

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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1,25 diOH Vitamin D (see 1,25-Dihydroxy Vitamin D, Serum/Plasma)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
1,25-Dihydroxy Vitamin D, Serum/Plasma Calcitriol 1,25 diOH Vitamin D	Endocrinology	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube</p> <p><b>Light Green top tubes (Li- heparin) or Lavender top tubes (EDTA) are also acceptable GENERAL LABORATORY REQUISITION</b></p>	Monday-Friday 0800-1600	60-208 pmol/L	2015-01-05	<p>The test for 1,25 di-OH vitamin D is <u>not</u> useful to assess sufficiency of vitamin D from diet, supplements, and endogenous synthesis. The 25-OH vitamin D test would be more appropriate for that purpose.</p> <p><u>Appropriate Indications for 1,25 di-OH Vitamin D Testing:</u></p> <p>RENAL FAILURE</p> <p>RENAL TUBULOPATHY</p> <p>SARCOIDOSIS</p> <p>UNEXPLAINED HIGH PARATHYROID HORMONE LEVEL</p> <p>PEDIATRIC ENDOCRINOLOGY CONCERN (E.g. vitamin D-dep (more...))</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
1. Erythrocyte Total Panel (Total, Essential and Toxic) 2. Essential Erythrocyte Panel 3. Toxic Erythrocyte Panel 4. Total Panel	Trace Elements	Reference # 368381-BD Royal Blue K2-EDTA Vacutainer  TRACE ELEMENTS REQUISITION	Batched analysis	Find individual Reference Ranges here:		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
11-Deoxycortisol,Serum/Plasma	Core (all campuses)	6 mL Red top Vacutainer tube or 4.5 mL Lavender top tube Pediatric: 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	As required	See report for therapeutic ranges	2008-12-16	Referred out Monday - Thursday  Hospitals In-Common Laboratory Inc.
14C Breath Test (see <u>H. Pylori Breath Test</u> <b>test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener</b> )						
17 Alpha Hydroxy Progesterone (see <u>17-Hydroxyprogesterone, Serum</u> )						
17 Beta Estradiol (see <u>Estradiol, Plasma/Serum</u> )						
17-Hydroxy Progesterone (see <u>17-Hydroxyprogesterone, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
17-Hydroxyprogesterone, Serum 17-OH Progesterone 17-Hydroxy Progesterone 17 Alpha Hydroxy Progesterone	Core	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red top Vacutainer tube</p> <p><b>Avoid blood collection tubes with separator gels (Gold top Vacutainer tubes)</b></p> <p>Light Green (Li-Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION</p>	Referred out Monday - Friday	<p>&lt;14 days: &lt;4.9 nmol/L 14 days - &lt;1 year: &lt;3.5 nmol/L 1 - &lt;12 years: &lt;1.2 nmol/L 12 - &lt;14 years: &lt;2.1 nmol/L 14 - &lt;16 years: &lt;4.3 nmol/L 16 - &lt;19 years: &lt;4.0 nmol/L</p> <p><b>Male:</b> ≥19 years: &lt;6.0 nmol/L</p> <p><b>Female:</b> Follicular phase: &lt;5.6 nmol/L Midcycle: &lt;6.8 nmol/L Luteal phase: &lt;8.6 nmol/L Post-menopausal: &lt;1.4 nmol/L</p>	2017-11-07	
17-OH Progesterone (see 17-Hydroxyprogesterone, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
21-Hydroxylase Antibodies (see <u>Anti-21-Hydroxylase Antibodies, Serum</u> )						
25 OH Vitamin D (see <u>25-Hydroxy Vitamin D, Serum</u> )						
25 Vitamin D (see <u>25-Hydroxy Vitamin D, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
25-Hydroxy Vitamin D, Serum Calcidiol 25 Vitamin D 25 OH Vitamin D	Endocrinology	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 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 top tubes (Li-heparin) or Lavendar top tubes (EDTA) are <u>not</u> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800-1600	Deficiency: < 25 nmol/L Insufficiency: 25-74 nmol/L Sufficiency: 75-250 nmol/L Toxicity: > 250 nmol/L	2015-04-15	<p>It is common for Canadians to have 25-OH vitamin D levels that are considered insufficient. <b>Choosing Wisely</b> Canada recommends against measurement of 25-OH vitamin D in most patients because routine supplementation with vitamin D is appropriate for the general population. Measurement of 25-OH vitamin D levels should be restricted to patient populations who are more likely to require more aggressive therapy.</p> <p><u>Appropriate Indications for 25-OH Vitamin D Testing:</u></p> <p><b>METABOLIC BONE DISORDER</b> (E.g. osteoporosis, (more...))</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
3-hydroxy-3-methyl-glutaryl-CoA reductase antibodies (see <a href="#">HMG-CoA Reductase (HMGCR) IgG Antibodies, Serum</a> )						
3-methoxytyramine (see <a href="#">Metanephrines, Urine</a> )						
3-methoxytyramine (see <a href="#">Metanephrines, Plasma</a> )						
5-HIAA (see <a href="#">5-Hydroxyindole Acetic Acid, Urine</a> )						
5-HT (see <a href="#">Serotonin, 24-Hour Urine, Serotonin, Serum</a> )						
5-Hydroxyindole Acetic Acid, Urine 5-HIAA	Toxicology/Special Chemistry	24-hour urine GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	≤ 43.0 mol/day	2017-07-04	
5-Hydroxytryptamine (see <a href="#">Serotonin, 24-Hour Urine, Serotonin, Serum</a> )						
7-Dehydrocholesterol (see <a href="#">Sterol Profile, Serum/Plasma</a> )						
7. Plasma Panel (Total, Essential and Toxic)	Trace Elements	Reference number 368681 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	Find individual Reference Ranges here:		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
8. Urine Panel (Total, Essential and Toxic) 9. Urine Essential Panel 9.1 Urine Toxic Panel	Trace Elements	24 hour urine collected in a <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	Find individual Reference Ranges here:		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here: <b>Random Urine:</b> TMESSU (Essential Panel) TMTOXU (Toxic Panel) TMU (Essential and Toxic Panel)  <b>24 Hour Urine:</b> TEESU24 (Essential Panel) TETOXU24 (Toxic Panel) TEU24 (Essential and Toxic Panel)
β-Ctx (see <u>C-Telopeptide, Plasma</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
9.2 Whole Blood Toxic Panel	Trace Elements	Reference number 368681 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	Find individual Reference Ranges here:		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
A1AT Phenotyping (see <u>Alpha 1-Antitrypsin Phenotype, Serum</u> )						
A2M (see <u>Alpha2-Macroglobulin, Serum</u> )						
Abdominal Fat Pad FNAB for Amyloid Detection Fat Pad for Amyloid	Cytopathology-UH	Fine Needle Aspiration CYTOPATHOLOGY REQUISITION-NON-GYNAECOLOGICAL AREA	Performed as required	See report	2017-06-28	Any questions: Please call the Cytopathology Laboratory at LHSC - University Campus during regular working hours (0830-1630) Ext. 35056.
ABO Titre Alloantibody Antibody Titre	Blood Transfusion	6 mL Pink (EDTA) top Vacutainer tube BLOOD TRANSFUSION REQUISITION or Electronic order	Daily Urgent, if indicated	See report	2005-03-26	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Abortus, Stillbirth or Deceased Neonate	Pathology	Abortus Stillbirth Deceased Neonate See links in Collection Information	As required		2011-07-21	
ACA (see <u>Anticardiolipin</u> )						
ACADM (see <u>Medium Chain Acyl CoA Dehydrogenase Deficiency(MCAD)</u> )						
Acanthamoeba Culture	Microbiology (VH)	CSF Corneal scrapings Contact lens cases and fluid PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to the Public Health Laboratory.		2006-07-01	
AcCoA: Alpha-Glucosamine Acetyltransferase, Fibroblasts MPSIIIC Sanfilippo C Syndrome	Biochemical Genetics	Fibroblasts BIOCHEMICAL GENETICS LAB REQUISITION	As required	600-935 pmol/hr/mg protein	2009-10-01	
ACCP (see <u>Anti Cyclic Citrullinated Peptide, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
ACE (see <u>Angiotensin Converting Enzyme, CSF, Angiotensin Converting Enzyme, Serum</u> )						
Acetaminophen Tylenol Tempra Paracetamol	Core UH & VH	4.5 mL Green top Vacutainer  <b>Pediatric:</b> 0-2 years: Green 0.6 mL Microtainer 2-10 years: 2 mL Green top GENERAL LABORATORY REQUISITION	As required	Therapeutic: 70-130 µmol/L Toxic Levels: 4 hr. after ingestion: >990 µmol/L 12 hr. after ingestion: >260 µmol/L  Please interpret acetaminophen results with great caution as bilirubin has been found to significantly interfere with this method (artificially elevates the results)	2010-08-04	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Acetoacetate + Beta Hydroxybutyrate, Biochemical Genetics Lab	Biochemical Genetics	<p>6 mL Green (Sodium or Lithium Heparin) top Vacutainer tube</p> <p><b>Pediatric:</b>  0-2 yrs: 2 x 0.5 mL Green top  2-10 yrs: 3 mL Green top  BIOCHEMICAL GENETICS LAB REQUISITION</p>	As required	<p>Acetoacetate: 0.02-0.08 mmol/L</p> <p>Beta-hydroxybutyrate: 0.06-0.17 mmol/L</p>	2008-06-10	<p>To be ordered for investigating biochemical genetics and metabolic disorders only. For all other requests refer to Beta Hydroxybutyrate, Plasma/Serum (test performed in the Core Lab).</p> <ol style="list-style-type: none"> <li>1. Pipette 0.5 mL of freshly drawn whole blood from the Green top tube (on ice) into cold acetoacetate tube containing 1.0 mL of 8% perchloric acid (PCA).</li> <li>2. Mix and spin in cold centrifuge.</li> <li>3. Aliquot supernatant into clean transport tube.</li> <li>4. Re-spin in cold centrifuge and remove supernatant into another clean transport tube. (more...)</li> </ol>

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Acetone (see <u>Alcohol Fractionation (by Gas Liquid Chromatography)</u> )						
Acetylcholine Receptor Antibodies (see <u>Anti-Acetylcholine Receptor Antibodies, Serum</u> )						
aCGH (see <u>Microarray, Prenatal Microarray</u> )						
ACHR (see <u>Anti-Acetylcholine Receptor Antibodies, Serum</u> )						
ACHR Variant (see <u>Muscle Specific Tyrosine Kinase Antibodies</u> )						
AchRAb (see <u>Anti-Acetylcholine Receptor Antibodies, Serum</u> )						
Acid fast Bacilli Culture (AFB) (see <u>Mycobacterium Culture</u> )						
Acid Lipase Lysosomal Acid Lipase Wolman's Disease CESD (Cholesterol Ester Storage Disease)	Biochemical Genetics	Dried Blood Spot BIOCHEMICAL GENETICS LAB REQUISITION	As required	80-230 pmol/hr/dried blood dot punch	2009-10-01	
Acid Maltase (see <u>Alpha-Glucosidase, Dried Blood Spot, Alpha-Glucosidase, Fibroblasts</u> )						
Acid Mucopolysaccharide (see <u>Mucopolysaccharide Screen,Urine</u> )						
ACRAB (see <u>Anti-Acetylcholine Receptor Antibodies, Serum</u> )						
ACTH (see <u>Adrenocorticotropic Hormone, Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
ACTH Stimulation Test, Plasma/Serum Cosyntropin Test	Core	<p><u>FOR ACTH TESTING:</u> Adult: 4 mL Lavender top (EDTA) Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Lavender top (EDTA) Microtainer 2-10 years: 2 mL Lavender top (EDTA) Vacutainer tube Red, Gold, or Light Green (Li-heparin) top tubes are NOT acceptable.</p> <p><u>FOR CORTISOL TESTING:</u> Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p>	<p>For cortisol testing, as required.</p> <p>For ACTH testing, Tuesday afternoons.</p> <p>(more...)</p>	Interpretation of this test is based on the clinical circumstances, other medications and the formulation of ACTH used for this stimulation challenge.	2019-12-09	<p>Biotin may interfere with the cortisol and ACTH tests. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 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>Patients suffering from 21-hydroxylase deficiency exhibit elevated 21-deoxycortisol levels and this can cause falsely elevated cortisol results.</p> <p><u>FOR ACTH TESTING:</u> Use a refriger (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
ADAMTS-13 Activity	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	41-130%		
Additional Kidney Living donor Crossmatch (see <u>HLA Workup Living Donor Additional or Final</u> )						
ADH (see <u>Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum</u> )						
ADNA (see <u>Anti double stranded DNA, IgG</u> )						
Adrenal Antibodies, Serum Anti adrenal antibodies Steroid Cell Antibodies	Core	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Adrenal Antibodies: Negative  Mitochondrial Antibodies: Negative	2016-08-08	<b>Note: Test approved for Endocrinologists. For all other requests, please page the Biochemist on-call.</b>  LTC Staff: Collect sample, manually label and send to SRA to order
Adrenalin (see <u>Catecholamines, Urine</u> )						
Adrenaline (see <u>Catecholamines, Plasma (Norepinephrine, Epinephrine, Dopamine)</u> )						

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Adrenocorticotrophic Hormone, Plasma ACTH	Core	<p><b>Adult:</b> 4 mL Lavender top (EDTA) Vacutainer tube</p> <p><b>Pediatric:</b> 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 <b>NOT</b> acceptable. GENERAL LABORATORY REQUISITION</p>	Tuesday afternoons	7 - 10 am: 1.6 - 13.9 pmol/L	2009-02-12	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>ACTH levels undergo diurnal variation. Values are normally higher in the morning and lower in the evening. Use a refrigerated centrifuge to separate plasma. Analyze samples immediately or freeze them at -20 C.</p>
AFP (see <u>Alpha Fetoprotein (Non-Pregnancy), Fluid, Alpha Fetoprotein (Non-Pregnancy), Plasma/Serum</u> )						
AGA1 (see <u>Anti GA1 IgM, Serum</u> )						
AGAD (see <u>Anti Glutamic Acid Decarboxylase, Serum/CSF</u> )						
AILD-relevant antinuclear antibodies (ANA2) (see <u>Autoimmune Liver Disease (AILD) Profile</u> )						
ALA (see <u>Porphyrin Precursors, 24-Hour Urine, Porphyrin Precursors, Random Urine</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alanine Aminotransferase, Plasma ALT	Core	4.5 mL Green (Lithium Heparin) top Vacutainer Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable.  <b>Pediatric:</b> 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	As required	Male: ≤41 U/L  Female: ≤33 U/L	2008-11-15	The presence of hemolysis may falsely elevate ALT.  Used in the evaluation of liver disease; elevated in most forms of liver disease.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Albumin, Plasma	Core	4.5 mL Green (Lithium Heparin) top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top GENERAL LABORATORY REQUISITION	As required	0-4 days: 28-44 g/L 5 days-14 years: 38-54 g/L 15 years-18 years: 32-45 g/L >18 years: 35-52 g/L	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Albumin,CSF CSF ALB CSFI	Core	<p><b>Adult:</b> 1.0 mL of CSF and a 5 mL Gold or 6 ml Red top Vacutainer</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold or Red Microtainer 2-10 years: 3 mL Gold or Red Vacutainer tube</p> <p>GENERAL LABORATORY REQUISITION</p>	Daily	<350 mg/L	2010-01-11	
Albumin/Creatinine Ratio (see <u>Microalbumin,Urine</u> )						
Alcohol Fractionation (by Gas Liquid Chromatography) Volatile Screen Methanol Isopropanol Acetone Ethanol	Core (VH)	5 mL Gold top Vacutainer tube. Lithium Heparin or EDTA plasma is also acceptable. GENERAL LABORATORY REQUISITION	As Required	<p>Toxic Levels:</p> <p>Methanol: &gt;6 mmol/L</p> <p>Isopropanol: &gt;7 mmol/L</p> <p>Acetone: &gt;6.9 mmol/L</p> <p>Ethanol: &gt;33 mmol/L</p>	2010-01-26	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Aldosterone to Renin Concentration Ratio, Plasma	Endocrinology	<p><b>Adult:</b>4 mL Lavender top Vacutainer tube</p> <p><b>Pediatric:</b> 2-10 years: 3 mL Lavender top (EDTA) Vacutainer tube</p> <p>Red, Gold, Light Green (Li-Heparin), or Lavender (EDTA) top tubes are <b>NOT</b> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800 - 1600	<p>This ratio is used as a screening test for primary hyperaldosteronism.</p> <p>Ratios <math>\geq 144</math> are considered screen positive and warrant further investigation.</p>	2014-11-21	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Aldosterone, Plasma	Endocrinology	<p><b>Adult:</b> 4 mL Lavender top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Lavender top (EDTA) Microtainers 2-10 years: 3 mL Lavender top (EDTA) Vacutainer tube</p> <p>Red, Gold, Light Green (Li- Heparin), or Lavender (EDTA) top tubes are <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800-1600	<p><u>Child:</u> 0 - 30 days: 320 - 4621 pmol/L 1 - 12 months: 125 - 2870 pmol/L 1 - 4 years: 112 - 1575 pmol/L 4 - 10 years: 102 - 1521 pmol/L 13 - 17 years: ≤ 729 pmol/L</p> <p><u>Adult:</u> 7 - 10 am upright: ≤ 1118 pmol/L 7 - 10 am supine: ≤ 712 pmol/L</p>	2014-11-17	
Aldosterone, Urine	Core	24-hour urine GENERAL LABORATORY REQUISITION	Referred out Monday-Friday	≥14 years: 3-78 nmol/day	2017-11-07	Aldosterone output increases in normal persons on low salt intake or on diuretic medication.

