-21 years: 0.78-6.20 mmol/day 21-22 years: 0.82-6.20 mmol/day 22-23 years: 0.85-6.20 mmol/day 23-24 years: 0.89-6.20 mmol/day 24-25 years: 0.93-6.20 mmol/day 25-26 years: 0.97-6.20 mmol/day 26-27 years: 1.00-6.20 mmol/day 27-28 years: 1.04-6.20 mmol/day 28-29 years: 1.08-6.20 mmol/day 29-30 years: 1.11-6.20 mmol/day (more...) | 2008-11-15 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|------------------------------|-------------------------------|----------------|----------|
| Citrate, Random Urine | Core | Random urine (24-hour urine is the preferred sample type; see Lab Test Information Guide entry for Citrate, 24-Hour Urine) GENERAL LABORATORY REQUISITION | Referred out Monday-Thursday | ≥ 0.1036 mmol/mmol creatinine | 2017-12-11 | |
| CJD Protein Assay (see <u>Creutzfeldt-Jakob Disease (CJD) Protein Assay</u>) | | | | | | |
| CK Total (see <u>Creatine Kinase - CK,Plasma</u>) | | | | | | |
| CLN2 Peptidase (see <u>Tripeptidyl Peptidase 1, Dried Blood Spot/Fibroblast</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|------------------------------------|------------------------------|--|---------------|---|----------------|----------|
| Clobazam/Desmethyl clobazam, Serum | Toxicology/Special Chemistry | 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION | Once a week | <p>Clobazam:</p> <p>No therapeutic range has been established, however levels of: 0.15-1.00 µmol/L</p> <p>Desmethyl Clobazam: 2.8-14.0 µmol/L</p> <p>have been suggested.</p> | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------------------------|--|------------------------------|--|----------------|---|
| Clomipramine and Desmethylclomipramine, Serum/Plasma Desmethylclomipramine (metabolite) Anafranil | Core | 2 x 6 mL Red top Vacutainer or 2 x 4 mL Lavender top EDTA Vacutainer tube GENERAL LABORATORY REQUISITION | Referred out Monday-Thursday | No reference range for Clomipramine <u>OR</u> Desmethylclomipramine alone. Combined Metabolites Clomipramine + Desmethylclomipramine Adult Therapeutic Ranges: 580-1500 nmol/L | 2005-07-01 | Testing is also possible on urine and Gastric lavage samples. Toxic: >2000 nmol/L To monitor therapy, draw trough level specimen in TBEP-free tubes prior to morning dose or 10 - 12 h after last drug administration. Separate as soon as possible. Assay includes Desmethylclomipramine. |
| Clonazepam, Urine Qualitative | Toxicology/Special Chemistry | Urine GENERAL LABORATORY REQUISITION | Monday-Friday 0800-1600 | See report | 2015-09-10 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-------------------------------|------------------------------|--|---------------|-----------------|----------------|----------|
| Clonazepam, Serum Rivotril | Toxicology/Special Chemistry | 2 x 6 mL Red top Vacutainer tube or 2 x 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION | Once a week | 20-180 nmol/L | 2009-06-10 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|--------------------------|--|---|-----------------|-------------------|--|
| <p>Clostridioides (Clostridium) difficile toxin C. difficile CDIFT</p> | <p>Microbiology (VH)</p> | <p>Faeces MICROBIOLOGY REQUISITION</p> | <p>Batched and performed twice daily.</p> | | <p>2008-02-08</p> | <p>Children may carry C. difficile asymptotically. Presence of this toxin may not be diagnostic of infection.</p> <p>Only one sample will be processed per patient within a 7 day period.</p> <p>Specimens previously positive will not be repeated for at least 14 days.</p> <p>Samples are processed by a PCR screening technique (toxin gene). If results are positive, they will be tested by an enzyme immunoassay (toxin protein).</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-------------------------------------|------------------------------|--|---------------|--|----------------|---|
| Clozapine, Serum/Plasma Clozaril | Toxicology/Special Chemistry | 4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube GENERAL LABORATORY REQUISITION | Routine | Minimum effective concentration is 1070 nmol/L | 2009-06-04 | Alert value is 3100 nmol/L Norclozapine, metabolite: not active. |

Clozaril (see Clozapine, Serum/Plasma)

CML (see Chronic Myelogenous Leukemia, by Karyotype/FISH, Chronic Myelogenous Leukemia, by PCR)

CMT (see Charcot Marie Tooth Disease)

CMV IgM/IgG (see Cytomegalovirus Serology)

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------------------|---|--|-----------------|----------------|----------|
| CMV PCR Quantitative Cytomegalovirus Cytomegalovirus PCR (Viral Load) | Virology Laboratory | Please refer to Special Processing below for each Group: Group 1: -Blood: 4 mL Lavender top (EDTA) Vacutainer tube -Urine -BAL -CSF - Vitreous/Aqueo us Fluid Group 2: -Fluid: Amniotic, ascitis, pleural samples sent to Public Health Laboratory for testing -Tissue: samples sent to Public Health Laboratory for testing VIROLOGY LABO (more...) | Samples are tested on Tuesday, Thursday and Friday. STAT requests must be approved by a Medical Microbiologist. | See report | 2009-11-09 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------------|--|---------------|--|----------------|----------|
| Co oximetry Methemoglobin METHB Carboxyhemoglobin COHB Carbon Monoxide COOX | Core (all sites) | Heparinized blood gas syringe or 4.5 mL Green (Lithium Heparin) top vacutainer tube. GENERAL LABORATORY REQUISITION | As required | Whole Blood, AdultAge RangeMale Female Hemoglobin, Hbbirth-1 month150- 250150-2501 month-2 years100- 140100-1402 years-10 years110- 160110-16010 years-18 years125- 160120-15018 years-adult135- 170115-160 Oxygenated Hemoglobin; O2Hb(all)95- 9895-98 CarboxyHemogl obin; COHbNon- smoker, all<1.5<1.5Smok ers all:1-2 packs/day1.5- 5.01.5-5 (more...) | 2016-05-04 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------|------------|---------------|---------------|-----------------|----------------|----------|
|-----------|------------|---------------|---------------|-----------------|----------------|----------|

CO2 (see Electrolytes,Plasma)

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|--|---|--------------------------|---|----------------|--|
| Coagulation Factor Assays Factor Assays (II, V, VII, VIII, IX, X, XI, XII) Factor VIII F8 Factor IX F9 | Hemostasis and Thrombosis Laboratory (Victoria Hospital) | 2 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes Pediatric: 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: Contact HAT lab ext. 52526 for number of tubes required prior to sampling GENERAL LABORATORY REQUISITION | Routine/Stat as required | Factor X 0 Min - 5 Days: 0.13-0.68 U/mL 5 Days - 1 Month: 0.19-0.79 U/mL 1 Month - 3 Months: 0.31-0.87 U/mL 3 Months - 6 Months: 0.35-1.07 U/mL 6 Months - Adult: 0.50-2.00 U/mL Factor XI 0 Min - 5 Days: 0.10-0.66 U/mL 5 Days - 1 Month: 0.23-0.87 U/mL 1 Month - 3 Months: 0.27-0.79 U/mL 3 Months - 6 Months: 0.41-0.97 U/mL (more...) | 2006-06-01 | Please direct any questions or concerns to: Hematology Scientist 519-685-8500 x 55402 Pager 17716 All test requests, regardless of whether the patient is an adult or pediatric, must be authorized by a Hematologist by contacting the adult or pediatric Hematologist on call through switchboard. <u>It is the responsibility of the Hematologist or Pediatrician to communicate their decision to the HATLAB.</u> For newly diagnosed hemophilia patient. Factor VIII or IX level less than 0.10 U/mL (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|--|--|---------------|----------------------|----------------|---|
| Coagulation Factor Inhibitor Assays (Usually VIII and IX) Factor VIII Inhibitor Factor IX Inhibitor | Hemostasis and Thrombosis Laboratory (Victoria Hospital) | 2 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tube Pediatric: 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: Contact HAT lab ext. 52526 for number of tubes required prior to sampling GENERAL LABORATORY REQUISITION | As required | No inhibitor present | 2006-06-01 | Factor assay sample can be used if available. Please direct any questions or concerns to: Hematology Scientist 519-685-8500 x 55402 Pager 17716 All test requests, regardless of whether the patient is an adult or pediatric, must be authorized by a Hematologist by paging the adult or pediatric Hematologist on call through switchboard. <u>It is the responsibility of the Hematologist or Pediatrician to communicate their decision to the HATLAB.</u> (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|----------------|--|------------------|--|----------------|--|