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Alkaline Phosphatase Fractionation (see Alkaline Phosphatase Isoenzymes, Serum)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alkaline Phosphatase Isoenzymes, Serum Alkaline Phosphatase Fractionation ALP Isoenzymes	Clinical Immunology	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 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 <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800-1600	<p>ALP Isoenzyme Fraction Reference Interval (U/L)AgeLiver</p> <p>1BoneLiver 2Intestinal</p> <p>≤14 days ≤77≤248≤17 ≤3515 days-&lt;1 year ≤145≤469≤33≤661-&lt;10 years ≤104≤335≤23≤4710-&lt;13 years ≤129≤417≤29≤58</p> <p>Male 13-&lt;15 years ≤145≤468≤33≤66 Male 15-&lt;17 years ≤103≤331≤23≤46 Male 17-&lt;19 years ≤46≤149≤10≤21 Male ≥19 years ≤92≤97≤12≤18 Female 13-&lt;15 years ≤79≤254≤18≤36 Female 15-&lt;17 years ≤36≤117≤8≤16 Fema (more...)</p>	2010-01-11	<p>If alkaline phosphatase isoenzymes are ordered and it has been ≤ 15 days since the collection date of the last sample run, the test will be cancelled. Please monitor using the total alkaline phosphatase result.</p> <p>1. The reference values of the individual isoenzymes vary with age, sex, hormonal state (pregnancy, menopause, puberty) and medications.</p> <p>2. In children, ALP is increased due to predominant bone isoenzymes.</p> <p>3. Intestinal isoenzymes are absent in about 60% of normal subjects</p> <p>4. Our method (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alkaline Phosphatase, Plasma	Core	<p>4.5 mL Green (Lithium Heparin) top Vacutainer tube</p> <p><b>Pediatric:</b>  0-2 years: Green 0.5 mL Microtainer  2-10 years: 2 mL Green top GENERAL LABORATORY REQUISITION</p>	As required	<p><b>Male &amp; Female Children:</b></p> <p>≤14 days: 83-248 U/L</p> <p>15 days-1 year: 122-469 U/L</p> <p>1-10 years: 142-335 U/L</p> <p>10-13 years: 129-417 U/L</p> <p>Male:</p> <p>13-15 years: 116-468 U/L</p> <p>15-17 years: 82-331 U/L</p> <p>17-19 years: 55-149 U/L</p> <p>&gt;19 years: 40-130 U/L</p> <p>Female:</p> <p>13 years-15 years: 57-254 U/L</p> <p>15-17 years: 50-117 U/L</p> <p>17-19 years: 45-87 U/L (more...)</p>	2008-11-15	<p>Hemolysis is an interfering substance with this methodology.</p> <p>Normally increased to 400 IU/L in children, adolescence and pregnancy. Abnormally elevated with increased osteoblastic activity (e.g. bone metastasis, Paget's disease of bone), in obstructive liver disease and in some carcinomas of the bronchus. Patients with low alkaline phosphatase levels: A low level can occur in various medical conditions and may be a marker for hypophosphatasia, a now potentially treatable disorder of bone mineralization</p>



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Allergen Specific IgE, Serum Immunoglobulin E, Allergen Specific RAST Test	Core	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube Each test requires 50 L and 2 mL is sufficient for 10-12 tests.  <b>Pediatric:</b> 0-2 years: Red 0.5 mL Microtainer (this volume sufficient for maximum of 2 allergens) 2-10 years: 2 mL Red top (this volume sufficient for 10-12 allergens) GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	IgE Activity Allergy Index:  <0.35 kU/L  0: No sensitivity 0.35 - 0.69 kU/L  1: Low 0.70 3.49 kU/L  2: Moderate 3.50 17.49 kU/L  3: High 17.50 49.99 kU/L 4: Very High 50.00 100.00 kU/L 5: Very High >100.00 kU/L 6: Extremely High	2010-03-16	Testing limited to 10 allergens and to LHSC/SJH Allergists, Clinical Pharmacologists and Pediatric Respirologists. All other test requests will require approval by the Clinical Biochemist.  Clinician must determine clinical significance of specific IgE result after correlation with clinical exam and history. Detectable levels are present in patients with allergic disease and in approx. 15% of asymptomatic healthy persons. Some with classic atopic symptoms may not have detectable levels. Specific IgE may decrease with time and lack of exposure to allergens. (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Allergic Alveolitis (see <u>Aspergillus fumigatus IgG Antibodies, Farmers Lung IgG Antibodies, Serum</u> )						
Allergic Lung Serology (see <u>Aspergillus fumigatus IgG Antibodies, Farmers Lung IgG Antibodies, Serum</u> )						
Alloantibody (see <u>ABO Titre</u> )						
ALP Isoenzymes (see <u>Alkaline Phosphatase Isoenzymes, Serum</u> )						
Alpha 1 Antitrypsin Clearance (see <u>Alpha 1-Antitrypsin Clearance, Feces and Serum</u> )						
Alpha 1 Antitrypsin Phenotype (see <u>Alpha 1-Antitrypsin Phenotype, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha 1-Antitrypsin Clearance, Feces and Serum Alpha-1 Antitrypsin Clearance Alpha-1-Antitrypsin Clearance Alpha1 Antitrypsin Clearance Alpha 1 Antitrypsin Clearance	Core	<p><b>FECES:</b>            Collect all feces produced within a 24-hour period in fecal collection containers provided by the Core Laboratory upon request. If no specimen is obtained within 24 hours, extend collection time to 48 to 72 hours. Document time frame (duration of collection) on container.</p> <p><b>SERUM:</b>            Adult:            5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b>            0-2 ye (more...)</p>	Referred out Monday-Thursday	Clearance: $\leq 27$ mL/24 hours  Fecal alpha1-antitrypsin: $\leq 54$ mg/dL  Serum alpha1-antitrypsin: 100-190 mg/dL	2019-10-22	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha 1-Antitrypsin Phenotype, Serum Alpha-1 Antitrypsin Phenotype Alpha-1-Antitrypsin Phenotype Alpha1 Antitrypsin Phenotype Alpha 1 Antitrypsin Phenotype A1AT Phenotyping Alpha 1-Antitrypsin Proteotype	Core	<b>Adult:</b> 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red Vacutainer top <b>GENERAL LABORATORY REQUISITION</b>	Referred out Monday-Thursday	Alpha-1-Antitrypsin: 100 - 190 mg/dL (reference interval from Mayo Medical Laboratories) Proteotype: Negative for S and Z phenotypes (Non S Non Z)	2010-01-21	<p><b>This test is available exclusively to LHSC/SJHC physicians.</b></p> <p>All specimens submitted for A1AT phenotyping/proteotyping will have a serum A1AT level measured at LHSC as a screening test. Those specimens with an A1AT result of <math>\leq 1.50</math> g/L will be referred out for proteotyping automatically as long as phenotyping/proteotyping has been ordered and phenotyping/proteotyping has not been done on the patient in the past. If the A1AT level is <math>&gt;1.50</math> g/L, the sample will not be referred out for phenotyping/proteotyping without bio (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha 1-Antitrypsin Proteotype (see <u>Alpha 1-Antitrypsin Phenotype, Serum</u> )						
Alpha 1-Antitrypsin, Serum/Plasma Alpha Protease Inhibitor	Clinical Immunology	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 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 GENERAL LABORATORY REQUISITION</p>	Monday-Friday 0800-1600	0.90-2.00 g/L	2010-01-11	<p>Patients with homozygous deficiency of alpha 1-antitrypsin usually have levels less than 0.6 g/L.</p> <p>Levels rise in acute phase reaction.</p>
Alpha 1-Microglobulin			Test unavailable until further notice			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha Fetoprotein (Non-Pregnancy), Fluid Alphafetoprotein AFP	Core	Fluid GENERAL LABORATORY REQUISITION	As required	No reference range available for fluid	2018-07-10	

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha Fetoprotein (Non-Pregnancy), Plasma/Serum Alphafetoprotein AFP	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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>&gt; 5 years: ≤ 7 g/L</p> <p>Literature indicates that from birth to 1 month of age, expected AFP values are up to 18,964 g/L for girls and up to 16,387 g/L for boys. From 1 month to 12 months of age, expected values are up to 77 g/L for girls and up to 28 g/L for boys. The AFP level continues to fall slowly until adult levels are reached at about 5 years of age.</p>	2017-04-03	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Used as a tumour marker for non-seminomatous germ cell tumours and hepatocellular carcinoma. Not recommended for cancer screening in the general population.</p> <p>Levels can also be increased in other diseases such as acute viral hepatitis, chronic active hepatitis, and liver cirrhosis.</p> <p>Alpha fetoprotein is increased in pregnancy and is a part of prenatal maternal seru (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha Protease Inhibitor (see <u>Alpha 1-Antitrypsin, Serum/Plasma</u> )						
Alpha-1 Antitrypsin Clearance (see <u>Alpha 1-Antitrypsin Clearance, Feces and Serum</u> )						
Alpha-1 Antitrypsin Phenotype (see <u>Alpha 1-Antitrypsin Phenotype, Serum</u> )						
Alpha-1-Antitrypsin Clearance (see <u>Alpha 1-Antitrypsin Clearance, Feces and Serum</u> )						
Alpha-1-Antitrypsin Phenotype (see <u>Alpha 1-Antitrypsin Phenotype, Serum</u> )						
Alpha-Fucosidase, Leukocyte/Plasma/Fibroblasts Fucosidosis	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) <b>3.</b> Fibroblasts <b>1. &amp; 2.</b> GENERAL LABORATORY REQUISITION  <b>3.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: 60-121 nmol/hr/mg protein  Plasma: 214-1070 nmol/hr/mL plasma  Fibroblast: 54-313 nmol/hr/mg protein	2009-10-01	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha-Galactosidase, Leukocyte Fabry's Disease	Biochemical Genetics	6 mL Dark Green (Sodium Heparinized) top Vacutainer tube BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte:24-56 nmol/hr/mg protein	2009-10-01	
Alpha-Galactosidase, Plasma Fabry's Disease	Biochemical Genetics	6 mL Dark Green (Sodium Heparinized) top Vacutainer tube BIOCHEMICAL GENETICS LAB REQUISITION	As required	4.2-15 nmol/hr/mL plasma	2009-10-01	
Alpha-Glucosidase, Dried Blood Spot Acid Maltase GSDII Pompe Disease	Biochemical Genetics	Blood spot on filter paper card or EDTA Lavender top tube BIOCHEMICAL GENETICS LAB REQUISITION	As required	78-342 nmol/hr/3mm disc	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha-Glucosidase, Fibroblasts GSDII Pompe Disease Acid Maltase	Biochemical Genetics	Fibroblasts BIOCHEMICAL GENETICS LAB REQUISITION	As required	5.3-8.5 nmol/hr/mg protein	2008-06-10	
Alpha-Iduronidase, Leukocyte/Fibroblasts MPSI Hurler Syndrome Scheie Syndrome	Biochemical Genetics	2 x 6 mL Dark Green (Sodium Heparin) top Vacutainer tube or Fibroblasts GENERAL LABORATORY REQUISITION	As required	Leukocyte: 8-25 nmol/hr/mg protein	2008-06-10	
Alpha-Iduronidase, Plasma MPSI Hurler Syndrome Scheue Syndrome	Biochemical Genetics	4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) GENERAL LABORATORY REQUISITION	As required	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha-Mannosidase, Leukocyte/Plasma/Fibroblasts	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) <b>3.</b> Fibroblasts <b>1. &amp; 2.</b> GENERAL LABORATORY REQUISITION  <b>3.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: 151-264 nmol/hr/mg protein  Plasma: 21-47 nmol/hr/mL plasma  Fibroblast: 68-184 nmol/hr/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha-N-Acetylgalactosaminidase, Leukocyte/Plasma/Fibroblasts Schindler Disease	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) <b>3.</b> Fibroblasts <b>1. &amp; 2.</b> GENERAL LABORATORY REQUISITION  <b>3.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: 0.55-1.10 deltaA410/hr/mg protein  Fibroblast: 1.83-2.67 deltaA410/hr/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha-N-Acetylglucosaminidase, Plasma MPSIIIB Sanfilippo B Syndrome	Biochemical Genetics	6 mL Dark Green (Sodium Heparinized) top Vacutainer tube BIOCHEMICAL GENETICS LAB REQUISITION	As required	0.11-0.25 nmol/hr/ mL plasma	2008-06-10	
Alpha-N-Acetylneuraminidase, Fibroblasts Sialidase	Biochemical Genetics	Fibroblasts BIOCHEMICAL GENETICS LAB REQUISITION	As required	11.9-20.1 nmol/hr/mg protein	2008-06-10	
Alpha-Tocopherol (see <u>Vitamin E, Serum/Plasma</u> )						
Alpha1 Antitrypsin Clearance (see <u>Alpha 1-Antitrypsin Clearance, Feces and Serum</u> )						
Alpha1 Antitrypsin Phenotype (see <u>Alpha 1-Antitrypsin Phenotype, Serum</u> )						
Alpha2-Macroglobulin, Serum A2M	Core	<b>Adult:</b> 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 2-10 years: 3.5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	1.02 2.59 g/L	2019-04-17	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alphafetoprotein (see <u>Alpha Fetoprotein (Non-Pregnancy), Fluid, Alpha Fetoprotein (Non-Pregnancy), Plasma/Serum</u> )						
Alphafetoprotein (Pregnancy) (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
ALT (see <u>Alanine Aminotransferase,Plasma</u> )						
Aluminum, 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): 0-708 nmol/L  Conventional Units: 0.0-19.1 µg/L	2014-11-17	Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Aluminum, 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): 0-560 nmol/L  Conventional Units: 0.0-15.1 µg/L	2014-11-17	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
Aluminum, Plasma/Serum	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): 0-293 nmol/L  Conventional Units: 0-7.9 µg/L	2001-05-29	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
Aluminum,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-0.63 µmol/L µmol/mol creatinineAgeFe maleMale0-110-75.00-71.612-190-45.70-44.420-290-51.60-39.430-390-62.40-46.040-490-74.10-48.550-590-87.50-55.860-690-86.30-58.370-790-90.00-63.0≥800-110.50-71.6  24 Hour Urine: 0-0.93 µmol/d  <u>Conventional Units:</u>  Random Urine: 0-17.0 µg/L (more...)	2002-10-30	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
Amikacin, Serum Aminoglycoside Amikin	Core	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><u>Blood collection tubes with separator gels are not acceptable for this test.</u> GENERAL LABORATORY REQUISITION</p>	Referred out Monday- Thursday	<p><u>Therapeutic Range:</u></p> <p>For traditional (conventional) dosing method in adults: Pre-dose (trough): &lt;8 mg/L Half-hour post-dose (peak): 20-30 mg/L For urinary tract infection (peak): 15-30 mg/L</p> <p><b>For extended interval (once daily) dosing method in adults:</b> Pre-dose (trough): &lt;1.0 mg/L 8-12 h post dose (peak): Use nomogram for interpretation</p>	2007-10-18	
Amikin (see <u>Amikacin, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Amino Acids, 24-Hour Urine Cystine Cystinuria	Biochemical Genetics	24 hour urine collection BIOCHEMICAL GENETICS LAB REQUISITION	As required	See report	2008-06-10	
Amino Acids, CSF	Biochemical Genetics	Cerebrospinal fluid (CSF) BIOCHEMICAL GENETICS LAB REQUISITION	As required	See report	2008-06-10	
Amino Acids, Plasma Phenylalanine Phenylketonuria PKU	Biochemical Genetics	6 mL Green (Sodium or Lithium Heparin) top Vacutainer tube BIOCHEMICAL GENETICS LAB REQUISITION	As required	See report	2010-01-15	Quantitative determination of individual amino acids. Useful in screening for inborn errors of metabolism of amino acids. Elevated in a wide variety of inherited metabolic disorders.
Amino Acids, Random Urine	Biochemical Genetics	Random Urine BIOCHEMICAL GENETICS LAB REQUISITION	As required	See report	2008-06-10	

Aminoglycoside (see Amikacin, Serum)

Aminoglycosides (see Gentamicin, Serum/Plasma, Tobramycin, Serum/Plasma)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Aminolevulinic acid (see <u>Porphyrin Precursors, 24-Hour Urine, Porphyrin Precursors, Random Urine</u> )						
Aminophylline (see <u>Theophylline, Serum</u> )						
Amiodarone/Desethyl amiodarone, Serum	Toxicology/Special Chemistry	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Amiodarone 2.30 -3.90 µ mol/L  Desethylamiodarone 2.30-3.90 µmol/L	1998-09-18	
Amitriptyline (metabolite) (see <u>Nortriptyline, Serum/Plasma</u> )						
Amitriptyline, Serum/Plasma Elavil	Core	2 x 6 mL Red top Vacutainer or 2 x 4 mL Lavender top EDTA Vacutainer tube GENERAL LABORATORY REQUISITION	As required	Amitriptyline + Nortriptyline: 450-900 nmol/L	2004-05-12	Referred out Monday - Thursday.  Testing is also possible on urine and Gastric lavage samples. <b>Toxic:</b> Amitriptyline + Nortriptyline: Greater than 1800 nmol/L