| Cobalamin (see <u>Vitamin B12, Plasma/Serum</u>) | | | | | | |
| Cobalt, Erythrocytes | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 0.3-4.9 nmol/L Conventional Units: 0.02-0.29 µg/L | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |
| Cobalt, Serum | Trace Elements | Reference number 368380 - HMMS# 260 - 6 mL Non Additive Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 0.5-6.8 nmol/L Conventional Units: 0.03-0.40 µg/L | 2007-03-30 | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|----------------|----------------|--|------------------|--|----------------|--|
| Cobalt, Plasma | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 2.4-8.3 nmol/L Conventional Units: 0.14-0.49 µg/L | 2010-01-15 | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--------------|----------------|---|------------------|--|----------------|--|
| Cobalt,Urine | Trace Elements | 24 hour urine collected in new 24 hour urine container or random urine TRACE ELEMENTS REQUISITION | Batched analysis | <u>SI Units:</u> Random Urine: 1.2-14.1 nmol/L Ageµmol/mol creatinineFemale Male0-110.13-1.680.13-1.6012-190.09-1.020.08-0.9920-290.10-1.150.07-0.8830-390.12-1.390.09-1.0340-490.14-1.660.09-1.0850-590.16-1.960.11-1.2560-690.16-1.930.11-1.3070-790.17-2.010.12-1.41≥800.21-2.470.13-1.60 24 Hour Urine: 1.7-21.2 nmol/d <u>Conventional Units:</u> Random Urine: 0.07-0.83 µg/L (more...) | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|----------------------|--|--|---|----------------|--|
| Cobalt, Whole blood | Trace Elements | Reference number 368381- HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 1.9-6.6 nmol/L Conventional Units: 0.11-0.39 µg/L | | Reference Ranges are based on Non- Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |
| Cocaine (see <u>Cocaine Screen, Urine</u>) | | | | | | |
| Cocaine Screen, Urine Cocaine | Core UH & VH | Urine, Random GENERAL LABORATORY REQUISITION | As required | Negative | 2008-11-15 | |
| Coccidioides Culture (see <u>Fungus Culture-Dimorphic</u>) | | | | | | |
| Coccidioidomycosis (Coccidioides immitis), Coccidioides Serology | Microbiology (VH) | Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION | Referred weekdays to Public Health Laboratory | | 2010-09-13 | |
| COHB (see <u>Co oximetry</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-------------------|---|---------------------------|-----------------|----------------|----------|
| Cold Agglutinin Screen Test | Blood Transfusion | 6 mL Pink (EDTA) top Vacutainer tube BLOOD TRANSFUSION REQUISITION or Electronic order | As required Monday-Friday | See report | | |
| Cold Agglutinin Titre & Thermal Amplitude | Blood Transfusion | 6 mL Pink (EDTA) top Vacutainer tube BLOOD TRANSFUSION REQUISITION or Electronic order | As required Monday-Friday | See report | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-----------------------|--|---|-----------------|----------------|--|
| Colon Cancer (Proband) Hereditary Colorectal/Gastric Cancer | Molecular Diagnostics | Whole Blood-3 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION | As Required Monday - Friday 0800 - 1600 h | See report | | Genes Tested (hg19;HGVS nomenclature):APC and5UTR(NM_001127510.2), BMPR1A(NM_004329.2), CDH1(NM_004360.3), CDK4(NM_000075.3), CHEK2(NM_007194.3), CTNNA1(NM_001903.2), EPCAM(NM_002354.2:3' large del only), FLCN(NM_144997.5), GREM1(NM_013372.6), MLH1 and5UTR(NM_000249.3), MSH2(NM_000251.2), MSH3(NM_002439.4), MSH6(NM_000179.2), MUTYH(NM_001128425.1), NTHL1(NM_002528.5), PMS2(NM_000535.5), POLD1(NM_001256849.1), POLE(NM_00 (more...)) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------|------------|---------------|---------------|-----------------|----------------|----------|
|-----------|------------|---------------|---------------|-----------------|----------------|----------|

Combined Cervical/Endocervical Smear (see Gynaecological Conventional Smear for Cytology)

| |
|--|
| |
|--|

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---------------------------|------------|--|---------------|-----------------|----------------|--|
| Complement C3, Plasma C3c | Core | <p>Adult: 4.5 mL Green (Lithium Heparin) top Vacutainer</p> <p>Serum from a 5 mL Gold top or 6 mL Red top is also acceptable.</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>GENERAL LABORATORY REQUISITION</p> | Daily | 0.90-1.80 g/L | 2009-02-27 | <p>C3 is normally run in conjunction with C4. Fresh samples have lower C3c than stored samples as C3 breaks down to C3c. Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes.</p> <p>This test quantitates the amount of C3c in the serum but does not test C3 function. Decreased levels are associated with complement activation of either/both classical and alternative pathway(s), or genetic deficiency. Major clinical manifestations (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------|------------|---------------|---------------|-----------------|----------------|----------|
|-----------|------------|---------------|---------------|-----------------|----------------|----------|

Complement C2 quantitation (see C2, Serum)

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------------------------|------------|--|---------------|-----------------|----------------|--|
| Complement C4, Plasma C4 | Core | <p>Adult: 4.5 mL Green (Lithium Heparin) top Vacutainer</p> <p>Serum from a 5 mL Gold top or 6 mL Red top is also acceptable.</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>GENERAL LABORATORY REQUISITION</p> | Daily | 0.10-0.40 g/L | 2009-02-27 | <p>Normally run in conjunction with C3 C4 degrades in storage. Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes.</p> <p>This test quantitates the amount of C4 in the plasma but does not test C4 function. Decreased levels are associated with complement classical pathway activation, decreased or dysfunctional C1 esterase inhibitor or genetic deficiency. Major clinical manifestations include SLE, glomeruloneph (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|---|---|----------------|---|
| Complement Components CCOMPG Complement components group test: C1qrs, C5, C6, C7, C8, C9 (Each component may be ordered separately) | Clinical Immunology | <p>Age 10-Adult: 6 mL Red top Vacutainer tube and 5 mL Lavender top (K₃EDTA) tube Require 2 x 1 mL aliquots each of serum and plasma for send out</p> <p>Pediatric: 0-2 yrs: 2 x 0.5 Red micropick and 2 x 0.5 Lavender micropick Require 2 x 0.5 mL aliquots each of serum and plasma for send out</p> <p>2-10 yrs: 2 x 4 mL Red top and 2 x 4 mL Lavender top Require 2 x 1 mL ali (more...)</p> | Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required. | <p>C1q 83 to 125 mg/L</p> <p>C1r 61 to 162 % of standard</p> <p>C1s 59 to 297 % of standard</p> <p>C5 55 to 113 mg/L</p> <p>C6 28 to 69 mg/L</p> <p>C7 35.3 to 96.5 mg/L</p> <p>C8 49 to 106 mg/L</p> <p>C9 33 to 95 mg/L</p> | 2010-01-11 | <p>This test is available exclusively to SJHC/LHSC physicians.</p> <p>CCOMPG is a group test that includes C1qrs, C5, C6, C7, C8, C9. The components can be ordered individually.</p> <p>Total complement is assayed first to determine if the components evaluation is necessary. Only if the total complement is less than the lower limit of normal will the complement component be processed. Otherwise the component(s) is cancelled with the Comment: "Test not indicated."</p> <p>Group test tha (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|---------------------|--|----------------|-----------------|----------------|----------|
| Complement components group test: C1qrs, C5, C6, C7, C8, C9 (see Complement Components) | | | | | | |
| Complement Total, Serum CH50 TCOM Total Complement Function Assay | Clinical Immunology | <p>Adult: 5 mL Gold top Vacutainer tube</p> <p>Pediatric: 0-2 years: 2 x 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Light Green (Li-Heparin) or Lavender (EDTA) top tubes are NOT acceptable GENERAL LABORATORY REQUISITION</p> | Batch analysis | 42 95 U/mL | 2010-01-11 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|---------------|--|----------------|----------|