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ammonia, Plasma	Core (VH)	<p>4 mL K<sub>2</sub> or K<sub>3</sub> EDTA Lavender top Vacutainer tube</p> <p><b>Pediatric:</b>  0-2 years: 0.5 mL Lavender Microtainer (must be venous draw)  2-10 years: 3 mL Lavender top (must be venous draw).</p> <p><b>NICU ONLY</b>  Micropick specimens are acceptable Use the CBC Microtainer tube, put on ice and deliver to Core Laboratory immediately.  GENERAL LABORATORY REQUISITION</p>	As required	Male: 15-55 µmol/L Female: 11-48 µmol/L	2008-11-15	<p>Hemolyzed samples are not acceptable as lysed red blood cells may elevate ammonia concentration.</p> <p>Hemolysis interferes with result. Hemolyzed samples will have a comment attached to the result for children &lt; 18. For adults ≥18, a comment will be attached to the result, unless hemolysis is &gt;201, in which case the test will be canceled.</p> <p>Lipemia may also cause interference.  &gt;149 µmo/L  Therapeutic concentration of Cefoxitin, Acetaminophen (paracetamol), Ibuprofen, Sulfasalazine and Temozolomide interfere with the assay (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Amniotic Fluid Chromosome Analysis QF-PCR Microarray	Cytogenetics (VH)	<p>20 mL of amniotic fluid for QF-PCR, Microarray (if required) and back up culture (additional sample if external testing required)</p> <p>3mL EDTA Maternal Blood Sample</p> <p>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, speci (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 Cytogenetics Webpage. See final report Prenatal diagnostic test performed at approximately 16-18 weeks gestation. Must prearrange with Cytogenetics Lab.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Amoebic Serology Entamoeba histolytica IgG	Microbiology (VH)	5 mL Gold top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to the Public Health Laboratory in Toronto.		2009-02-22	
Amphetamine Screen,Urine Amphetamines Methamphetamine Dextroamphetamine MDMA Ecstasy	Core	Random Urine GENERAL LABORATORY REQUISITION	As required	Negative	2008-11-15	
Amphetamines (see <u>Amphetamine Screen,Urine</u> )						
Amputation	Pathology	Limb (arm, leg) or portions thereof PowerChart: E- order choosing appropriate specimen. See Identification of Clinical Specimens	As Required	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Amylase,Fluid	Core UH & VH	Fluid (Pleural, Synovial, Peritoneal Dialysis, Pericardial etc.) GENERAL LABORATORY REQUISITION	As required	See report for ranges dependent on fluid type. Units are reported in U/L.	2005-04-20	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Amylase- Total,Plasma	Core	4.5 mL Green (Lithium Heparin) top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	<b>Adult:</b> 28-100 U/L  <b>Pediatric:</b> Up to 2 X Adult levels	2008-11-15	Hemolyzed plasma may interfere with this test methodology.  Besides acute pancreatitis, amylase is increased in other acute abdominal disorders (intestinal obstruction, perforations, biliary obstruction). Also increased in renal disease, after morphine, salivary gland inflammation, macroamylasemia and diabetic ketoacidosis. Occasional cases of acute pancreatitis may yield normal plasma amylase results. Increased in "mumps" (S-type).
ANA (see <u>Anti Nuclear Antibody</u> )						
Anafranil (see <u>Clomipramine and Metabolite, Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
ANCA P-ANCA / Anti-MPO (anti-myeloperoxidase antibody) C-ANCA / Anti-PR3 (anti-proteinase antibody)	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top EDTA, heparin or citrate plasma tube  <b>Pediatric:</b> 0-2 years: Red 1.0 pk. 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Wednesday and Friday  <u>For STAT samples:</u> Availability of STAT testing is 07:00-15:00 Monday to Friday. Saturday, Sunday & holiday requests will be processed the next business day. STAT testing must be pre- arranged with the Immunology Lab by calling x35541. See Critical Information Required section prior to calling.	Negative: ≤19 RU/mL	2010-12-09	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.  Interpretive Comments: cANCA and pANCA are two fluorescence patterns that are associated with a number of antibodies. Our current methodology of ELISA detects anti MPO (a major antibody for pANCA) and anti PR3 (a major antibody for cANCA) only.  ANCA testing is mainly indicated in patients with a tentative or a definite diagn (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Androstenedione, Serum	Core	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 2 x 0.5 mL Red top Microtainers</p> <p>Plasma (heparin) is also acceptable GENERAL LABORATORY REQUISITION</p>	Referred out Monday-Thursday	<p><b>Male:</b> 0 &lt;14 days: 0.0 2.5 nmol/L 14 days &lt;1 year: 0.1 2.1 nmol/L 1 &lt;6 years: 0.1 0.6 nmol/L 6 &lt;10 years: 0.2 0.9 nmol/L 10 &lt;12 years: 0.0 2.5 nmol/L 12 &lt;15 years: 0.5 2.0 nmol/L 15 &lt;19 years: 0.9 3.6 nmol/L 19 &lt;31 years: 1.8 7.7 nmol/L 31 &lt;51 years: 1.4 6.6 nmol/L 51 &lt;89 years: 1.8 7.7 nmol/L</p> <p><b>Female:</b> 0 &lt;14 days: 0.0 2.5 nmol/L 14 days &lt;1 year: 0.1 2.1 nmol/L 1 &lt;6 years: 0.1 0.6 nmol/L 6 &lt;10 y (more...)</p>	2017-11-07	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Angiotensin Converting Enzyme, CSF ACE	Core	Cerebrospinal Fluid (CSF) GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	No reference range available for CSF	2017-11-07	
Angiotensin Converting Enzyme, Serum ACE	Core	<b>Adult:</b> 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	<1 year: 16-126 U/L 1-3 years: 14-108 U/L 3-5 years: 12-89 U/L 5-10 years: 14-106 U/L 10-13 years: 15-111 U/L 13-17 years: 13-100 U/L 17-20 years: 11-79 U/L >20 years: 9-63 U/L	2017-11-07	
Angiotensin II Receptor Subtype 1 antibody (see <a href="#">Anti-AT1R</a> )						
ANNA-3 (see <a href="#">Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</a> )						
Anti adrenal antibodies (see <a href="#">Adrenal Antibodies, Serum</a> )						
Anti AQP4 antibody (see <a href="#">Neuromyelitis Optica Spectrum Panel</a> )						
Anti Asialo GM1 (GA1) (see <a href="#">Anti GA1 IgM, Serum</a> )						
Anti cardiolipin Antibodies\ (see <a href="#">Anticardiolipin</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti CENP A (see <u>Systemic Sclerosis Profile</u> )						
Anti CENP B (see <u>Systemic Sclerosis Profile</u> )						
Anti Cyclic Citrullinated Peptide (see <u>Anti Cyclic Citrullinated Peptide, Serum</u> )						
Anti Cyclic Citrullinated Peptide, Serum ACCP Anti Cyclic Citrullinated Peptide	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top EDTA, heparin or citrated plasma tube  <b>Pediatric:</b> 0-2 yrs: Red 0.5pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Batch Analysis	Negative ≤ 5 RU/mL	2010-01-11	Anti-CCP antibodies are potentially important surrogate markers for diagnosis and prognosis in rheumatoid arthritis (RA) because they:  - are as sensitive as, and more specific than, IgM Rheumatoid Factor (RF) in early and fully established disease - may predict the eventual development into RA when found in undifferentiated arthritis - may be detected in healthy individuals years before onset of clinical RA  Reports above the top standard are reported as ">200" RU/mL

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Deamidated Gliadin Peptide (see <u>Gliadin (DGP) Antibodies</u> )						
Anti DNA (see <u>Anti double stranded DNA, IgG</u> )						
Anti double stranded DNA, IgG Anti DNA Anti native DNA IgG Antibodies to double stranded DNA ADNA Anti dsDNA	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube as well as EDTA, heparin or citrated plasma  <b>Pediatric:</b> 0-2 years: Red 0.5 pk. 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Weekdays	Negative: ≤ 99 IU/ml Positive: >99 IU/ml	2009-10-26	
Anti dsDNA (see <u>Anti double stranded DNA, IgG</u> )						
Anti EJ (see <u>Myositis Antibodies Profile</u> )						
Anti ENA Identification, Serum--SEE ANA	Clinical Immunology				2010-01-11	
Anti ENA Screen, Serum--SEE ANA						
Anti Fibrillarin (see <u>Systemic Sclerosis Profile</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti GA1 IgM, Serum AGA1 Anti-Asialo IgM Anti Asialo GM1 (GA1) Anti-Asialo GM1 Anti-GA1 IgM ASGM1 IgM vs GA1 IgM vs Asialo-GM1 (GA1) IgM antibodies to Asialo GM1	Core	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: Red 0.5pk. 2-10 years: 2 mL Red top TESTING LAB REQUISITION FORM	Referred out monthly	Titre: < 3000 Units	2010-01-11	<p><b>This test is available exclusively to SJH/LHSC physicians.</b></p> <p>For more information, please contact:</p> <p>Senior Technologist            Immunology Lab            (519) 685-8500 ext. 35541</p> <p>Associated with chronic motor neuropathy syndromes.</p>
Anti GAD (see <u>Anti Glutamic Acid Decarboxylase, Serum/CSF</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Gangliosides Profile IgG and IgM, Serum Anti GM1 IgG Anti GM2 IgG Anti GM3 IgG Anti GD1a IgG Anti GD1b IgG Anti GT1b IgG Anti GQ1b IgG Anti GM1 IgM Anti GM2 IgM Anti GM3 IgM Anti GD1a IgM Anti GD1b IgM Anti GT1b IgM Anti GQ1b IgM	Clinical Immunology	<b>Adult:</b> 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: Red 0.5 mL Microtainer 2-10 years: 3 mL Red top tube  EDTA, Heparin or Citrate plasma are also acceptable <b>GENERAL LABORATORY REQUISITION</b>	Batch analysis	Negative	2019-11-27	Immunoblot results will be reported as either negative or positive for specific antibodies as the following:  1+ Weak Positive 2+ Positive 3+ Strong Positive  Antibodies Against Ig Class Associated Neuropathies GM1, GD1a, GD1b and GT1b IgM Multifocal motor neuropathy (MMN) GM2 and GM3 IgM, IgG Multifocal motor neuropathy (MMN) GM3, GD1a and GT1b IgM Guillain-Barre syndrome (GBS) GM1, GM2, GD1b and GQ1b IgM, IgG Guillain-Barre syndrome (GBS) GM2, GD1a and GD1b IgM Chronic inflammatory demyelinating (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti GBM (see <u>Anti Glomerular Basement Membrane, Serum</u> )						
Anti GD1a IgG (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GD1a IgM (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GD1b IgG (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GD1b IgM (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Glomerular Basement Membrane, Serum Anti GBM Glomerular Basement Membrane, IgG antibody	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube. EDTA, heparin or citrated plasma are also acceptable.  <b>Pediatric:</b> 0-2 years: Red 0.5 pk. 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Routine: Wednesdays and Fridays  <u>For STAT samples:</u> Availability of STAT testing is 0700-1500 hrs, seven days a week. ** Sample must be in Immunology by noon to insure testing is completed by 15:00** STAT testing must be pre-arranged with the Immunology Lab by calling ext. 35541. See "Critical Information Required" section prior to calling.	Negative: ≤19 RU/mL	2010-01-11	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.  For the detection of IgG class antibodies to NC1 domain of Type 4 collagen found in glomerular basement membrane. Increases may occur in Goodpasture's Syndrome.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Glutamic Acid Decarboxylase, Serum/CSF AGAD Anti-GAD65 Anti GAD Glutamic Acid Decarboxylase-65 Antibodies	Clinical Immunology	<b>Adult:</b> 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top Vacutainer tube  CSF collected in a standard CSF tube. GENERAL LABORATORY REQUISITION	Batch analysis	<5.0 IU/mL	2010-06-01	
Anti GM1 IgG (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GM1 IgM (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti GM1, IgM serum IgM antibodies to Ganglioside Monosialic Acid IgM antibodies to AGM1	Clinical Immunology	6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 yrs: Red 1.0 pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Batch Analysis	Ratio %NegativeLess than or equal to 29Borderline Positive30-50 Positive>50- 100Strong Positive>100  Borderline positive result should be retested after a subsequent blood draw.	2010-12-14	
Anti GM2 IgG (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GM2 IgM (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GM3 IgG (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GM3 IgM (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GQ1b IgG (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GQ1b IgM (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GT1b IgG (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti GT1b IgM (see <u>Anti Gangliosides Profile IgG and IgM, Serum</u> )						
Anti HCV (see <u>Hepatitis C Antibody</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Histone Group, Serum Anti-Histones HIST	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube <b>as well as</b> EDTA, heparin or citrate plasma  <b>Pediatric:</b> 0-2 yrs: Red 1.0 pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Batch Analysis	Negative: $\leq 0.9$ Positive: $> 0.9$	2010-04-07	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.  Histone antibodies are the major antibodies found in 50-90% drug-induced lupus erythematosus. As well, histone antibodies are found along with other antibodies in 20-50% of Systemic Lupus Erythematosus and 10-15% of Rheumatoid Arthritis, Mixed Connective Tissue Disease and Progressive Scleroderma.  This test does (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti IgA	Blood Transfusion	6 mL Red top Vacutainer tube BLOOD TRANSFUSION REQUISITION	Referred out Monday - Friday	See report	2009-04-21	IgA level must be <0.2 g/L before test will be referred  Patients with anti-IgA requiring a transfusion must only receive washed red cells and platelets and IgA deficient plasma.
Anti Insulin (see <u>Insulin Antibodies, Serum</u> )						
Anti Intrinsic Factor (see <u>Intrinsic Factor Antibodies, Serum</u> )						
Anti Islet Cell Antibodies, Serum Islet Cell Antibodies Pancreatic Antibodies	Core	5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Daily	Negative		
Anti JO1 (see <u>Myositis Antibodies Profile</u> )						
Anti Ku (see <u>Myositis Antibodies Profile, Systemic Sclerosis Profile</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Liver/Kidney Microsome Antibody (Anti LKM) (see <u>Autoimmune Liver Disease (AILD) Profile</u> )						
Anti MAG, Serum (see <u>Myelin-Associated Glycoprotein IgM, Serum</u> )						
Anti MDA5 (see <u>Myositis Antibodies Profile</u> )						
Anti Mi-2 alpha (see <u>Myositis Antibodies Profile</u> )						
Anti Mi-2 beta (see <u>Myositis Antibodies Profile</u> )						
Anti Mitochondrial Antibody (AMA) (see <u>Autoimmune Liver Disease (AILD) Profile</u> )						
Anti MOG antibody (see <u>Neuromyelitis Optica Spectrum Panel</u> )						
Anti Mycelial (see <u>Antiendomysial Antibodies</u> )						
Anti Myelin Oligodendrocyte Glycoprotein and Anti Aquaporin4, IgG (see <u>Neuromyelitis Optica Spectrum Panel</u> )						
Anti Myelin-Associated Glycoprotein IgM (see <u>Myelin-Associated Glycoprotein IgM, Serum</u> )						
Anti native DNA (see <u>Anti double stranded DNA, IgG</u> )						
Anti NMO antibody (see <u>Neuromyelitis Optica Spectrum Panel</u> )						
Anti NOR90 (see <u>Systemic Sclerosis Profile</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Nuclear Antibody ANA	Clinical Immunology	Serum (preferred) from a 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: Red 0.5pk. 2-10 years: 2 mL Red top  EDTA, heparin or citrated plasma will also be accepted. Other fluids will not be accepted. GENERAL LABORATORY REQUISITION	Batch Analysis	Negative <1:80	2010-01-11	ANA should not be used to monitor disease activity. Positive ANA other than anti-dsDNA should not be repeated. If ANA was tested positive previously, repeat testing will not be processed.  Anti-dsDNA may correlate with disease activity and positive results can be repeated 1-3 months for active disease and 6-12 months for less active disease. Repeat testing for Anti-dsDNA within 1 month will not be processed.  If ANA is negative or borderline positive (1:80), repeat testing is allowed only if the patient has developed new symptoms of SARD and the (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti NXP2 (see <a href="#">Myositis Antibodies Profile</a> )						
Anti OJ (see <a href="#">Myositis Antibodies Profile</a> )						
Anti Parietal Cell Antibody Parietal Antibodies	Core (all campuses)	5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Negative <1:20		Dilutions 1:20 to 1:320  Grossly hemolyzed, lipemic or microbially contaminated specimens may interfere with the performance and should be documented.
Anti PDGFR (see <a href="#">Systemic Sclerosis Profile</a> )						
Anti Phospholipid Antibodies (see <a href="#">Anticardiolipin</a> )						
Anti PL-12 (see <a href="#">Myositis Antibodies Profile</a> )						
Anti PL-7 (see <a href="#">Myositis Antibodies Profile</a> )						
Anti Platelet Antibodies (see <a href="#">Platelet Antibodies</a> )						
Anti PM-Scl 100 (see <a href="#">Myositis Antibodies Profile</a> )						
Anti PM-Scl 75 (see <a href="#">Myositis Antibodies Profile</a> )						
Anti PM-Scl100 (see <a href="#">Systemic Sclerosis Profile</a> )						
Anti PM-Scl75 (see <a href="#">Systemic Sclerosis Profile</a> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Ro-52 (see <u>Myositis Antibodies Profile, Systemic Sclerosis Profile</u> )						
Anti RP11 (see <u>Systemic Sclerosis Profile</u> )						
Anti RP155 (see <u>Systemic Sclerosis Profile</u> )						
Anti SAE1 (see <u>Myositis Antibodies Profile</u> )						
Anti Scl-70 (see <u>Systemic Sclerosis Profile</u> )						
Anti Skin Antibodies (see <u>Pemphigus/Pemphygoid Antibodies</u> )						
Anti Smooth Muscle Antibody (ASMA) (see <u>Autoimmune Liver Disease (AILD) Profile</u> )						
Anti SRP (see <u>Myositis Antibodies Profile</u> )						
Anti Streptolysin O Screen ASO Screen and Titre	Virology Laboratory	5 mL Gold or 6 mL Red top Vacutainer tube VIROLOGY REQUISITION	Testing is batched weekly on Thursday		2006-11-16	
Anti Th/To (see <u>Systemic Sclerosis Profile</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Thrombin AT Antithrombin	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling GENERAL LABORATORY REQUISITION</b>	Weekly	<b>0 - 5 days:</b> 0.39-0.87 U/mL <b>5 days - 1 month:</b> 0.41-0.93 U/mL <b>1 month - 3 months:</b> 0.48-1.08 U/mL <b>3 months - 6 months:</b> 0.73-1.21 U/mL <b>6 months - 1 year:</b> 0.84-1.24 U/mL <b>1 year - 5 years:</b> 0.82-1.39 U/mL <b>5 years - 10 years:</b> 0.90-1.31 U/mL <b>10 years - 16 years:</b> 0.77-1.32 U/mL <b>16 years - Adult:</b> 0.71-1.15 U/mL  Uncertainty of Measurement: 0.39 0.05 1.14 0.20	2006-06-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti TIF1 gamma (see <u>Myositis Antibodies Profile</u> )						
Anti Tr, Serum Purkinje Cell Cytoplasmic Antibody Type Tr	Core	5 mL Gold or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out monthly	Negative	2015-12-03	<p>This test is available exclusively to LHSC/SJHC physicians. For more information, please contact: Senior Technologist Immunology Lab, LHSC (519)-685-8500 ext. 35541</p> <p>The presence of ant-Tr is usually associated with paraneoplastic cerebellar degeneration and Hodgkins disease.</p>
Anti VGCC (see <u>Voltage Gated Calcium Channel Antibodies</u> )						
Anti Xa Assay (see <u>Heparin Assay</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-21-Hydroxylase Antibodies, Serum 21-Hydroxylase Antibodies	Core	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Light Green (Li-Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	Referred out Monday-Thursday	Negative	2020-04-29	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Acetylcholine Receptor Antibodies, Serum Acetylcholine Receptor Antibodies ACHR ACRAB AchRab	Core	<p><b>Adult:</b> 1-2 x 5 mL Gold top Vacutainer tubes</p> <p><b>Pediatric:</b> 2-10 years: 1-3 x 3.5 mL Gold top Vacutainer tubes</p> <p>UBC Neuro-Immunology Laboratory Requisition must be completed by neurologist or ophthalmologist</p>	Referred out Monday	Absent	2017-11-07	<p>Associated with Myasthenia Gravis.</p> <p>Qualitative assay is performed first. If negative, reflexing to anti-muscle-specific tyrosine kinase (anti-MuSK) antibody testing is performed if requested on the requisition form. If qualitative assay is positive, assay is repeated with cold alpha-bungarotoxin to rule out non-specific binding. If qualitative test is truly positive, quantitative test is performed. If a previous sample has been received from the patient, it will be included in the quantitative test to allow comparison of antibody titers between samples. (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-AMPAR1/R2 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-Amphiphysin (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-AP3B2 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-Asialo GM1 (see <u>Anti GA1 IgM, Serum</u> )						
Anti-Asialo IgM (see <u>Anti GA1 IgM, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-AT1R Angiotensin II Receptor Subtype 1 antibody	Transplant	6 mL Red top Vacutainer tube - No additives or separator gel TRANSPLANT LABORATORY REQUISITION	As required Monday to Friday except Stat holidays	<10 U/mL Negative 10-17 U/mL Borderline Positive >17 U/mL Positive	2020-06-29	<p>This test will include pre-transplant and post transplant samples to differentiate between pre-tx and de novo antibody.</p> <p>It is common to hold off testing until several samples are available for testing (maximum is 14 days).</p> <p>Angiotensin II is an oligopeptide hormone that causes vasoconstriction and release of aldosterone from the adrenal cortex, increasing blood pressure. AT1R antibodies have been linked to severe vascular rejection and malignant hypertension.</p>
Anti-CASPR2 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-cN1A (see <u>Comprehensive Myositis Panel, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-CV2 (CRMP5) (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-DPPX (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-EJ (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-GA1 IgM (see <u>Anti GA1 IgM, Serum</u> )						
Anti-GABARB1/B2 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-GAD65 (see <u>Anti Glutamic Acid Decarboxylase, Serum/CSF, Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-GFAP (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-GRAF (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-Histones (see <u>Anti Histone Group, Serum</u> )						
Anti-HMGCR antibodies (see <u>HMG-CoA Reductase (HMGCR) IgG Antibodies, Serum</u> )						
Anti-Hu (ANNA-1) (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-IgLON5 Antibody, Serum/CSF	Clinical Immunology	<p><b>Adult:</b> 5 mL Gold or 6 mL Red top Vacutainer tube</p> <p>EDTA, heparin or citrated plasma are also acceptable.</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top Vacutainer tube</p> <p>CSF: Suggest CSF be submitted with serum for testing. CLINICAL IMMUNOLOGY REQUISITION</p>	Batch analysis	Negative	2019-02-26	<p>This test is available to neurologists at LHSC/SJHC and accepted from referred in locations.</p> <p>A single autoantibody test is not diagnostic and should not be used to determine course of treatment.</p> <p>The test result must be evaluated with consideration of clinical presentation, patient history and other laboratory tests.</p> <p>Associated disease: parasomnia, tauopathy</p>
Anti-ITPR1 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-JO1 (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-KLHL11 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Ku (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-LGI1 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-Ma2/Ta (see <u>Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-Ma2/Ta (PNMA2) (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-MAG, IgM (see <u>Myelin-Associated Glycoprotein IgM, Serum</u> )						
Anti-MDA5 (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-mGluR1 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-Mi-2 alpha (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-Mi-2 beta (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-Microsomal Antibodies (see <u>Anti-Thyroid Peroxidase Antibodies, Serum/Plasma</u> )						
Anti-Neurochondrin (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-NIF (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-NMDAR (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-NXP2 (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-OJ (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-PDE10A (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Anti-PL-12 (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-PL-7 (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-PLA2R (see <u>Phospholipase A2 Receptor (PLA2R) Antibodies</u> )						
Anti-PM-Scl 100 (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-PM-Scl 75 (see <u>Comprehensive Myositis Panel, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Recoverin (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-Ri (ANNA-2) (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-Ro-52 (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-SAE1 (see <u>Comprehensive Myositis Panel, Serum</u> )						
Anti-SARS-CoV-2 (IgG + IgM) (see <u>Anti-SARS-CoV-2 Total Antibody</u> )						
Anti-SARS-CoV-2 Antibody (see <u>Anti-SARS-CoV-2 Total Antibody</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-SARS-CoV-2 Total Antibody Anti-SARS-CoV-2 Antibody COVID Serology Anti-SARS-CoV-2 (IgG + IgM)	Core	<p><b>Adult:</b>            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><b>Pediatric:</b>            0-2 years: 0.5            mL Green or            Gold top            Microtainer            2-10 years: 3            mL Green top            or 2 mL Gold            top tube            GENERAL            LABORATORY            REQUISITION</p>	Monday - Friday 0800 - 1600 h	See report	2020-08-01	<p>Serology testing            examines a persons            blood to see if they            have antibodies to            COVID-19. Testing            detects both IgG and            IgM antibodies (total) to            SARS-CoV-2            nucleocapsid (N)            antigen of the SARS-            CoV-2 virus.</p> <p><b>Serology testing is            limited to the            currently approved            uses in Ontario (See            PHO COVID-19            Serology) including:</b></p> <p>The investigation of            suspected cases of            Multisystem            Inflammatory            Syndrome in Children            (MIS-C) or adults (MIS-            A)</p> <p><b>With Approval:</b>            Serology may be            considered in patients            with severe ill (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-SOX1 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-SRP (see <u>Comprehensive Myositis Panel, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Thyroglobulin Antibodies, Serum/Plasma Thyroid Antibodies	Core	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Lavender top (EDTA) tubes are also acceptable</p> <p>Light Green top (Li-Heparin) tubes are <b>NOT</b> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	≤ 115 IU/mL	2009-02-12	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Measurement of anti-thyroglobulin antibodies is automatically performed with each serum thyroglobulin test order.</p> <p>Thyroglobulin concentrations &gt; 2000 g/L may lead to falsely elevated anti-thyroglobulin antibody results.</p> <p>The presence of anti-thyroglobulin antibodies may cause falsely low thyroglobulin measurements.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Thyroid Peroxidase Antibodies, Serum/Plasma Anti-Thyroperoxidase Antibodies Anti-TPO Antibodies Anti-Microsomal Antibodies	Core	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Light Green top (Li-Heparin) tubes are also acceptable</p> <p>Lavender top (EDTA) tubes are <b>NOT</b> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	Tuesdays	≤ 34 IU/mL	2009-12-01	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Falsely elevated results may be obtained in patients being treated with Itraconazole.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum Anti-TSH receptor antibodies Thyrotropin Receptor Antibodies TRAb Thyroid Stimulating Immunoglobulin TSI Long Acting Thyroid Stimulator LATS Thyrotropin Binding Inhibitor Immunoglobulin TBII	Endocrinology	<b>Adult:</b> 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube  Light Green (Li-Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	Elevated: > 1.8 IU/L	2017-12-12	
Anti-Thyroperoxidase Antibodies (see <u>Anti-Thyroid Peroxidase Antibodies, Serum/Plasma</u> )						
Anti-TIF1 gamma (see <u>Comprehensive Myositis Panel, Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Tissue Transglutaminase Antibodies (IgA), Serum/Plasma Transglutaminase Antibody tTGAB Tissue Transglutaminase Antibody	Endocrinology	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Gold, Light Green (Li-Heparin), or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800-1600	Negative: <8.0 AU/mL Positive: ≥8.0 AU/mL	2009-02-12	
Anti-Titin (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-TPO Antibodies (see <u>Anti-Thyroid Peroxidase Antibodies, Serum/Plasma</u> )						
Anti-Tr (DNER) (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Anti-TSH receptor antibodies (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						
Anti-Yo (PCA-1) (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Zic4 (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel, Serum/CSF</u> )						
Antibody Investigation	Blood Transfusion	6 mL Pink (EDTA) top Vacutainer tube Reflex ordered in Blood Transfusion Laboratory	Daily, Urgent if indicated.	See report		
Antibody Titre (see <u>ABO Titre, Prenatal Titre</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anticardiolipin ACA Lupus Anticoagulant Anti cardiolipin Antibodies\ Anti Phospholipid Antibodies	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	<b>Adult:</b> Four 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes <b>Pediatric:</b> 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT            lab ext. 52526            for number of            tubes required            prior to            sampling            GENERAL            LABORATORY            REQUISITION</b>	Weekly	Negative	2006-06-01	<b>Testing includes:</b>  INR PTT Anticardiolipin IgG Interpretation Anticardiolipin IgM Interpretation Lupus Anticoagulant - battery including LA screen, sensitive and insensitive aPTT, mixing studies and platelet neutralization  Blue (Sodium Citrate) top tubes should be centrifuged within 4 hours of collection.  The blood specimen must be double centrifuged to prepare platelet free plasma.  Centrifuge the primary tube or tubes for 10 minutes at 3000 rpm, aliquot and re- (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anticonvulsant (see <u>Carbamazepine, Serum/Plasma-Total, Ethosuximide, Serum, Phenobarbital, Serum/Plasma, Phenytoin, Serum/Plasma-Total, Primidone, Serum</u> )						
Antidiuretic hormone (see <u>Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum</u> )						
Antiendomysial Antibodies EMA Anti Mycelial	Core (all sites)	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Negative	2010-01-25	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Antimony, Erythrocytes	Trace Elements	Reference # 366480- Glass BD Green Sodium Heparin tube TRACE ELEMENTS REQUISITION	Batched analysis	SI Units (Reported on Patient Chart): 0.00-1.64 nmol/L  Conventional Units: 0-0.20 µg/L	2009-09-03	Reference Ranges are based on Non-Occupationally exposed population.  Samples collected in plastic tubes yield elevated antimony results due to leaching from the tube walls. High antimony results should be followed up with a repeat request for antimony making sure that the sample is collected in a glass tube.  Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Antimony,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units</u>  Random Urine: 0-0.46 nmol/L  Agenmol/mol creatinineFemale Male0-110-54.70-52.212-190-33.30-32.420-290-37.70-28.730-390-45.50-33.640-490-54.10-35.450-590-63.90-40.760-690-63.00-42.670-790-65.70-46.0≥800-80.70-52.2  24 Hour Urine: 0-0.69 nmol/d  <u>Conventional Units</u>  Random Urine: (more...)	2010-01-08	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
Antimony, Whole blood	Trace Elements	Reference # 366480- Glass BD Green Sodium Heparin tube TRACE ELEMENTS REQUISITION	Batched analysis	SI Units (Reported on Patient Chart): 0-0.74 nmol/L  Conventional Units: 0-0.090 µg/L	2009-09-03	Reference Ranges are based on Non- Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Antithrombin (see <u>Anti Thrombin</u> )						
Apo B (see <u>Apolipoprotein B</u> )						
Apo Lipoprotein E Genotype APOE	Test not available (Various)			See Report		
apoA1 (see <u>Apolipoprotein A1, Serum</u> )						
ApoB (see <u>Apolipoprotein B</u> )						
APOE (see <u>Apo Lipoprotein E Genotype</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Apolipoprotein A1, Serum apoA1	Core	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Lavender top (EDTA) tubes are also acceptable</p> <p>Light Green (Li-Heparin) top tubes are NOT acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	Referred out weekdays Monday-Thursday	0.92-1.96 g/L	2006-04-03	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Apolipoprotein B Apo B ApoB	Core	<p><b>Adult</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Lavender top (EDTA) tubes are also acceptable</p> <p>Light Green (Li- Heparin) top tubes are <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION</p>	Referred out weekdays Monday- Thursday	0.59-1.46 g/L	2006-04-03	
Apt Test	Blood Transfusion	-Cord Blood -Vaginal Blood BLOOD TRANSFUSION REQUISITION or Electronic order	Monday-Sunday	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
APTT (see <u>Partial Thromboplastin Time (Activated)- PTT</u> )						
Arava (see <u>Leflunomide</u> )						
Arbovirus Flavivirus Serology/PCR Dengue Fever Chikungunya Virus Eastern Encephalitis Powassan St. Louis Encephalitis West Nile Virus Western Encephalitis Venezuela Encephalitis Yellow Fever Zika Virus	Microbiology (VH)	5 mL Gold top or 6 mL Red top Vacutainer tube CSF must be accompanied by a plasma collected in a 5 mL EDTA Lavender top tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to Public Health Laboratory		2010-09-13	
Arginine Vasopressin (see <u>Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum</u> )						
Array CGH (see <u>Microarray</u> )						
Array CGH (see <u>Prenatal Microarray</u> )						
Array comparative genomic hybridization (see <u>Microarray</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Arsenic - Inorganic,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-0.13 µmol/L  Ageµmol/mol creatinineFemale Male0-110-15.90-15.212-190-9.70-9.420-290-10.90-8.330-390-13.20-9.740-490-15.70-10.350-590-18.50-11.860-690-18.30-12.470-790-19.10-13.4≥800-23.40-15.2  24 Hour Urine: 0-0.20 µmol/d  <u>Conventional Units:</u>  Random Urine: 0-10.0 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
Arsenic, 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): 0.0-65.4 nmol/L  Conventional Units: 0.0-4.9 µg/L	2010-01-08	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
Arsenic,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-0.53 µmol/L  Ageµmol/mol creatinineFemale Male0-110-63.60-60.712-190-38.70-37.620-290-43.80-33.430-390-52.90-39.040-490-62.80-41.150-590-74.20-47.360-690-73.20-49.470-790-76.30-53.4≥800-93.70-60.7  24 Hour Urine: 0-0.80 µmol/d  <u>Conventional Units:</u>  Random Urine: (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
Arsenic, 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): 0.0-50.7 nmol/L  Conventional Units: 0.0-3.8 µg/L		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
<u>Arthropods (see Ova and Parasites-Ticks/Arthropods)</u>						
Aryl Sulfatase A, Leukocyte/Fibroblasts /Urine Metachromatic Leukodystrophy MLD	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> Fibroblasts <b>3.</b> 5-10 mL of first a.m. urine <b>1. &amp; 3.</b> GENERAL LABORATORY REQUISITION  <b>2.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: 2.8-17.9 nmol/hr/mg protein  Fibroblast: 22-50 nmol/hr/mg protein  Urine: 2.2-6.4 nmol/hr/mL urine	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Aryl Sulfatase B, Leukocytes/Fibroblasts MPSVI Maroteaux-Lary Syndrome	Biochemical Genetics	1. 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer 2. Fibroblasts 1. GENERAL LABORATORY REQUISITION  2. BIOCHEMICAL GENETICS LAB REQUISITION	As required		2008-06-10	
Aryl Sulfatase E, Fibroblasts Chondrodysplasia Punctata (X-Linked Recessive)	Biochemical Genetics	Fibroblasts BIOCHEMICAL GENETICS LAB REQUISITION	As required		2008-06-10	
ASA (see <u>Salicylate, Serum</u> )						
Ascorbic Acid (see <u>Vitamin C</u> )						
ASGM1 (see <u>Anti GA1 IgM, Serum</u> )						
ASO Screen and Titre (see <u>Anti Streptolysin O Screen</u> )						
Asparaginase Activity (see <u>L-Asparaginase</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Aspartate Aminotransferase, Plasma AST	Core	4.5 mL Green (Lithium Heparin) top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Male: <40 U/L  Female: <32 U/L	2008-11-15	Hemolysis will falsely increase plasma results.  Very sensitive but non-specific indicator of hepatocellular damage. Also elevated in cardiac and skeletal muscle damage and erythrocyte disorders. Hemolysis will falsely increase plasma results.
Aspergillosis Serology	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to Public Health Laboratory	See report	2010-09-13	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Aspergillus fumigatus IgG Antibodies Allergic Alveolitis Aspergillus precipitins Allergic Lung Serology Hypersensitivity Pneumonitis	Core	Serum from a 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	<40 mg/L	2010-01-11	
Aspergillus precipitins (see <u>Aspergillus fumigatus IgG Antibodies</u> )						
Aspiration Biopsy (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
AST (see <u>Aspartate Aminotransferase, Plasma</u> )						
AT (see <u>Anti Thrombin</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>Ataxia Telangiectasia, Breakage Study Chromosome Analysis, Breakage Study, Ataxia Telangiectasia Breakage Study, Ataxia Telangiectasia</p>	<p>Cytogenetics (VH)</p>	<p>4-6 mL peripheral venous blood, in a sterile, sodium heparin vacutainer. If &lt;3 mL is collected, it must be in a 3 mL Vacutainer to allow for appropriate sample to anticoagulant ratio.</p> <p><b>Note:</b> A 6 mL control sample should also be sent (see Collection Information)  CYTOGENETICS  REQUISITION must include patient's name, address, Ontario Health Insurance Numb (more...)</p>	<p>As required</p>	<p>See final report</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 Web Page  N/A  See final report  An age/sex match control is required and should be collected and received at the same time as the patient sample.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ativan (see <u>Lorazepam,Urine-</u> <b>Qualitative</b> test is available only upon request)						
AUSAB (see <u>Hepatitis B Surface Antibody</u> )						
Australian Antibody (see <u>Hepatitis B Surface Antibody</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Autoimmune Liver Disease (AILD) Profile Anti Mitochondrial Antibody (AMA) Anti Smooth Muscle Antibody (ASMA) Anti Liver/Kidney Microsome Antibody (Anti LKM) AILD-relevant antinuclear antibodies (ANA2)	Clinical Immunology	<p>Serum (preferred) from a 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: Red 0.5 Microtainer tube 2-10 years: 2 mL Red top tube EDTA, heparin or citrated plasma will also be accepted. Other fluids will not be accepted. GENERAL LABORATORY REQUISITION</p>	Batch Analysis	Negative	2018-06-11	<p>ANA2 will only screen and report for AILD-related ANA patterns (Multiple Nuclear Dot, Nuclear Membrane and F-Actin).</p> <p>To screen for other ANA patterns, the regular ANA is tested together with AILD testing initially.</p> <p>Repeat testing: For adults ANA repeat testing will not be done; AILD testing can be repeated every 6 months. For children AILD/ANA testing can be repeated every 3 months.</p> <p>The following IFA patterns are reported: AMA ASMA Anti LKM Multiple Nuclear dots Nuclear membrane (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Autoimmune Myositis Panel (see <u>Myositis Antibodies Profile</u> )						
Autopsy	Autopsy	Body See corporate policy: Authorization for Autopsy	As required 0800-1600 including weekends and holidays	Autopsy will be performed within 24 hours of death, provided all valid authorization is completed. A provisional report is available within 5 working days.		
Aventyl (see <u>Nortriptyline, Serum/Plasma</u> )						
AVP (see <u>Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum</u> )						
<b>Rush Requests for Surgical Pathology Specimens</b>	Pathology - UH	Tissue PowerChart: E-order choosing appropriate specimen. See Identification of Clinical Specimens.	Weekdays	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<b>Surgical Pathology Specimens, Biopsies and Resections</b>	Pathology	Tissue PowerChart: E-order choosing appropriate specimen. See Identification of Clinical Specimens.	As required	See report		Biopsy and curretting specimens may be placed on telfa pads and NOT gauze.  See - Intraoperative consult, lymphoma prep, EM
B-Cell Gene rearrangement (see <u>B-Cell Lymphoma</u> )						
B-Cell Lymphoma B-Cell Gene rearrangement	Molecular Diagnostics	EDTA blood/bone marrow MOLECULAR DIAGNOSTIC REQUISITION	As required, Monday to Friday 0800-1600h	See report		
B19 (see <u>Parvovirus Serology (Human)</u> )						
B2 Microglobulin (see <u>Beta<sub>2</sub> Microglobulin, Urine, Beta<sub>2</sub>Microglobulin, Plasma</u> )						
B <sub>2</sub> Microglobulin (see <u>Beta<sub>2</sub>Microglobulin, Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Babesia Screen	Core	4 mL K2 or K3 EDTA Lavender top Vacutainer tube.  <b>Pediatric:</b> 2 mL K2 or K3 EDTA Lavender top Vacutainer tube. GENERAL LABORATORY REQUISITION	As required	No babesial parasites seen.	2016-03-10	
Bacterial Endotoxin Test	Microbiology/Epidemiology	Specimen collected aseptically in pyrogen free container. MICROBIOLOGY REQUISITION	Weekly, unless specifically arranged.			
Banding (see <u>Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor</u> )						
Bands (see <u>Differential Leukocyte Count (Peripheral Blood)</u> )						
Banking (see <u>DNA/RNA Banking</u> )						
Barb Screen (see <u>Barbiturate Screen,Urine</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Barbiturate Screen,Urine Barb Screen	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
Barium,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-25.5 nmol/L Ageµmol/mol creatinineFemale Male0-110-3.00-2.912-190-1.80-1.820-290-2.10-1.630-390-2.50-1.940-490-3.00-2.050-590-3.50-2.360-690-3.50-2.470-790-3.60-2.5≥800-4.50-2.9  24 Hour Urine: 0-36.4 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-3.5 µg/L Ageµg/g creatinineFemale Male0-110-3.70-3.512-190-2.20-2.220-2 (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
Bartonella Serology Cat Scratch Fever (Bartonella) Antibody	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to Public Health Laboratory		2010-09-13	
Basophils (see <u>Differential Leukocyte Count (Peripheral Blood)</u> )						
Batten Disease (see <u>Tripeptidyl Peptidase 1, Dried Blood Spot/Fibroblast</u> )						
BCR/ABL (see <u>Chronic Myelogenous Leukemia, by Karyotype/FISH, Chronic Myelogenous Leukemia, by PCR</u> )						
Be (see <u>Beryllium,Urine</u> )						
Benadryl (see <u>Diphenhydramine, Urine Qualitative</u> )						
Bence Jones Protein (see <u>Immunofixation Electrophoresis, Urine</u> )						
Bence Jones Protein Screen (see <u>Protein Electrophoresis, Urine</u> )						
Benzo Screen (see <u>Benzodiazepines,Urine</u> )						
Benzodiazepines,Urine Benzo Screen	Core	Random urine GENERAL LABORATORY REQUISITION	As required	Negative	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beryllium,Urine Be	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-11.1 nmol/L Ageµmol/mol creatinineFemale Male0-110-1.320-1.2612-190-0.800-0.7820-290-0.910-0.6930-390-1.100-0.8140-490-1.310-0.8550-590-1.540-0.9860-690-1.520-1.0370-790-1.590-1.11≥800-1.950-1.26  24 Hour Urine: 0-16.7 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-0.100 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
Beta 2 Transferrin (see <u>Beta-2 Transferrin</u> )						
Beta Carotene (see <u>Carotene, Serum</u> )						
Beta Crosslaps (see <u>C-Telopeptide, Plasma</u> )						
Beta hCG (see <u>Chorionic Gonadotropin (Quantitative), Plasma/Serum, Chorionic Gonadotropin, Fluid</u> )						
Beta Hydroxybutyrate, Plasma/Serum BHB Ketones	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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 or Gold top tubes are also acceptable GENERAL LABORATORY REQUISITION</p>	As required	≤0.30 mmol/L	2020-03-30	Gross hemolysis of the sample will affect the results.
Beta Transferrin (see <u>Beta-2 Transferrin</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta-2 Transferrin Beta-2 Transferrin Beta 2 Transferrin Beta Transferrin CSF Specific Transferrin Tau Protein	Clinical Immunology	<p><b>Collect 500 L nasal or ear fluid into a clean specimen container. Also need to collect blood as follows:</b></p> <p>Adult: 5 mL            Gold top            Vacutainer tube</p> <p><b>Pediatric:</b>            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 <b>NOT</b> acceptable            GENE (more...)</p>	Monday - Friday 0800-1600	Negative	2012-04-12	<p>Based on consultation with Dr. Rotenberg, it has been decided to limit the collection frequency to <math>\geq 4</math> weeks for repeat testing. If beta-2 transferrin testing is ordered and it has been <math>\leq 30</math> days since the collection date of the last sample run, the test will be cancelled.</p> <p><b>Both fluid and serum are required for testing. Failure to collect a serum specimen may result in an inconclusive result.</b></p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta-Galactocerebrosidase , Leukocyte/Fibroblasts Krabbe Disease	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> Fibroblasts <b>1.</b> GENERAL LABORATORY REQUISITION  <b>2.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: 66-139 nmol/hr/mg protein  Fibroblast: 58.4-135.5 nmol/hr/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta-Galactosidase, Leukocyte/Plasma/Fibroblasts GMI Gangliosidosis MPSIVB Morquio B Disease	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) <b>3.</b> Fibroblasts <b>1. &amp; 2.</b> GENERAL LABORATORY REQUISITION  <b>3.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: 139-248 nmol/hr/mg protein  Plasma: 6.3-42.0 nmol/hr/mL plasma  Fibroblasts: 335-435 nmol/hr/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta-Glucocerebrosidase, Leukocyte/Fibroblasts Gaucher Disease	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> Fibroblasts <b>1.</b> GENERAL LABORATORY REQUISITION  <b>2.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: 5.0-11.3 nmol/hr/mg protein	2008-06-10	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta-Glucuronidase, Leukocyte/Plasma/Fib roblasts MPSVII Sly Syndrome	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) <b>3.</b> Fibroblasts <b>1. &amp; 2.</b> GENERAL LABORATORY REQUISITION  <b>3.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: 97-174 nmol/hr/mg protein  Plasma: 18-76 nmol/hr/mL plasma	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts Hexosaminidase GM2 Gangliosidosis Sandhoff Disease Tay-Sachs Disease	Biochemical Genetics	<b>1.</b> 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer <b>2.</b> 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) <b>3.</b> Fibroblasts <b>1. &amp; 2.</b> GENERAL LABORATORY REQUISITION  <b>3.</b> BIOCHEMICAL GENETICS LAB REQUISITION	As required	Leukocyte: <b>A%:</b> 62-77% <b>A:</b> 99-311 nmol/hr/mg protein <b>A+B:</b> 962-1711 nmol/hr/mg protein  Plasma <b>A%:</b> 62-76% <b>A:</b> 22-58 nmol/hr/mL plasma <b>A+B:</b> 715-1516 nmol/hr/mL plasma  Fibroblast: <b>A:</b> 390-750 nmol/hr/mg protein <b>A+B:</b> 8160-11500 nmol/hr/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta <sub>2</sub> Microglobulin, Urine B2 Microglobulin	Clinical Immunology	Random urine GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	B2MU: 35-202 g/L B2MU/creatinine ratio: 0-23 g/mmol	2010-02-03	Beta <sub>2</sub> microglobulin is unstable in acidic urine.  B2MU is increased in proximal tube dysfunction and some forms of cancer.  Testing includes urine creatinine.  Prepare an aliquot of the urine and freeze immediately.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta <sub>2</sub> Microglobulin, Plasma B <sub>2</sub> Microglobulin B2 Microglobulin	Core	<p><b>Adult:</b> 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><b>Pediatric:</b> 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	0.80-2.20 mg/L	2009-12-01	<p>Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes.</p> <p>Increased in B-cell malignancies and glomerular dysfunction; also non-specifically increased in inflammatory diseases and some malignancies</p>