| Complete Blood Count CBC Leukocyte Count (LKC) Hemoglobin (Hb) Hematocrit (HCT) Mean Cell Volume (MCV) Platelet Count | Core | <p>Adult: 4 mL K₂ EDTA (Lavender) Vacutainer tube</p> <p>Pediatric Venous: 2 mL Paeds K2 EDTA (Lavender) Vacutainer</p> <p>Pediatric (Capillary): 0.5 mL MAP K₂ EDTA (Lavender) Microtube 0.5 mL K₂ EDTA (Lavender) Microtube GENERAL LABORATORY REQUISITION</p> | As required | Normal Ranges adopted through consensus by the three London teaching hospitals. Leukocyte Count (LKC): >18 years: 4.0-10.0 x 10 ⁹ /L 11-18 years: 4.0-10.0 x 10 ⁹ /L 3-10 years: 5.0-12.0 x 10 ⁹ /L 1 month-2 years: 5.0-15.0 x 10 ⁹ /L < 1 month: 5.0-34.0 x 10 ⁹ /L Erythrocyte Count (ERC): Males: >18 years: 4.50-6.50 x 10 ¹² /L 11-18 years: 4.20-5.60 x 10 ¹² /L 3-10 years: 4.00-5.3 (more...) | 2011-01-14 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|--|----------------|-----------------|----------------|--|
| Comprehensive Autoimmune Encephalitis Panel, Serum/CSF Panel includes: <u>Autoimmune Encephalitis Antibodies</u> Anti-NMDAR Anti-LGI1 Anti-CASPR2 Anti-AMPA1/R2 Anti-GABAR1/B2 Anti-DPPX <u>Paraneoplastic Antibodies</u> Anti-Hu (ANNA-1) Anti-Ri (ANNA-2) Anti-Yo (PCA-1) Anti-Amphiphysin Anti-CV2 (CRMP5) Anti-Ma2/Ta (PNMA2) Anti-Tr (DNER) Anti-Zic4 Anti-Recoverin Anti-Titin Anti-SOX1 (more...) | Clinical Immunology | Adult: 5 mL Gold or 6 mL Red top Vacutainer tube Pediatric: 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top Vacutainer tube CSF sample: Suggest CSF be submitted with serum for testing. CLINICAL IMMUNOLOGY REQUISITION | Batch analysis | Negative | 2019-02-26 | This test is available to neurologists at LHSC/SJHC and accepted from referred in locations. A single autoantibody test is not diagnostic and should not be used to determine course of treatment. The test result must be evaluated with consideration of clinical presentation, patient history and other laboratory tests. Antibodies against Associated Neurological Disorders Frequently Associated Tumors NMDARAnti-NMDAR encephalitisOvarian teratoma, testicular teratomaLGI1Limbic encephalitisThyroid carcinoma, small cell lung cancer, ki (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---------------|---------------|-----------------|----------------|----------|
| Concerta™ (see <u>Methylphenidate, Urine</u>) | | | | | | |
| Conjugated (see <u>Bilirubin- Direct</u>) | | | | | | |
| Coombs' Test (see <u>Direct Antiglobulin Test</u>) | | | | | | |
| COOX (see <u>Co oximetry</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|---------------|---|------------------------------|--|----------------|----------|
| Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum ADH Antidiuretic hormone Vasopressin Arginine Vasopressin AVP ProAVP | Endocrinology | Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red or Gold top tubes are acceptable. Lavender (EDTA) top tubes are NOT preferred. If EDTA plasma is being sent for testing, the laboratory must be informed. GENE (more...) | Monday - Friday 0800-1600 | ADULT: Osmolality (mOsm/kg) Copeptin Reference Interval (pmol/L) 270-280 ≤ 11.6281-285≤ 13.7286-2901.5- 15.3291-2952.3- 24.5296-3002.4- 28.2 From Timper K et al., J Clin Endocrinol Metab 2015; 100(6):2268-2274: a baseline copeptin ≥21.4 pmol/L identified nephrogenic diabetes insipidus with 100% sensitivity and specificity following a combin (more...) | 2019-03-04 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|----------------------|----------------|--|------------------|--|----------------|--|
| Copper, Erythrocytes | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 0-12 years: 10.3-17.5 µmol/L ≥13 years: 9.7-14.6 µmol/L Conventional Units: 0-12 years: 654-1114 µg/L ≥13 years: 616-929 µg/L | 2010-01-18 | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---------------|----------------|--|------------------|---|----------------|--|
| Copper,Plasma | Trace Elements | Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION | Batched analysis | SI Units (Reported on Patient Chart): 0-3 months:1.4-7.2 µmol/L 4-6 months:3.9-17.3 µmol/L 7-12 months:7.9-20.5 µmol/L 1-5 years:12.6-23.6 µmol/L 6-9 years:13.2-21.4 µmol/L Male 10-13 years:12.6-19.0 µmol/L Female 10-13 years:12.9-18.9 µmol/L Male ≥14 years:11.2-20.6 µmol/L Female ≥14 years:13.5-36.5 µmol/L Conventional Units: 0-3 months:89-457 µg/L 4-6 months:248-1099 µg/L 7-12 (more...) | 2010-07-05 | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|----------------|----------------|---|------------------|---|----------------|--|
| Copper, Tissue | Trace Elements | Fresh or frozen tissue is acceptable. TRACE ELEMENTS REQUISITION | Batched analysis | Liver: 0.16-0.55 μ mol/g ** Reference range is tissue dependent. | | Reference Ranges are based on Non-Occupationally exposed population. Gold standard for Wilson's Disease-liver biopsy. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--------------|----------------|---|------------------|---|----------------|--|