BH4/NB Ratio (see Pterin Analysis, Urine)

BHB (see Beta Hydroxybutyrate, Plasma/Serum)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Bile Acids, Serum Bile Acids: Total	Core	5 mL Gold top Vacutainer tube  4.5 mL Light Green (Li-Heparin) top Vacutainer tube is also acceptable GENERAL LABORATORY REQUISITION	Batch testing - Twice per week (Tuesday and Thursday)	0.0-10.0 umol/L (fasting sample)	2011-01-20	
Bile Acids: Total (see <u>Bile Acids, Serum</u> )						
Bileduct Brush/Wash (see <u>Gastrointestinal/Hepatobiliary Specimens for Cytology</u> )						
Bilirubin- Direct Direct Conjugated	Core	4.5 mL Green top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	<b>AgeReference Interval (mol/L)</b> 0-<15 days≤915 days-<1 year≤41-<9 years≤29-<13 years≤413-<19 years≤5Adult≤3	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Bilirubin-Total	Core	4.5 mL Green top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	<b>AgeReference Interval (mol/L)</b> 0-<15 days≤25015 days-<1 year≤101-<9 years≤59-<12 years≤812-<15 years≤1015-<19 years≤12Adult≤21	2008-11-15	
Biotinidase, Plasma	Biochemical Genetics	6 mL Green (Sodium or Lithium Heparinized) top Vacutainer tube  <b>Pediatric:</b> 0-2 yrs: 2 x 0.5 mL Green top 2-10 yrs: 3 mL Green top BIOCHEMICAL GENETICS LAB REQUISITION	As required	6-12 umol/min/L plasma	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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Biquin (see Quinidine)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Bismuth,Urine	Trace Elements	24 hour urine collected in acid washed bottle or random urine TRACE ELEMENTS REQUISITION	Batched Analysis	<u>SI Units:</u>  Random Urine: 0-0.34 nmol/L Agenmol/mol creatinineFemale Male0-110-39.90-38.112-190-24.30-23.620-290-27.50-21.030-390-33.20-24.540-490-39.40-25.850-590-46.60-29.760-690-45.90-31.070-790-47.90-33.5≥800-58.80-38.1  24 Hour Urine: 0-0.48 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-0.070 µg/L Ageng/ (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
BK Virus (see <u>Polyoma Virus</u> )						
Blastomyces Culture	Microbiology (VH)	Bone, Bone Marrow CSF Respiratory (sputum, tracheal aspiration, bronchial wash) Skin Lesions (scrapings or exudates) Subcutaneous Lesions or Aspirates Tissue PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to the Public Health Laboratory.			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Blastomyces Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to Public Health Laboratory.		2010-09-13	Clinical history is important for adequate testing.
Blood Culture Malassezia species, Histoplasma capsulatum, Blastomyces dermatitidis and Coccidioides immitis	Microbiology	Blood Malassezia species MICROBIOLOGY REQUISITION , Histoplasma capsulatum, Blastomyces dermatitidis, and Coccidioides immitis PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily Specimens are referred to the Public Health Laboratory only during weekdays.	Malassezia species up to 10 days Histoplasma capsulatum, Blastomyces dermatitidis, and Coccidioides immitis up to 28 days	2018-04-09	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Blood Culture Aerobic/Anaerobic (Adult)	Microbiology	Blood MICROBIOLOG Y REQUISITION	Daily	5 days positive findings are available within 1 hour of discovery.  Negative cultures at 24 hours will be routinely updated with the comment No growth 1 day	2018-04-09	
Blood Culture Aerobic/Anaerobic (Paediatric)	Microbiology	Blood MICROBIOLOG Y REQUISITION	Daily	5 days positive findings are available within 1 hour of discovery.  Negative cultures at 24 hours will be routinely updated with the comment No growth 1 day.	2018-04-09	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Blood Gases	Core (all sites)	See Note in Interpretive Comments. GENERAL LABORATORY REQUISITION	As required	<b>Age Range</b> <b>Arterial/Capillary Venous pH</b> birth-1 day 7.29 - 7.45 2 days-adult 7.32 - 7.42 <b>pCO<sub>2</sub></b> birth - 2 days 27 - 40 3 - 52 days - adult 35 - 45 <b>pO<sub>2</sub></b> birth - 2 days 54 - 95 3 - 52 days - adult 83 - 108 <b>Base Excess (BE)</b> (all) (-2) - 3(-2) - 3 <b>O<sub>2</sub> saturation, calculated</b> (all) N/A/N/A	2016-05-04	<b>Critical Low Critical High pH</b> 7.20 - 7.60 <b>pCO<sub>2</sub></b> 20 - 60 <b>pO<sub>2</sub> (arterial only)</b> 40  Venous pCO <sub>2</sub> >45 is suggestive of arterial pCO <sub>2</sub> >40 mmHg, which may be clinically important.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Blood Gases Plus	Core (all sites)	See Note in Interpretive Comments. GENERAL LABORATORY REQUISITION	As required	<b>Age Range</b> <b>Arterial/Capillary Venous pH</b> birth-1 day 7.29 - 7.45 2 days-adult 7.32 - 7.42 <b>pCO<sub>2</sub></b> birth - 2 days 27 - 40 38 - 50 days - adult 35 - 45 38 - 50 <b>pO<sub>2</sub></b> birth - 2 days 54 - 95 30 - 50 days - adult 83 - 108 30 - 50 <b>Base Excess (BE)</b> (all) (-2) - 3 (-2) - 3 <b>O<sub>2</sub> saturation, calculated</b> (all) N/A <b>Sodium, Na</b> (all) 135-145 <b>Potassium, K</b> (all) 3.5-5.0 <b>Chloride, Cl</b> (all) 98-107 <b>Total CO<sub>2</sub> (Bicarb (more...))</b>	2016-05-04	<b>Critical Low Critical High pH</b> 7.20-7.60 <b>pCO<sub>2</sub></b> 20-60 <b>pO<sub>2</sub> (arterial only)</b> 40-120 <b>Na</b> 120-160 <b>K</b> 3.0-6.0 <b>Glucose</b> 2.8-3.0 <b>Lactate (ED only)</b> 4.0  Venous pCO <sub>2</sub> >45 is suggestive of arterial pCO <sub>2</sub> >40 mmHg, which may be clinically important.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Blood Parasite Screen Filaria Screen Trypanosomiasis Screen	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender Microtainer 2-10 years: 2 mL Lavender top tube GENERAL LABORATORY REQUISITION	As required	No blood parasites seen	2006-06-01	A CBCD will automatically be ordered with this test.  Speciation of parasite confirmed by Microbiology in consultation with Ontario Public Health Laboratory.
Blood Urea (see <u>Urea,Plasma</u> )						
Blood/Body Fluid Exposure: Exposed individual (see <u>Needle Stick Injury - Victim</u> )						
Blood/Body Fluid Exposure: Source patient (see <u>Needle Stick Injury - Source</u> )						
Body Fluid Analysis (other than CSF) (see <u>Cell Count and Differential, Fluid (other than CSF)</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Body Fluid Culture (excluding blood, CSF, urine) Fluid Culture	Microbiology (VH)	Pericardial Fluid, Peritoneal Fluid, Pleural Fluid, Synovial Fluid, CAPD fluid, Aspirate, Vitreous Fluid MICROBIOLOGY REQUISITION	Daily			
Bone (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
Bone Loss Marker (see <u>N-Telopeptide,Urine</u> <b>no longer available- see C-Telopeptide</b> )						
Bone Marrow Aspirate Examination Bone Marrow Smears For: a) Wright's b) Iron Stain c) Cytochemical Stains  Differential Bone Marrow	Flow Cytometry	Bone marrow in K <sub>2</sub> or K <sub>3</sub> EDTA GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	Normal marrow elements	2006-06-01	
Bone Marrow Smears (see <u>Bone Marrow Aspirate Examination</u> )						
BoneMarrow/StemCell Donor initial HLA Typing (see <u>HLA BoneMarrow/StemCell Histocompatibility-Donor</u> )						
BoneMarrow/StemCell Recipient Antibody Workup (see <u>HLA Antibody BM/SC Recipient Workup</u> )						
BoneMarrow/StemCell recipient initial HLA Typing (see <u>HLA BoneMarrow/StemCell Histocompatibility-Recipient</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Bordetella pertussis Investigation (PertPCR) Whooping Cough Pertussis	Virology Laboratory	Nasopharyngeal aspirates (2-3 mL) <b>or</b> Nasopharyngeal swabs  Collect during the early phase of the disease and prior to antimicrobial therapy. VIROLOGY LABORATORY TEST REQUISITION	Samples are tested once a week on Wednesday. STAT requests must be approved by a Medical Microbiologist.	See report	2006-07-01	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Boron,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0.05-0.65 mmol/L Agemmol/mol creatinineFemale Male0-115.3-77.15.3-73.612-193.4-46.93.3-45.620-293.8-53.12.9-40.530-394.6-64.13.4-47.340-495.4-76.23.6-49.850-596.4-89.94.1-57.360-696.3-88.74.3-60.070-796.6-92.54.6-64.8≥808.1-113.65.3-73.6  24 Hour Urine: 0.07-0.97 mmol/d  <u>Conventional Units:</u> (more...)	2010-01-08	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
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Borrelia burgdorferi (see Lyme Disease Antibody)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Botulism (Botulism Toxin) Stool Culture for Botulism	Microbiology (VH)	Faecal samples (approximately 10g if available) Enema fluid in a sterile container Gastric contents in a sterile container Serum (from 20 ml of blood collected before administration of antitoxin) in 5 mL Gold or 6 mL Red top Vacutainer tubes For suspected infant botulism, the essential material for analysis is the infant's faeces. As constipation is a common symptom, the soiled parts of diapers, a rectal swab, 2 ml of serum (more...)	Referred out weekdays	See report	2010-09-13	Botulism is a reportable disease.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
BRAF NCCO NGS	Molecular Diagnostics	FFPE	Monday to Friday 0800-1600h	See report		<p>Patient is outside CCO criteria for funded testing</p> <p>N/A</p> <p>In patients with advanced malignant melanoma BRAF V600 mutations have been shown to be associated with clinical response to therapies targeting BRAF, such as vemurafenib.(PMID: 2235632) While clinical guidelines for BRAF mutational analysis are evolving, current available guidelines recommend routine testing for BRAF V600 mutations in metastatic melanoma.(PMID:24129426</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
BRAF NGS	Molecular Diagnostics	FFPE Refer to Pathology	Monday to Friday 0800-1600h	See report		<p>Patient must meet CCO criteria for funding of test.</p> <p>N/A</p> <p>In patients with advanced malignant melanoma BRAF V600 mutations have been shown to be associated with clinical response to therapies targeting BRAF, such as vemurafenib.(PMID: 2235632) While clinical guidelines for BRAF mutational analysis are evolving, current available guidelines recommend routine testing for BRAF V600 mutations in metastatic melanoma.(PMID:24129426)</p>
Breakage Study, Ataxia Telangiectasia (see <u>Ataxia Telangiectasia, Breakage Study</u> )						
Breakage Study, Fanconi Anemia (see <u>Fanconi Anemia, Breakage Study</u> )						
Breast (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Breast Cancer (BRCA1 and BRCA2 Screening) Hereditary Cancer - Breast/Ovarian	Molecular Diagnostics	Whole blood-4 mL Lavender EDTA top Vacutainer tube  MOLECULAR DIAGNOSTIC REQUISITION	As Required Monday - Friday 0800 - 1630 h	See report		For more information click on:  MOLECULAR DIAGNOSTIC LABORATORY N/A A subset (5-10 %) of breast / ovarian cancers are familial, and a predisposition to develop malignancy in these tissues has been found to segregate with (autosomal dominant) mutations in either the BRCA1 gene (Chr.17) or the BRCA2 gene (Chr.13). Mutations in both BRCA1 and BRCA2 are associated with a markedly elevated lifetime risk of breast cancer (BRCA1: 65% or greater, BRCA2: 45% or greater) as well as an increased lifetime risk of ovarian cancer (BRCA1: 39% (more...))