| Copper,Urine | Trace Elements | 24 hour urine collected in new 24 hour urine container or random urine TRACE ELEMENTS REQUISITION | Batched analysis | <u>SI Units:</u> Random Urine: 0.04-0.19 µmol/L Ageµmol/mol creatinineFemale Male0-114.1-22.54.1-21.512-192.6-13.72.5-13.320-293.0-15.52.3-11.830-393.6-18.72.6-13.840-494.3-22.22.8-14.550-595.0-26.23.2-16.760-695.0-25.93.4-17.570-795.2-27.03.6-18.9≥806.4-33.14.1-21.5 24 Hour Urine: 0.06-0.28 µmol/d <u>Conventional Units:</u> Random Urine: 2.3-12.0 µg/L (more...) | | Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|----------------------|--|----------------------------------|---|----------------|--|
| Copper, Whole Blood Cu | Trace Elements | BD Royal Blue K2 EDTA Vacutainer, Reference # 368381 TRACE ELEMENTS REQUISITION | Batched Analysis | SI Units (Reported on patient chart): Male: 10.8-16.3 umol/L Female: 11.8- 24.6 umol/L Conventional Units: Male: 683-1036 ug/L Female: 752- 1565 ug/L | 2011-09-13 | Reference Ranges are based on Non- Occupationally exposed population. Find Interpretive Comment and Clinical Information here: |
| Coproporphyrin I (see <u>Porphyryns, 24-Hour Urine, Porphyryns, Urine, Random</u>) | | | | | | |
| Coproporphyrin III (see <u>Porphyryns, 24-Hour Urine, Porphyryns, Urine, Random</u>) | | | | | | |
| Cord Blood Testing Umbilical Cord Blood Testing | Blood Transfusion | 4 mL Lavender or 6 mL Pink (umbilical cord) top Vacutainer tube BLOOD TRANSFUSION REQUISITION or Electronic order | Daily Urgent if indicated. | See report | | |
| CORE (see <u>Hepatitis B Core Antibody</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|--------------|---|--|-----------------|----------------|----------|
| Coronavirus SARS-CoV-2 2019 Diagnostic (COVID) | Microbiology | Bronchial Alveolar Lavage Nasopharyngeal Swab Nasal/Mid-Turbinate swab Sputum Throat swab Tracheal Aspirate LHSC COVID-19 REQUISITION | Testing is performed 7 days per week at PaLM Microbiology. Specimens received on swab media not validated at LHSC will be forwarded to Public Health. -Lower respiratory specimens will be tested in-house -Other requests may be forwarded to PHL for testing | | 2020-03-05 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|--------------|---|--|-----------------|----------------|----------|
| Coronavirus SARS-CoV-2 2019 Screen (COVIDSCR) | Microbiology | Bronchial Alveolar Lavage Nasopharyngeal Swab Nasal/Mid-Turbinate swab Sputum Throat swab Tracheal Aspirate LHSC COVID-19 REQUISITION | Testing is performed 7 days per week at PaLM Microbiology. Specimens received on swab media not validated at LHSC will be forwarded to Public Health. - Lower respiratory specimens will be tested in-house - Other requests may be forwarded to PHL for testing | | 2020-07-13 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|---|----------------------------|-----------------|----------------|--|
| Cortisol Level Post-Dexamethasone, Plasma/Serum | Core | <p>Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p> | As required | ≤ 50 nmol/L | 2018-03-06 | <p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>This test is used to measure cortisol level following a dexamethasone suppression test.</p> |
| Cortisol, 24-Hour Urine | Core | <p>24-hour urine</p> <p>GENERAL LABORATORY REQUISITION</p> | Referred out Monday-Friday | ≤ 274 nmol/day | 2017-11-07 | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---------------------------|------------|---|---------------|---|----------------|---|
| Cortisol, Plasma/Serum | Core | <p>Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Pediatric: 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p> | As required | <p>6 10 am: 133 537 nmol/L</p> <p>4 8 pm: 68 327 nmol/L</p> | 2018-03-06 | <p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Oral contraceptives, pregnancy, or estrogen therapy cause elevated plasma cortisol levels due to an increase in binding proteins.</p> <p>Prednisolone, 6-α-methylprednisolone, or prednisone treatment may cause falsely elevated cortisol results.</p> <p>During metyrapon tests, 11-deoxycortisol levels are elevated. Falsely elevated cortisol values may be determined due to cross reactivit (more...)</p> |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---------------------------------------|------------|--|-----------------------|---|----------------|----------|
| Cortisol, Saliva Salivary Cortisol | Core | Saliva GENERAL LABORATORY REQUISITION | Tuesday afternoons | 6 - 10 am collection: < 24.1 nmol/L 4 - 8 pm collection: < 9.7 nmol/L 11:30 pm - 12:30 am collection: < 11.3 nmol/L | 2015-11-02 | |

Cosyntropin Test (see ACTH Stimulation Test, Plasma/Serum)

COVID Serology (see Anti-SARS-CoV-2 Total Antibody)

COVID19 (see Respiratory Virus Panel (RPCR))

Coxiella burnetti Serology (see Q fever Serology)

CPE Screen (see Carbapenemase Producing Enterobacteriaceae Screen)

CPK Total (see Creatine Kinase - CK,Plasma)

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|---------------|--|----------------|---------------------------------------|
| Creatine Kinase - CK, Plasma CPK Total CK Total | Core | <p>4.5 mL Green (Lithium Heparin) top Vacutainer</p> <p>Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable.</p> <p>Pediatric: 0-2 years: 0.6 mL Green top Microtainer (BD 365985) 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION</p> | As required | <p>Children:</p> <p>0 - 5 days: <712 U/L 6 days - 12 months: <295 U/L 1 year - 17 years: <247 U/L</p> <p>Adult: Male >18 years: <190 U/L Female >18 years: <170 U/L</p> | 2008-11-15 | Hemolyzed plasma may elevate results. |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------|---|----------------------------------|---|----------------|----------|
| Creatinine Clearance | Core | 4.5 mL Green top Vacutainer and 24 hour urine collection GENERAL LABORATORY REQUISITION | Monday - Friday 0800 - 1600 h | 0 min - 124 years: 1.24-2.24 mL/s Correction for body surface area: 0 min. - 124 years: 1.17-2.33 mL/s/1.73 m2 | 2010-07-13 | |
| Creatinine Trace Elements (see <u>Trace Elements Creatinine, Urine</u>) | | | | | | |
| Creatinine, 24-Hour Urine | Core | 24 Hour Urine GENERAL LABORATORY REQUISITION | Monday - Friday 0800 - 1600 h | Male: 8.6-19.4 mmol/d Female: 6.3-13.4 mmol/d | 2008-11-16 | |
| Creatinine, Urine-Random for Trace Elements (see <u>Trace Elements Creatinine, Urine</u>) | | | | | | |
| Creatinine, Fluid | Core | 5 mL Fluid GENERAL LABORATORY REQUISITION | As required | See report | 2008-11-16 | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|----------------------------------|--|----------------|----------|
| Creatinine,Plasma | Core | 4.5 mL Green top Vacutainer Pediatric: 0-2 years: 0.6 mL Green top Microtainer (BD 365985) 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION | As required | Age/Range: 0-5 years: <53 µmol/L 5-8 years: 30-70 µmol/L 8-12 years: 30-96 µmol/L Male 12 years-adult: 62-120 µmol/L Female 12 years-adult: 55-100 µmol/L Note that plasma creatinine increases with age. | 2008-11-15 | |
| Creatinine,Urine-Random | Core | Random Urine GENERAL LABORATORY REQUISITION | Monday - Friday 0800 - 1600 h | Random Urine (1st morning): Male: 3.5-25 mmol/L Female: 2.6-20 mmol/L | 2008-11-16 | |
| Creute (see <u>Trace Elements Creatinine, Urine</u>) | | | | | | |
| Creutzfeldt-Jakob Disease (see <u>Creutzfeldt-Jakob Disease (CJD) Protein Assay</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-------------------|--|---|-----------------|----------------|---|
| Creutzfeldt-Jakob Disease (CJD) Protein Assay CJD Protein Assay Creutzfeldt-Jakob Disease | Microbiology (VH) | Cerebrospinal Fluid REQUISITION FOR TESTING | Referred out Monday, Tuesday and Wednesday to the National Microbiology Laboratory in Winnipeg. | | 2006-07-01 | Please notify Microbiology (VH) before submitting sample. |
| CRP (see <u>C-Reactive Protein</u>) | | | | | | |
| Cryofibrinogen, Plasma (see <u>Cryoglobulin Serum and Cryofibrinogen Plasma Panel</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|---------------------|---|------------------------------------|-----------------|----------------|--|
| Cryoglobulin Serum and Cryofibrinogen Plasma Panel Cryoglobulin, Serum Cryofibrinogen, Plasma | Clinical Immunology | 3 x 6 mL Red Top Vacutainer tubes 2 x 4 mL Lavender Top Vacutainer tubes 1 x 4.5 ml Green Top Vacutainer tube (Note: this tube does not need to be placed in thermos) GENERAL LABORATORY REQUISITION | Monday-Thursday. No STAT holidays. | Negative | 2020-10-28 | Immunofixation for identification of cryoprecipitate will only be performed on new cryoglobulin and cryofibrinogen positive samples, once per patient. The final report for positive cryoglobulins will include: 1)Cryoglobulin type: Type I - Monoclonal immunoglobulins. May be associated with Waldenström's macroglobulinemia, multiple myeloma, monoclonal gammopathy of undetermined significance, and other lymphoproliferative diseases. Type II - A mixture of immunoglobulins (usually monoclonal IgM kappa rheumatoid factor complex (more...)) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|-------------------|---|---------------|-----------------|----------------|---|
| Cryoglobulin, Serum (see <u>Cryoglobulin Serum and Cryofibrinogen Plasma Panel</u>) | | | | | | |
| Cryptococcal Antigen | Microbiology (VH) | Blood or CSF CSF is the preferred specimen. MICROBIOLOGY REQUISITION | Weekdays | | | |
| Cryptococcus Culture | Microbiology (VH) | Body Fluids Blood Bone Marrow CSF Respiratory (bronchial wash, sputum, tracheal aspirate) Tissue/Biopsy Material Urine Wound Material (skin scrapings, subcutaneous lesions and abscesses, exudates) MICROBIOLOGY REQUISITION | Daily | | | Clinical history is important for adequate testing. |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|-------------------|---|---|------------------|----------------|----------|
| Cryptosporidium Ova and Parasites | Microbiology (VH) | Faeces MICROBIOLOGY REQUISITION For full work up: PUBLIC HEALTH LABORATORY TEST REQUISITION | Daily | | 2010-09-13 | |
| Crystal Analysis, Synovial Fluid Crystals (Joint Fluid) | Core | Synovial fluid collected in K ₂ or K ₃ EDTA Note: Specimens anticoagulated with heparin and oxalate are not acceptable for crystal analysis. GENERAL LABORATORY REQUISITION | As required Available STAT-24 hours/day, 7 days/week | No crystals seen | 2006-12-27 | |