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Bronchial: Washings & Brushings (see <u>Respiratory and Exfoliative samples for Cytology</u> )						
Bronchoalveolar lavage (BAL) for LLM -Oil Red O (see <u>LIPID LADEN MACROPHAGE INDEX for OIL RED O- Respiratory and Exfoliative Samples for Cytology</u> )						
Brucella Serology	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to Public Health Laboratory		2010-09-13	
C Peptide (see <u>C-Peptide, Plasma/Serum</u> )						
C-ANCA / Anti-PR3 (anti-proteinase antibody) (see <u>ANCA</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C-Peptide, Plasma/Serum C Peptide	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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. &gt; 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  <b>Pediatric:</b> 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)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C-Telopeptide, Plasma Beta Crosslaps β-CTX C-Telo	Core	<p><b>Adult:</b> 4 mL Lavender top (EDTA) Vacutainer tube</p> <p><b>Pediatric:</b> 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> &lt;30 years: 238 - 1019 ng/L 30 - &lt;40 years: 225 - 936 ng/L 40 - &lt;50 years: 182 - 801 ng/L 50 - &lt;60 years: 161 - 737 ng/L 60 - &lt;70 years: 132 - 752 ng/L ≥70 years: 118 - 776 ng/L</p> <p><u>Female:</u> &lt;30 years: 148 - 967 ng/L 30 - &lt;40 years: 150 - 635 ng/L 40 - &lt;50 (more...)</p>	2015-04-15	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 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> <b>test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener</b> )						
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><b>This test is available exclusively to LHSC/SJH physicians.</b></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><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 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><b>Both plasma and serum are required</b></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><b>Pediatric:</b> 0-2 yrs: Red 0.5pk. and Purple 0.5pk 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION</p>	Referred out monthly. Total complement CH50 is performed as a screen to determine if the component assay is required.	C1q level: 83-125 mg/L C1r level: 61-162 % of STD C1s level: 59-297 % of STD	2010-01-11	<p><b>This test is available exclusively to SJHC/LHSC physicians.</b></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  <b>Pediatric:</b> 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.  <b>Pediatric:</b> 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	<b>This test is available exclusively to SJHC/LHSC physicians.</b>  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)  <b>Pediatric:</b> 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><b>This test is available exclusively to SJHC/LHSC physicians.</b></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)  <b>Pediatric:</b> 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><b>This test is available exclusively to SJHC/LHSC physicians.</b></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)  <b>Pediatric:</b> 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><b>This test is available exclusively to SJHC/LHSC physicians.</b></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
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)  <b>Pediatric:</b> 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	<b>This test is available exclusively to SJHC/LHSC physicians.</b>  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."  Also included in group test CCOMPG (includes, C1qrs, C5, C6, C7, C8, C9).  Total complement (TCOM, CH50) is a screen for cla (more...)

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)  <b>Pediatric:</b> 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><b>This test is available exclusively to SJHC/LHSC physicians.</b></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> <b>test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener</b> )						
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><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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. &gt; 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	<b>Adult:</b> 5 mL Gold top Vacutainer tube  Light Green (Li- Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> 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><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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 <b>unused</b> 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. <b>GENERAL LABORATORY REQUISITION</b>	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 &gt; 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><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 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 <b>NOT</b> 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		

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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><b>Pediatric:</b>  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><b>Calcium:</b>&lt;1.5 or &gt;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	<b>Adult:</b> 18 years and over: Normal <50 mg/kg  <b>Pediatric:</b> 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.  <b>Pediatric:</b> 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  <b>Toxic:</b> >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  <b>Pediatric:</b> 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 Fever (Bartonella) Antibody (see <a href="#">Bartonella Serology</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Catecholamines, Plasma (Norepinephrine, Epinephrine, Dopamine) Dopamine Epinephrine Norepinephrine Adrenaline Noradrenaline	Core	2 x 6 mL Pink (EDTA) top Vacutainer tubes GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Supine position only: Norepinephrine: 0.5 - 3.1 nmol/L Epinephrine: < 1.1 nmol/L Dopamine: < 0.13 nmol/L  Note: Higher catecholamine concentrations are observed in specimens collected from upright or standing adults.  <b>Please note new method and reference intervals as of July 1, 2021.</b>	2009-11-25	

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><b>Epinephrine (nmol/day):</b></p> <p>&lt;1 year: 0-14 1-&lt;2 years: 0-19 2-&lt;4 years: 0-33 4-&lt;10 years: 1-55 10-&lt;16 years: 3-109 ≥16 years: 0-120</p> <p><b>Norepinephrine (nmol/day):</b></p> <p>&lt;1 year: 0-59 1-&lt;2 years: 6-100 2-&lt;4 years: 24-171 4-&lt;7 years: 47-266 7-&lt;10 years: 77-384 ≥10 years: 66-660</p> <p><b>Dopamine (nmol/day):</b> (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><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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. &gt; 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 <b>GENERAL LABORATORY REQUISITION</b>	As required	Total Nucleated Cell Count: Red Cell Count: Appearance:  <b>TNC X 109/L</b> <b>RBC X 1012/L</b> <b>Appearance</b>  <b>Synovial</b> 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  <b>Pleural</b> 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:  <b>TNC x 106/L</b> <b>RBC x 106/L</b> <b>&lt; 1 year</b> 0-30 few <b>1-5 years</b> 0-20 few <b>6-16 years</b> 0-10 few <b>Adult</b> 0-5 few  Differential:  <b>Neonate(%)</b> <b>Adult(%)</b> <b>Lymphocytes</b> 2-38 63-99 <b>Monocytes</b> 50-94 3-37 <b>Neutrophils</b> 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 (0.5-1cm<sup>2</sup>), amnion (0.1-5cm<sup>2</sup>), cord (1cm<sup>3</sup>), 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><b>Adult:</b> 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><b>Pediatric:</b> 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> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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	<p>For more information click on:            Molecular Diagnostic Laboratory</p> <p>Charcot-Marie-Tooth (CMT) disease is a genetically and clinically heterogeneous group of inherited disorders of the peripheral nervous system characterized by progressive loss of muscle tissue and touch sensation across various parts of the body. CMT type 1 (CMT1) is a demyelinating peripheral neuropathy characterized by distal muscle weakness and atrophy, sensory loss, and slow nerve conduction velocity. CMT type 2 (CMT2) is an axonal (non-demyelinating) peripheral neu (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Charcot Marie Tooth Neuropathy (see <u>Charcot Marie Tooth Disease</u> )						
Chikungunya Virus (see <u>Arbovirus Flavivirus Serology/PCR</u> )						



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 - Pharyngeal/throat swab - Penile Meatal swab - Rectal swab - Urine - Vaginal swab PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to Public Health Laboratory		2010-09-13	

Chloride (see Electrolytes,Plasma)

Chloride (fluid) (see Electrolytes,Fluid)

Chloride (urine) (see Electrolytes,Urine)

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 <a href="#">Lipid Profile</a> )						

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  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	* See interpretation of lipid profile.	2008-11-15	
Cholesterol-LDL (see <u>Cholesterol-LDL, Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cholesterol-LDL, Plasma Low Density Lipoprotein Cholesterol Cholesterol-LDL LDL	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer  <b>Pediatric:</b> 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	
Cholesterol-Total, Plasma	Core	4.5 mL Green (Lithium Heparin) top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube 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 apnoea 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><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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: &lt; 2 IU/L</p> <p>Non-pregnant pre-menopausal female: &lt; 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. &gt; 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:

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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:

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Chromium,Urine	Trace Elements	24 hour urine collected in <b>new</b> 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><b>Pediatric:</b> 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling</b> 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, <b>must be authorized by a Hematologist. Contact by Paging Adult or Pediatric Hematologist on call through the switchboard.</b></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><b>Adult:</b> 4 mL Lavender top (EDTA) Vacutainer tube</p> <p><b>Pediatric:</b> 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 <b>NOT</b> 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)

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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 &lt;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 &lt;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 <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender Microtainer 2-10 years: 3 mL Lavender top tube 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. <b>Peripheral blood samples require &gt;10% blasts for chromosome study.</b> CYTO (more...)	As required	See final report	2010-01-13	<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 Web Page @ <a href="http://www.lhsc.on.ca/lab/cytogen/">http://www.lhsc.on.ca/lab/cytogen/</a></p> <p>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).</p> <p>Controversy e (more...)</p>

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 <sub>2</sub> or K <sub>3</sub> 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><b>Clobazam:</b></p> <p>No therapeutic range has been established, however levels of: 0.15-1.00 µmol/L</p> <p><b>Desmethyl Clobazam:</b> 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 Metabolite, Serum Desmethylclomipramine (metabolite) Anafranil	Core	2 x 6 mL Red top Vacutainer tubes  Plasma from Light Green (Li-Heparin) or Lavender (EDTA) top tubes are NOT acceptable GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	No reference range for Clomipramine <u>OR</u> Desmethylclomipramine alone.  <b>Combined Metabolites</b>  Clomipramine + Desmethylclomipramine Adult Therapeutic Ranges:  580-1500 nmol/L	2005-07-01	
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>C. difficile testing is indicated for patients with unexplained new-onset diarrhea (&gt;3 unformed stools within the last 24 hours).</p> <p>Toxin testing is not performed on children less than 2 year of age. Children may carry C. difficile asymptotically. Presence of this toxin may not be diagnostic of infection.</p> <p>Testing is not routinely performed in children with diarrhea who are 1-2 years of age unless other infectious causes have been excluded. Contact the Microbiologist on call for approval (Pager#19000).</p> <p>Only one sample will be processed (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Clozapine, Serum/Plasma Clozaril	Toxicology/Special Chemistry	4 mL K <sub>2</sub> or K <sub>3</sub> 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: <b>Group 1:</b> -Blood: 4 mL Lavender top (EDTA) Vacutainer tube -Urine -BAL -CSF - Vitreous/Aqueo us Fluid <b>Group 2:</b> -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	<b>Whole Blood,</b> <b>AdultAge</b> <b>RangeMale</b> <b>Female</b> 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 <b>Oxygenated</b> <b>Hemoglobin;</b> <b>O2Hb(all)95-</b> <b>9895-98</b> <b>CarboxyHemogl</b> <b>obin; COHbNon-</b> 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
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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  <b>Pediatric:</b> 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling</b> GENERAL LABORATORY REQUISITION	Routine/Stat as required	<b>Factor X</b>  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  <b>Factor XI</b>  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, <b>must be authorized by a Hematologist</b> 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  <b>Pediatric:</b> 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling</b> 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, <b>must be authorized by a Hematologist by paging the adult or pediatric Hematologist on call through switchboard.</b>  <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 <b>new</b> 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
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Combined Cervical/Endocervical Smear (see Gynaecological Conventional Smear for Cytology)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Complement C3, Plasma C3c	Core	<p><b>Adult:</b> 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><b>Pediatric:</b> 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
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Complement C2 quantitation (see C2, Serum)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Complement C4, Plasma C4	Core	<p><b>Adult:</b> 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><b>Pediatric:</b> 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><b>Age 10-Adult:</b> 6 mL Red top Vacutainer tube and 5 mL Lavender top (K<sub>3</sub>EDTA) tube Require 2 x 1 mL aliquots each of serum and plasma for send out</p> <p><b>Pediatric:</b> 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><b>This test is available exclusively to SJHC/LHSC physicians.</b></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 <u>Complement Components</u> )						
Complement Total, Serum CH50 TCOM Total Complement Function Assay	Clinical Immunology	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 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 <b>NOT</b> 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><b>Adult:</b> 4 mL K<sub>2</sub> EDTA (Lavender) Vacutainer tube</p> <p><b>Pediatric Venous:</b> 2 mL Paeds K2 EDTA (Lavender) Vacutainer</p> <p><b>Pediatric (Capillary):</b> 0.5 mL MAP K<sub>2</sub> EDTA (Lavender) Microtube 0.5 mL K<sub>2</sub> EDTA (Lavender) Microtube GENERAL LABORATORY REQUISITION</p>	As required	Normal Ranges adopted through consensus by the three London teaching hospitals. <b>Leukocyte Count (LKC):</b> >18 years: 4.0-10.0 x 10 <sup>9</sup> /L 11-18 years: 4.0-10.0 x 10 <sup>9</sup> /L 3-10 years: 5.0-12.0 x 10 <sup>9</sup> /L 1 month-2 years: 5.0-15.0 x 10 <sup>9</sup> /L < 1 month: 5.0-34.0 x 10 <sup>9</sup> /L <b>Erythrocyte Count (ERC):</b> Males: >18 years: 4.50-6.50 x 10 <sup>12</sup> /L 11-18 years: 4.20-5.60 x 10 <sup>12</sup> /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	<b>Adult:</b> 5 mL Gold or 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 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.  <b>Antibodies against Associated Neurological Disorders Frequently Associated Tumors</b> 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
Comprehensive Myositis Panel, Serum Panel includes:  <u>Basic Myositis Panel</u> Anti-Mi-2 alpha Anti-Mi-2 beta Anti-TIF1 gamma Anti-MDA5 Anti-NXP2 Anti-SAE1 Anti-Ku Anti-PM-Scl 100 Anti-PM-Scl 75 Anti-JO1 Anti-PL-7 Anti-PL-12 Anti-EJ Anti-OJ Anti-Ro-52 Anti-cN1A Anti-SRP  <u>Anti-HMG-CoA Reductase (HMGCR)</u>	Clinical Immunology	<b>Adult:</b> 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top tube  CLINICAL IMMUNOLOGY REQUISITION	Batch analysis	<u>Antibodies by immunoblot</u> Negative  <u>Anti-HMGCR by ELISA</u> Negative: <20 U Positive: ≥20 U	2021-07-28	Accepted from referred in locations.  Immunoblot results will be reported as either negative or positive for specific antibodies as the following. 1+ Weak Positive 2+ Positive 3+ Strong Positive
Concerta™ (see <u>Methylphenidate, Urine</u> )						
Conjugated (see <u>Bilirubin- Direct</u> )						
Coombs' Test (see <u>Direct Antiglobulin Test</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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COOX (see Co oximetry)

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	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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><b>Red or Gold top tubes are acceptable.</b></p> <p>Lavender (EDTA) top tubes are <b>NOT</b> preferred. If EDTA plasma is being sent for testing, the laboratory must be informed. GENE (more...)</p>	Monday - Friday 0800-1600	<p><b>ADULT:</b> <b>Osmolality (mOsm/kg) Copeptin Reference Interval (pmol/L)</b> 270-280 ≤ 11.6281-285≤ 13.7286-2901.5- 15.3291-2952.3- 24.5296-3002.4- 28.2</p> <p>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...)</p>	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	<b>Liver:</b> 0.16-0.55 $\mu$ 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 <b>new</b> 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:
<u>Coproporphyrin I (see <a href="#">Porphyrin Screen and Quantitation, 24-Hour Urine</a>, <a href="#">Porphyrin Screen and Quantitation, Feces</a>, <a href="#">Porphyrin Screen and Quantitation, Random Urine</a>)</u>						
<u>Coproporphyrin III (see <a href="#">Porphyrin Screen and Quantitation, 24-Hour Urine</a>, <a href="#">Porphyrin Screen and Quantitation, Feces</a>, <a href="#">Porphyrin Screen and Quantitation, Random Urine</a>)</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		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
CORE (see <u>Hepatitis B Core Antibody</u> )						
Coronavirus SARS-CoV-2 2019 Diagnostic (COVID)	Microbiology	Bronchial Alveolar Lavage Nasopharyngeal Swab Nasal/Mid-Turbinate swab Sputum Throat swab Tracheal Aspirate VIROLOGY REQUISITION	Testing is performed 7 days per week at PaLM Microbiology.		2020-03-05	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>Coronavirus SARS-CoV-2 2019 Diagnostic Priority (GXRVP) <b>Adult ED and Critical Care Admissions only</b></p> <p>GeneXpert Priority PCR COVID-19 Testing GXRVP</p>	<p>Microbiology</p>	<p>Nasopharyngeal Swab VIROLOGY REQUISITION</p>	<p>Testing is performed 7 days per week at PaLM Microbiology.</p>	<p>Reference Range Results appear under GXRVP in Powerchart.</p>	<p>2021-04-21</p>	<p>This is a standard PCR equivalent test with PCR level sensitivity.</p> <p>Only one priority sample will be processed per patient within a 72 hour period.</p> <p>All SARS-CoV-2-positive specimens will be automatically tested for Variants of Concern (VOC). This test will screen for the presence of gene mutations (N501Y and E484K) associated with commonly circulating variants. The N501Y mutation is present in the UK (B.1.1.7) variant, while the E484K mutation is present in both the South African (B.1.351) and Brazilian (P.1) variants. The (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Coronavirus SARS-CoV-2 2019 Molecular test, (RCOVID) <b>No longer available</b>						
Coronavirus SARS-CoV-2 2019 Screen (COVIDSCR)	Microbiology	Bronchial Alveolar Lavage Nasopharyngeal Swab Nasal/Mid-Turbinate swab Sputum Throat swab Tracheal Aspirate VIROLOGY REQUISITION	Testing is performed 7 days per week at PaLM Microbiology.		2020-07-13	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cortisol Level Post-Dexamethasone, Plasma/Serum	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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. &gt; 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><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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. &gt; 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-<math>\alpha</math>-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 <u>ACTH Stimulation Test, Plasma/Serum</u> )						
COVID Serology (see <u>Anti-SARS-CoV-2 Total Antibody</u> )						
Coxiella burnetti Serology (see <u>Q fever Serology</u> )						
CPE Screen (see <u>Carbapenemase Producing Enterobacteriaceae Screen</u> )						
CPK Total (see <u>Creatine Kinase - CK,Plasma</u> )						

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><b>Pediatric:</b> 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: &lt;712 U/L 6 days - 12 months: &lt;295 U/L 1 year - 17 years: &lt;247 U/L</p> <p>Adult: Male &gt;18 years: &lt;190 U/L Female &gt;18 years: &lt;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 tube or 5 mL Gold top Vacutainer tube <b>Pediatric:</b> 0-2 years: 0.5 mL Green or Gold top Microtainer 2-10 years: 3 mL Green or Gold 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
<p>Cryoglobulin Serum and Cryofibrinogen Plasma Panel</p> <p>Cryoglobulin, Serum</p> <p>Cryofibrinogen, Plasma</p>	<p>Clinical Immunology</p>	<p>3 x 6 mL Red Top Vacutainer tubes</p> <p>2 x 4 mL Lavender Top Vacutainer tubes</p> <p>1 x 4.5 ml Green Top Vacutainer tube</p> <p><b>(Note: this tube does not need to be placed in thermos)</b></p> <p>GENERAL LABORATORY REQUISITION</p>	<p>Monday-Thursday. No STAT holidays.</p>	<p>Negative</p>	<p>2020-10-28</p>	<p>Immunofixation for identification of cryoprecipitate will only be performed on new cryoglobulin and cryofibrinogen positive samples, once per patient.</p> <p>The final report for positive cryoglobulins will include:</p> <p>1)Cryoglobulin type:</p> <p>    Type I - Monoclonal immunoglobulins. May be associated with Waldenström's macroglobulinemia, multiple myeloma, monoclonal gammopathy of undetermined significance, and other lymphoproliferative diseases.</p> <p>    Type II - A mixture of immunoglobulins (usually monoclonal IgM kappa rheumatoid factor complex (more...))</p>

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 <sub>2</sub> or K <sub>3</sub> EDTA  Note: Specimens anticoagulated with heparin and oxalate are <b>not</b> 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	<b>Adult:</b> 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 <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 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  <b>Pediatric:</b> 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, <i>Pediatr Nephrol</i> 18: 981-985, 2003  CYSC eGFR calculation (Filler G, Lepage N, 2003) eGFR: < 15 mL/min/1.73 m <sup>2</sup> Consistent with kidney failure  eGFR: 15-29 mL/min/1.73 m <sup>2</sup> Consistent with severe chronic kidney disease  eGFR: 30-44 mL/min/1.73 m <sup>2</sup> 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.  Specify Cysticercosis in the Specimen Description field when placing order in PowerChart and on Public Health Requisition.
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 <b>must</b> be made in advance by calling 519-685-8500 Specimen Receiving ext. 71561	≤ 0.200 nmol/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cystinosis (see <u>Cystine, Leukocyte</u> )						
Cystinuria (see <u>Amino Acids, 24-Hour Urine</u> )						
Cytomegalovirus PCR (Viral Load) (see <u>CMV PCR</u> )						
Cytomegalovirus Serology CMV IgM/IgG	Core (UH)	5 mL Gold or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	24/7	See report	2006-07-01	
D-ALA (see <u>Porphyrin Precursors, 24-Hour Urine, Porphyrin Precursors, Random Urine</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
D-Dimer	Core	2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer  <b>Pediatric:</b> 1.8 mL Blue (3.2% Sodium Citrate) *In cases where access is difficult, a 0.9 mL Blue top tube is acceptable GENERAL LABORATORY REQUISITION	As required	See Interpretive Comments on report	2010-06-02	<p><b>Inpatient</b> D-Dimer requests will not be performed routinely. These requests must be authorized by a Hematologist.</p> <p>During regular working hours 0900-1700 contact Dr. M. Kovacs (pager 15182). After 1700 contact the on call Hematologist (pager 12222).</p> <p>All other D-Dimer requests will be processed including Emergency departments, Outpatient Clinics, private Physician's Office and referring Institutions.</p> <p><u>Caution:</u></p> <p>D-Dimer: when used in patients with a low clinical probab (more...)</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
D-Lactate, Serum Lactate-D	Toxicology/Special Chemistry	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Weekly	<0.31 mmol/L	2009-02-06	
DAT (see <u>Direct Antiglobulin Test</u> )						
Deceased Donor HLA Typing and Deceased Donor Crossmatch (see <u>HLA Workup Deceased Donor</u> )						
Dehydroepiandrosterone Sulfate (see <u>DHEA Sulfate, Plasma/Serum</u> )						
Delta-aminolevulinic acid (see <u>Porphyrin Precursors, 24-Hour Urine, Porphyrin Precursors, Random Urine</u> )						
Demethylhydrazine (see <u>Diphenhydramine, Urine Qualitative</u> )						
Dengue Fever (see <u>Arbovirus Flavivirus Serology/PCR</u> )						
Depakene (see <u>Valproic Acid, Serum/Plasma-Total, Valproic Acid-Free, Serum</u> )						
Desethylamiodarone (see entry for Amiodarone)	Toxicology/Special Chemistry	See Amiodarone entry GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	2.3-3.9 umol/L		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Desipramine, Serum/Plasma Norpramine Pertofone	Core	5 mL Gold top Vacutainer or 4 mL Lavender EDTA top Vacutainer tube  Pediatric: 0-2 years: Red 0.5 Microtainer 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	0 - 1140 nmol/L	2007-03-05	<b>Toxic:</b> Greater than 1800 nmol/L Desipramine is also the metabolite of Imipramine, and is measured routinely when Imipramine is prescribed.
Desmethylclomipramine (metabolite) (see <u>Clomipramine and Metabolite, Serum</u> )						
Desyrel (see <u>Trazodone</u> )						
Dextroamphetamine (see <u>Amphetamine Screen, Urine</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
DHEA Sulfate, Plasma/Serum Dehydroepiandrosterone Sulfate DHEAS	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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>	Batched, run on Tuesdays	<p><u>Child:</u> &lt; 1 week: 2.9 16.5 mol/L 1 4 weeks: 0.9 11.7 mol/L 1 12 months: ≤ 3.4 mol/L 1 4 years: ≤ 0.5 mol/L 5 9 years: ≤ 2.3 mol/L</p> <p><u>Male:</u> 10 14 years: 0.7 6.7 mol/L 15 19 years: 1.9 13.4 mol/L 20 24 years: 5.7 13.4 mol/L 25 34 years: 4.3 12.2 mol/L 35 44 years: 2.4 11.6 mol/L 45 54 years: 1.2 9.0 mol/L 55 64 years: 1.4 8.0 mol/L 65 74 years: 0.9 6.8 mol/L ≥ 75 year (more...)</p>	2018-03-06	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Rheumatoid factor &gt; 80 IU/mL may cause interference with this assay.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
DHEAS (see <u>DHEA Sulfate, Plasma/Serum</u> )						
DHT (see <u>Dihydrotestosterone, Serum</u> )						
Dibucaine Number (see <u>Cholinesterase Phenotype (includes Cholinesterase, Total Activity)</u> )						
DIC Screen (see <u>Disseminated Intravascular Coagulation Screen</u> )						
Differential Bone Marrow (see <u>Bone Marrow Aspirate Examination</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Differential Leukocyte Count (Peripheral Blood) White Blood Cell Differential Lymphocytes Monocytes Neutrophils Bands Eosinophils Basophils	Core	<p><b>Adult:</b> 4 mL K<sub>2</sub> EDTA (Lavender) Vacutainer tube</p> <p><b>Pediatric Venous:</b> 2 mL Paeds K2 EDTA (Lavender) Vacutainer</p> <p><b>Pediatric (Capillary):</b> 0.5 mL MAP K<sub>2</sub> EDTA (Lavender) Microtube 0.5 mL K<sub>2</sub> EDTA (Lavender) Microtube GENERAL LABORATORY REQUISITION</p>	As required	<p>Lymphocytes: 18 yrs.: 1.0-4.0 x 10<sup>9</sup>/L 10-17 yrs.: 1.5-4.0 x 10<sup>9</sup>/L 2-9 yrs.: 2.0-8.0 x 10<sup>9</sup>/L 1-23 months: 4.0-10.5 x 10<sup>9</sup>/L Newborn-30 days: 2.0-17.0 x 10<sup>9</sup>/L</p> <p>Monocytes: &gt;18 yrs.: 0.2-0.8 x 10<sup>9</sup>/L 10-17 yrs.: 0.2-0.8 x 10<sup>9</sup>/L 2-9 yrs.: 0.2-0.8 x 10<sup>9</sup>/L 1-23 months: 0.2-1.5 x 10<sup>9</sup>/L Newborn-30 days: 0.2-3.1 x 10<sup>9</sup>/L</p> <p>Neutrophils: &gt;18 years: (more..)</p>	2007-07-18	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Digoxin Lanoxin	Core UH & VH	<p>4.5 mL Green (Lithium Heparin) top Vacutainer tube</p> <p>Plasma from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable.</p> <p><b>Pediatric:</b>  0-2 years: 0.5 mL Green Microtainer  2-10 years: 2 mL Green top tube  GENERAL LABORATORY REQUISITION</p>	As required	<p>Therapeutic range: 1.0 to 2.6 nmol/L</p> <p>Congestive heart failure: 0.6 to 1.0 nmol/L</p>	2008-11-15	<p>CRITICAL VALUE to be phoned to Nurse or Physician immediately:</p> <p><b>Toxic:</b>  Serum/Plasma &gt;3.0 nmol/L  Therapeutic digoxin concentrations vary significantly, depending upon the individual. The lower limit for one patient may be ineffective in another, while the upper limit may prove toxic in a third. The physician should determine the appropriate reference interval for each patient.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Dihydropteridine Reductase, Dried Blood Spot PKU-DHPR Deficient	Biochemical Genetics	Filter Paper with 6 mL Green (Sodium Heparinized) top Vacutainer BIOCHEMICAL GENETICS LAB REQUISITION	As required	7-22 U/g Hb	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Dihydrotestosterone, Serum DHT	Endocrinology	<p><b>Adult:</b> 5 mL Gold top Vacutainer</p> <p><b>Pediatric:</b> 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 top (Li-Heparin) or Lavender top (EDTA) tubes are <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800-1600	<p><u>Male:</u> &lt; 8 years: ≤ 632 pmol/L 8 18 years: ≤ 3367 pmol/L adult: 860 3406 pmol/L</p> <p><u>Female:</u> &lt; 8 years: ≤ 632 pmol/L 8 18 years: ≤ 1916 pmol/L premenopausal adult: 83 1266 pmol/L postmenopausal: 34 623 pmol/L</p>	2009-02-12	Decreased in 5alpha-reductase deficiency.

Dilantin (see Phenytoin, Serum/Plasma-Total)



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Diphenhydramine, Urine Qualitative Demehydrinate Gravol Benadryl	Toxicology/Special Chemistry	Minimum 10 mL random urine collected in a sterile container GENERAL LABORATORY REQUISITION	Monday-Friday: 0800-1600		2011-06-14	
Direct (see <u>Bilirubin- Direct</u> )						
Direct Antiglobulin Test DAT Coombs' Test	Blood Transfusion	6 mL Pink (EDTA) top Vacutainer tube BLOOD TRANSFUSION REQUISITION or Electronic order	Daily	See report		
Direct Renin (see <u>Renin, Plasma</u> )						
Disseminated Intravascular Coagulation Screen DIC Screen	Core	4 mL Lavender (K <sub>3</sub> EDTA) and 2.7 mL Blue (3.2% Sodium Citrate) Vacutainer tubes GENERAL LABORATORY REQUISITION	As required	See individual ranges and values for INR, PTT, Platelet Count and Fibrinogen.		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
DNA/RNA Banking Banking	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		<p>For more information click on: Molecular Diagnostic Laboratory. N/A</p> <p>The DNA/RNA will be extracted and stored in a manner suited to long-term storage (banking). Any referrals at a later date to this sample should be based on the name given above and the sample number to facilitate an efficient recovery of the sample from storage. This service is provided for clinical indications only. Please consult with the director before requesting the banking of samples. DNA is routinely stored in Low TE and frozen at minus 80 degrees Celsius.</p> <p>RNA is routine (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Donath-Landsteiner Hemolysin Test (see <u>PCH Donath-Landsteiner Test</u> )						
Donor Screen (see <u>Hepatitis Donor Transplant Screen</u> )						
Dopamine (see <u>Catecholamines, Plasma (Norepinephrine, Epinephrine, Dopamine), Catecholamines, Urine</u> )						
Doriden (see <u>Glutethimide, Serum</u> )						
Down Syndrome Screen (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
Doxepin + Desmethyldoxepin, Serum/Plasma Sinequan	Core	2 x 6 mL Gold top Vacutainer or 2 x 4 mL Lavender top EDTA Vacutainer tube  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Doxepin + Desmethyldoxepin: 350-1100 nmol/L	2005-07-01	
Duodenal Brush/Wash (see <u>Gastrointestinal/Hepatobiliary Specimens for Cytology</u> )						
(Each component may be ordered separately) (see <u>Complement Components</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
E.coli 0157:H7 Toxin	Microbiology (VH)	Faeces MICROBIOLOGY REQUISITION For full work up: PUBLIC HEALTH LABORATORY TEST REQUISITION	<b>Done by special request only.</b> This test will be performed only after consultation and approval by a Medical Microbiologist.  Referred weekdays to the Public Health Laboratory.			
E1 (see <u>Estrone, Serum/Plasma</u> )						
E2 (see <u>Estradiol, Plasma/Serum</u> )						
Ear Culture	Microbiology (VH)	Ear, ear drainage fluid, Tympanocentesis fluid MICROBIOLOGY REQUISITION	Daily		2012-03-28	
Eastern Encephalitis (see <u>Arbovirus Flavivirus Serology/PCR</u> )						
EBV IgM/IgG (see <u>Epstein Barr Virus Serology</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
EBV PCR Quantitative Epstein Barr Virus Epstein Barr Virus PCR (Viral Load)	Virology Laboratory	See Special Processing for further information: 4 mL Lavender top (EDTA) Vacutainer tube VIROLOGY LABORATORY TEST REQUISITION	Samples are tested twice a week on Tuesday and Thursday. STAT requests must be approved by a Medical Microbiologist, on call.	See report	2006-07-01	
Echinococcus (see <u>Ova and Parasites-Blood and Tissue</u> )						
Echinococcus Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekly to the National Reference Centre for Parasitology		2010-09-13	
Ecstasy (see <u>Amphetamine Screen,Urine</u> )						
Effusion Washing (see <u>Fluids for Cytology</u> )						
eFTS (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
EGFR NGS	Molecular Diagnostics	FFPE Refer to Pathology	Monday to Friday 0800-1600h	See report		<p>Patient must meet CCO criteria for funded testing</p> <p>N/A</p> <p>The National Comprehensive Cancer Network (NCCN) recommends testing for EGFR mutations and ALK rearrangements in all patients with recurrent or metastatic lung adenocarcinomas in order to guide therapy(PMID: 22138009). The College of American Pathologists (CAP), International Association for the Study of Lung Cancer (IASLC), and Association for Molecular Pathology (AMP) have prepared a joint guideline that provides a detailed description of the patient and specimen requirements (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Elastase 1 (see <u>Fecal Elastase</u> )						
Elavil (see <u>Amitriptyline, Serum/Plasma</u> )						
Electrolytes, Fluid Sodium (fluid) Potassium (fluid) Chloride (fluid)	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report	2010-05-17	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Electrolytes, Plasma Sodium Potassium Chloride CO2 GAP	Core	4.5 mL Green (Lithium Heparin) top Vacutainer  Serum from a 5 mL Gold top or 6 mL Red top is also acceptable.  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Sodium: 135-145 mmol/L Potassium: 3.5-5.0 mmol/L (<3 months: 4.0-6.5 mmol/L) Chloride: 98-107 mmol/L CO <sub>2</sub> : 22-29 mmol/L	2008-11-15	Potassium results may be affected by hemolysis. Sodium: <120 or >160 mmol/L Potassium: <3.0 or >6.0 mmol/L Of use in monitoring electrolyte status, interpretation of acid-base balance and evaluation of hydration status.  Potassium: potassium is largely intracellular cation and plasma levels are, at best, only a general guide to the total body potassium content. In some cases (e.g. untreated diabetes), plasma potassium may be increased when total body potassium is depleted.  CO <sub>2</sub> : for complete evaluation of (more...)