| Crystals (Joint Fluid) (see <u>Crystal Analysis, Synovial Fluid</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|-------------------|--|---------------|-----------------|----------------|----------|
| Crystals - Surgical joint specimens | Pathology - UH | Tissue PowerChart: E-order choosing appropriate specimen. See Identification of Clinical Specimens. | Weekdays | See report | | |
| CSF ALB (see <u>Albumin,CSF</u>) | | | | | | |
| CSF Analysis (see <u>Cell Count and Differential,CSF</u>) | | | | | | |
| CSF Culture | Microbiology (VH) | Cerebrospinal fluid obtained by lumbar puncture, shunt or drain MICROBIOLOGY REQUISITION | Daily | | 2008-06-05 | |
| CSF IgG (see <u>Immunoglobulin G,CSF</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|---------------|-----------------|----------------|----------|
| CSF Index IgG/Alb CSF/Serum Ratio CSFI | Core | Adult: 1.0 mL of CSF and a 5 mL Gold or 6 ml Red top Vacutainer 0-2 years: 0.5 mL Gold or Red Microtainer 2-10 years: 3 mL Gold or Red Vacutainer tube GENERAL LABORATORY REQUISITION | Daily | 0.25 0.85 | | |
| CSF Specific Transferrin (see <u>Beta-2 Transferrin</u>) | | | | | | |
| CSFI (see <u>Albumin,CSF, CSF Index, Immunoglobulin G,CSF</u>) | | | | | | |
| CTC (see <u>Circulating Tumor Cells</u>) | | | | | | |
| Cu (see <u>Copper,Whole Blood</u>) | | | | | | |
| CYA (see <u>Cyclosporine</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|------------------------------|---|---|---|----------------|--|
| Cyanide | Core | 4 mL Lavender or Royal Blue top Vacutainer tube GENERAL LABORATORY REQUISITION | As required | < 5 µmol/L | 2005-07-01 | Referred out Monday - Thursday Clearly write "CYANIDE" on the tube labels and requisition. |
| Cyanocobalamin (see Vitamin B12, Plasma/Serum) | | | | | | |
| Cyclosporine CYA Neoral | Toxicology/Special Chemistry | 4 mL K ₂ or K ₃ EDTA Lavender top Vacutainer tube Pediatric: 0-2 years: 0.5 mL Lavender Microtainer 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION | Samples are tested Monday-Saturday. Specimens received in the Core Laboratory after 10:00am will be processed the next working day. | No established reference range. Concentrations are measured in ng/mL. | 2009-02-27 | Call the Toxicology/Special Chemistry Laboratory for more information: (519) 685-8500 x 64664 option #3. |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-------------------|------------|---|---------------|--|----------------|---|
| Cystatin C, Serum | Core | 5 mL Gold top Vacutainer tube Pediatric: 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION | As requested | 0.61 - 0.95 mg/L Glomerular Filtration Rate estimated from measured Cystatin C: >90 mL/min | 2007-03-08 | CYSC eGFR is calculated based on the equation published by Filler G and Lepage N, Pediatr Nephrol 18: 981-985, 2003 CYSC eGFR calculation (Filler G, Lepage N, 2003) eGFR: < 15 mL/min/1.73 m2 Consistent with kidney failure eGFR: 15-29 mL/min/1.73 m2 Consistent with severe chronic kidney disease eGFR: 30-44 mL/min/1.73 m2 Moderate to severe decreased kidney function is consistent with chronic kidney disease if confirmed over 3 months eGFR: 45-59 (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|-----------------------|--------------------------|--|---|-----------------|----------------|---|
| Cystic Fibrosis CF | Molecular Diagnostics | Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION | As Required Monday - Friday 0800 - 1600 h | See report | 2009-03-31 | For more information click on: Molecular Diagnostic Laboratory. N/A CFTR related disorders include cystic fibrosis and absence of the vas deferens. Mutations in the CFTR gene can result in complex multisystem disease with morbidity resulting from pulmonary disease precipitated by lower airway inflammation and chronic endobronchial infection. The F508del mutation is a 3-base pair deletion in exon #10 of the CF gene that is associated with 70% of CF chromosomes in the Caucasian population. The American College of Medical Genetics (ACMG) has recommended (more...) |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|--|----------------------|---|---|-------------------------|----------------|--|
| Cysticercosis Serology Taenia solium Serology | Microbiology (VH) | 5 mL Gold or 6 mL Red top Vacutainer or CSF PUBLIC HEALTH LABORATORY TEST REQUISITION | Referred weekly to the National Reference Centre for Parasitology | | 2010-09-13 | Adequate clinical and epidemiological information must accompany specimen. PARASRO must be ordered in lab or Infectious Disease Service |
| Cystine (see <u>Amino Acids, 24-Hour Urine</u>) | | | | | | |
| Cystine, Leukocyte Leukocyte Cystine Cystinosis | Biochemical Genetics | 2 x 6 mL Green (Sodium or Lithium Heparinized) top Vacutainer tubes BIOCHEMICAL GENETICS LAB REQUISITION | Arrangements for test must be made in advance by calling 519-685-8500 Specimen Receiving ext. 71561 | ≤ 0.200 nmol/mg protein | 2008-06-10 | |
| Cystinosis (see <u>Cystine, Leukocyte</u>) | | | | | | |
| Cystinuria (see <u>Amino Acids, 24-Hour Urine</u>) | | | | | | |
| Cytomegalovirus PCR (Viral Load) (see <u>CMV PCR</u>) | | | | | | |
| | | | | | | |

| Test Name | Laboratory | Specimen Type | Test Schedule | Reference Range | Effective Date | Comments |
|---|------------|--|-----------------------|-----------------|----------------|----------|
| Cytomegalovirus Serology CMV IgM/IgG | Core (UH) | 5 mL Gold or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION | Weekdays, as required | See report | 2006-07-01 | |