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Electrolytes,Urine Sodium (urine) Potassium (urine) Chloride (urine)	Core	24 Hour Urine or Random Urine GENERAL LABORATORY REQUISITION	As required	Normal Diet: Sodium: 40-200 mmol/L Potassium: 25-125 mmol/L		
Electron Microscopy - Tissue, Bone Marrow, Blood	Pathology	Tissue/Blood & Bone Marrow SURGICAL PATHOLOGY REQUISITION Tissue: In general EM is added to the order for a tissue specimen. E- order choosing appropriate specimen. Blood, bone marrow: E order choosing EM, Blood Only. See Identification of Clinical Specimens	As required	N/A		Please call Electron Microscopy at ext. 78977 for any questions regarding this test.  See report See above
Elixophyllin (see <u>Theophylline, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
EMA (see <u>Antiendomysial Antibodies</u> )						
Endocervical Smear (see <u>Gynaecological Conventional Smear for Cytology</u> )						
Endomyocardial biopsy (see <u>Heart Biopsy</u> )						
Enhanced First Trimester Screen (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
Entamoeba histolytica IgG (see <u>Amoebic Serology</u> )						
Enterovirus PCR - ENVPCR	Virology Laboratory	<b>CSF</b> <b>Fluids</b> - pericardial, pleural, peritoneal <b>Swabs</b> - throat, rectal, mouth <b>Tissue</b> - lymph nodes, brain VIROLOGY LABORATORY REQUISITION	Samples are tested three times weekly on Monday, Wednesday and Friday.	See report	2011-10-31	
Eosinophils (see <u>Differential Leukocyte Count (Peripheral Blood)</u> )						
Epinephrine (see <u>Catecholamines, Plasma (Norepinephrine, Epinephrine, Dopamine), Catecholamines, Urine</u> )						
Epival (see <u>Valproic Acid, Serum/Plasma-Total</u> )						
EPO (see <u>Erythropoietin, Serum/Plasma</u> )						
Epstein Barr Virus PCR (Viral Load) (see <u>EBV PCR</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Epstein Barr Virus Serology Infectious Mononucleosis EBV IgM/IgG	Endocrinology	<b>Adult:</b> 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube  Light Green (Li-Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600  EBV serology results for TGLN donor samples will be reported by the business day following sample collection.		2006-07-01	All EBVIGM orders will include both IgM and IgG. EBVIGG orders will include only IgG.  A single serum sample will yield significant results for establishing previous exposure.
ERAS (see <u>KRAS</u> )						
Erythrocyte protoporphyrin (see <u>Protoporphyrin, Whole Blood</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Erythrocyte Sedimentation Rate ESR Sed Rate Sedimentation Rate	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-10 years: 3.0 mL Lavender top GENERAL LABORATORY REQUISITION	As required	Male: 0-10 mm/h  Female: 0-20 mm/h	2008-04-07	

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Erythropoietin,Serum/ Plasma EPO	Core	5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-10 years: 2 mL Gold top  Light Green (Li- heparin) top tubes are also acceptable. GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	<u>Male:</u>  <1 year: Not established 1-3 years: 1.7- 17.9 mIU/mL 4-6 years: 3.5- 21.9 mIU/mL 7-9 years: 1.0- 13.5 mIU/mL 10-12 years: 1.0- 14.0 mIU/mL 13-15 years: 2.2- 14.4 mIU/mL 16-18 years: 1.5- 15.2 mIU/mL >18 years: 2.6- 18.5 mIU/mL  <u>Female:</u>  <1 year: Not established 1-3 years: 2.1- 15.9 mIU/mL 4-6 years: 2.9- 8.5 mIU/mL 7-9 years: 2.1- 8.2 mIU/mL 10-12 y (more...)	2009-02-12	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Esophageal Brush/Wash (see <u>Gastrointestinal/Hepatobiliary Specimens for Cytology</u> )						
ESR (see <u>Erythrocyte Sedimentation Rate</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Estimated Glomerular Filtration Rate (eGFR)	Core			<p>For patients under 18 years of age eGFRs are reported as: eGFR calculation is not available for patients under 18 years of age.</p> <p>eGFR: &lt; 15 mL/min/1.73 m2 Consistent with <b>kidney failure</b></p> <p>eGFR: 15-29 mL/min/1.73 m2 Consistent with <b>severe chronic kidney disease</b></p> <p>eGFR: 30-44 mL/min/1.73 m2 <b>Moderate to severe decreased kidney function</b> is consistent with chronic (more...)</p>	2016-01-04	<p>eGFR is calculated using the CKD-EPI 2009 equation. Multiply eGFR by 1.159 for patients of African descent.</p> <p>Results for eGFR should be interpreted in concert with urine albumin creatinine ratio (ACR). eGFR is not valid for extreme muscle mass, pregnancy, drug dosing and acute kidney injury and not normalized for body surface area</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Estradiol, Plasma/Serum 17 Beta Estradiol E2 Major Estrogen	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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>Male &gt;18 years: ≤159 pmol/L</p> <p><b>Female:</b></p> <p>Follicular phase: 114 - 33 2 pmol/L</p> <p>Early follicular phase: 76-231 pmol/L</p> <p>Intermediate follicular phase: 96 294 pmol/L</p> <p>Late follicular phase: 182 858 pmol/L</p> <p>Ovulatory phase: 222 1959 pmol/L</p> <p>Luteal phase: 222 8 54 pmol/L</p> <p>Early luteal phase: 188 658 pmol/L</p> <p>Interme (more...)</p>	2015-06-01	<p>Biotin, fulvestrant (Faslodex), and steroid drugs may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Estradiol can be used as an indicator of follicular function and provides information in the diagnosis of amenorrhea and infertility. During pregnancy estradiol levels increase.</p> <p>In males, estradiol can be used to evaluate feminizing syndromes.</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Estrone, Serum/Plasma E1	Core	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	<b>Male:</b> 105-275 pmol/L  <b>Female:</b> Follicular Phase: 144 - 487 pmol/L Luteal Phase: 200 - 663 pmol/L Peri-ovulatory: 214 - 947 pmol/L  Post- menopausal: With Estrogen HRT: 189-1803 pmol/L Without Estrogen HRT: 114-370 pmol/L	1999-02-05	
ETG (see <u>Ethyl Glucuronide</u> )						
Ethanol (see <u>Alcohol Fractionation (by Gas Liquid Chromatography)</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ethanol, Serum/Plasma Ethyl Alcohol	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Negative  Values > 2.2 mmol/L will flag as High.	2010-06-01	Also available as part of Alcohol Fractionation by Gas Liquid Chromatography with Biochemist's approval. 33.0 mmol/L or greater  Spin all urine samples to remove debris
Ethosuximide, Serum Anticonvulsant Zarontin	Core	5 mL Gold or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	As required Referred out Monday-Friday	<b>Therapeutic:</b>  283- 708 µmol/L	2008-02-05	
Ethyl Alcohol (see <u>Ethanol, Serum/Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ethyl Glucuronide ETG	Core	Urine (Random) GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday Testing is performed Fridays at CAMH	Creatinine: 2.0 - 20.0 mmol/L  pH - Urine: 4.6 - 8.0  Ethanol - Urine: ≤2.4 mmol/L  <u>Ethyl Glucuronide:</u> Negative <100 g/8.8 mmol Cre Indeterminate 100 - 200 g/8.8 mmol Cre Positive ≥200 g/8.8 mmol Cre	2019-05-15	<p>Comments: Testing is available to Liver Transplant patients only. Routine testing for liver transplant is approved for sendout to CAMH.</p> <p>Priority testing is available for initial ETG testing to allow a patient to be listed on the Transplant List. Testing via ICL to CAMH is preferred (notify ICL/CAMH that sample is a priority sample for Transplant Listing).</p> <p><u>*Requires Biochemist Approval</u> Parallel testing to CAMH and Dynacare is available on a case by case basis; The following criteria would need to be considered for parallel testing -required to list (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ethylene Glycol (see <u>Glycol Screen</u> )						
Eye Culture	Microbiology (VH)	Conjunctival swab or scraping Corneal scrapings Vitreous fluid or washings MICROBIOLOGY REQUISITION	Daily		2008-11-03	Organisms are more readily detected in scrapings than from a swab.  Conjunctival samples from babies less than 2 weeks old will be investigated for N. gonorrhoeae. Swabs - <b>EYEC</b> Scrapings - <b>TISC</b> Fluids - <b>FLDS</b>
F8 (see <u>Coagulation Factor Assays</u> )						
F9 (see <u>Coagulation Factor Assays</u> )						
Fabry's Disease (see <u>Alpha-Galactosidase, Leukocyte, Alpha-Galactosidase, Plasma</u> )						
Factor Assays (II, V, VII, VIII, IX, X, XI, XII) (see <u>Coagulation Factor Assays</u> )						
Factor IX (see <u>Coagulation Factor Assays</u> )						
Factor IX Inhibitor (see <u>Coagulation Factor Inhibitor Assays (Usually VIII and IX)</u> )						
Factor V (see <u>Thrombophilia (associated with Factor V deficiency)</u> )						
Factor VIII (see <u>Coagulation Factor Assays</u> )						
Factor VIII Inhibitor (see <u>Coagulation Factor Inhibitor Assays (Usually VIII and IX)</u> )						
Faeces Culture (see <u>Stool Culture</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
FAI (see <u>Free Androgen Index, Plasma/Serum</u> )						
Familial Amyloidotic Polyneuropathy-TTR FAP TTR	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		<p>For more information click on: Molecular Diagnostic Laboratory</p> <p>Familial Amyloidotic Polyneuropathy (FAP) is a neurodegenerative disorder characterized by extracellular deposition of transthyretin (TTR) amyloid fibrils, particularly in the peripheral nervous system (PMID:11569892, PMID:8095302). A number of mis-sense mutations in the human prealbumin gene have been directly linked to FAP.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Familial Medullary Thyroid Carcinoma FMTC	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		*FMTC Approx. 88% of families with FMTC have an identifiable RET mutation (PMID:7907913,PMID:7595170). These mutations occur at one of the five cysteine residues (codons 609, 611, 618, 620 & 634) with mutations of codons 618, 620 & 634 each accounting for 25%-35% of mutations. Mutations in exons 13 & 14 (at codons 768 & 804) appear to account for a small percent of mutations in families with FMTC(PMID:7845675, PMID:9111992,PMID:10876191, PMID:11114642). Mutations in codons 533, 630, 631, 790, 791, 844 & 891 (exons 8, 11, 13, 14 & 15) have also been identified in a f (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Familial Thrombophilia (see <u>Thrombophilia (associated with Factor V deficiency)</u> )						
Fanconi Anemia, Breakage Study Chromosome Analysis, Breakage Study, Fanconi Anemia Breakage Study, Fanconi Anemia	Cytogenetics (VH)	Blood collected in Sodium Heparin, kept at room temperature 0-3 months: 1-3 mL 3 months -12 years: 3-6 mL 12 years Adult: 6 mL Hospital for Sick Children Cytogenetics Requisition	Monday or Tuesday preferred	See final report	2015-10-14	The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab).  For additional information please refer to the Molecular Diagnostic Laboratory N/A See final report
FAP (see <u>Familial Amyloidotic Polyneuropathy-TTR</u> )						
Farmer's Lung (see <u>Farmers Lung IgG Antibodies, Serum</u> )						
Farmers Lung (see <u>Farmers Lung IgG Antibodies, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Farmers Lung IgG Antibodies, Serum Allergic Alveolitis Allergic Lung Serology Farmer's Lung Farmers Lung Farmers Lung Precipitins Micropolyspora faeni M. faeni Thermoactinomyces vulgaris T. vulgaris Hypersensitivity Pneumonitis	Core	<b>Adult:</b> 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 2-10 years: 3 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	M. faeni IgG antibodies: <5.2 mg/L T. vulgaris IgG antibodies: <21.5 mg/L	2019-07-03	
Farmers Lung Precipitins (see <u>Farmers Lung IgG Antibodies, Serum</u> )						
Fasting Glucose (see <u>Glucose, Plasma</u> )						
Fat Pad for Amyloid (see <u>Abdominal Fat Pad FNAB for Amyloid Detection</u> )						
Fecal Calprotectin (see <u>Calprotectin, Stool</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Fecal Elastase Elastase 1	Core	Random stool GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday as required	Suggestive of Pancreatic Insufficiency: <100 µg/g  Suggestive of Pancreatic Sufficiency: >100 µg/g	2009-07-06	Referred out Monday - Thursday  Fecal elastase refers to the testing of the concentration of the pancreatic elastase-1 enzyme found in fecal matter with an enzyme- linked immunosorbent assay (ELISA). Results of this test can give a good indication of exocrine pancreatic status and is less invasive and expensive that the current gold standard, secretin- cholecystokinin test.1 Levels of fecal elastase lower than 200 µg / g of stool indicate an exocrine insufficiency. Correlations between low levels and chronic pancreatitis2 and cancer3 have been reported.  <u>References:</u> (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<b>Fecal Occult Blood- Testing cards available only for Pediatric areas</b>	Core	Fresh random stool applied to Hemoccult card GENERAL LABORATORY REQUISITION	As required	Negative	2009-08-27	
Fentanyl, Urine Qualitative	Toxicology/Special Chemistry	Minimum 10 mL random urine collected in a sterile container GENERAL LABORATORY REQUISITION	Monday-Friday: 0800-1600		2011-06-14	
Ferritin Level (see <a href="#">Hemoglobinopathy Screen</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ferritin, Plasma/Serum	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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><u>Male:</u> 0 &lt;1 month: 150.0 973.0 g/L1 1 &lt;6 months: 8.5 580.0 g/L1 6 months &lt;10 years: 14.0 101.1 g/L1 10 &lt;18 years: 15.1 201.1 g/L2 ≥ 18 years: 31.3 - 408.5 g/L2</p> <p><u>Female:</u> 0 &lt;1 month: 150.0 973.0 g/L1 1 &lt;6 months: 8.5 580.0 g/L1 6 months &lt;16 years: 14.0 101.1 g/L1 16 &lt;51 years: 13.0 150.0 g/L3 ≥ 51 years: 11.0-327.8 g/L2</p> <p>1.Bohn MK, Higgins (more...)</p>	2008-11-15	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Starting at a hemolysis index of 100, the following comment will be given: Interpret ferritin result with caution since hemolysis may artificially increase result.</p> <p>Starting at a hemolysis index of 500, the test will be cancelled.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Fetal Fibronectin fFN	Core	Cervicovaginal swab using the Adeza Biomedical specimen collection kit GENERAL LABORATORY REQUISITION	As required	Negative or Positive	2007-01-18	<p>Patients with suspected or known placental abruption, placenta previa, or moderate or gross vaginal bleeding should not be tested.</p> <p>Positive during second and third trimesters suggests twofold to fourfold higher risk for preterm delivery.</p> <p>Positive interference from semen has not been ruled out. Specimens should not be collected less than 24 hours after intercourse. Negative fFN results would be valid.</p> <p>Assay interference from the following components has not been ruled out: douches, white blood cells, red blood cells, bacteria, and bilirubin. (more...</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Fetal Maternal Hemorrhage Screen Kleihauer	Flow Cytometry (VH)	Peripheral blood collected in a 4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube from the post-partum mother <b>or</b> In cases of fetal trauma: Peripheral blood collected in a 4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube from the ante-partum mother. <b>BLOOD TRANSFUSION LABORATORY REQUISITION</b>	Monday-Friday 0800-1500  STAT Kleihauer Tests that arrive after hours are done in the Blood Transfusion Laboratory, VH.	See report	2006-06-01	Sample is forwarded to Flow Cytometry within 1 hour after determination of test requirement, to ensure results are available to the Blood Transfusion Laboratory before 72 hours post partum. Consult the Blood Transfusion Laboratory (519) 685-8500 x 58292 Samples are routinely drawn on all Rh negative mothers post-delivery, however the test is only performed if the baby is Rh positive. The test is used to quantitate the volume of cells that contain fetal hemoglobin in a blood specimen. This is usually done to determine the volume of fetal-maternal hemorrhage during pregnancy or at the time of deliver (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
fFN (see <u>Fetal Fibronectin</u> )						
Fibrinogen	Core UH & VH	2.7 mL Blue (3.2% Sodium Citrate) Vacutainer tube  <b>Pediatric:</b> 1.8 mL Blue (3.2% Sodium Citrate) top Vacutainer tube *In cases where access is difficult, a 0.9 mL Blue top tube is acceptable GENERAL LABORATORY REQUISITION	As required	1.6-3.4 g/L	2011-01-14	Fibrinogen levels ordered at St. Joseph's Health Care will be sent by cab to University Hospital for analysis.  INR/PTT will be performed at St. Joseph's Health Care Core Laboratory and the specimen will then be sent <b>on ice</b> to University Hospital for a fibrinogen level. ≤1 g/L Decreased level indicates increased consumption, decreased production or dysfunctional fibrinogen.
Filaria Screen (see <u>Blood Parasite Screen</u> )						
Final Kidney Living donor Crossmatch (see <u>HLA Workup Living Donor Additional or Final</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
FISH Studies Fluorescent In Situ Hybridization	Cytogenetics (VH)	<u>Blood:</u> 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. or <u>Bone Marrow:</u> 1-2 mL of bone marrow in a 3 mL Sodium Heparin Vacutainer (dark green top tube) or <u>Lymph            Node/Tumor:</u> 2-3 mm <sup>2</sup> Lymph (more...)	As required	See final report		The Cytogenetics Lab is staffed from 0700- 1700 (Monday-Friday), Ext. 78974 (office), or 78975 (lab).  For additional information please refer to the Molecular Diagnostic Laboratory See final report N/A <u>Solution for Specimen            Collection:</u> 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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
FK506 (see <u>Tacrolimus</u> )						
Flu Screen (see <u>Respiratory Virus Panel (RPCR)</u> )						
Fluid Culture (see <u>Body Fluid Culture (excluding blood, CSF, urine)</u> )						
Fluids for Cytology Effusion Washing Pleural, Peritoneal, Pericardial, CSF, Ocular	Cytopathology- UH	Body Fluid CYTOPATHOL OGY REQUISITION- NON- GYNAECOLOG ICAL AREA	Weekdays		2005-08-01	<p data-bbox="1652 410 2003 654">Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392</p> <p data-bbox="1652 792 2003 1247">Clinical history is an important component for diagnostic interpretation. The specimen is Thinprep processed so the total specimen volume should not exceed one orange top specimen container with Cytolyt included.</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Flunitrazepam, Urine Qualitative Rohypnol	Toxicology/Special Chemistry	Minimum 10 mL urine collected in a sterile container GENERAL LABORATORY REQUISITION	Monday-Friday: 0800-1600		2011-06-14	
Fluorescent In Situ Hybridization (see <u>FISH Studies</u> )						
Fluoxetine, Serum/Plasma Prozac Norfluoxetine	Core	6 mL Red top Vacutainer tube or 4.5 mL Lavender top tube  <b>Pediatric:</b> 0-2 years: 2 mL Red top  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	<b>Fluoxetine:</b> 160-1600 nmol/L  <b>Norfluoxetine:</b> 170-1700 nmol/L	2007-08-28	
FMTC (see <u>Familial Medullary Thyroid Carcinoma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Folate, Red Blood Cells RBC Folate	Core	<p><b>Adult:</b> 4 mL Lavender top (K<sub>2</sub>- EDTA) Vacutainer tubes</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Lavender top (K<sub>2</sub>-EDTA) Microtainer 2-10 years: 3 mL Lavender top (K<sub>2</sub>-EDTA) Vacutainer tubes</p> <p>GENERAL LABORATORY REQUISITION</p>	Referred out Monday-Thursday	>1475 nmol/L	2017-06-15	<p>Current nutritional supplementation makes folate deficiency exceedingly rare in North America. As of March 31, 2017, there has not been a case of folate deficiency detected in the past 18 months at LHSC. The test should only be considered in suspected severe nutritional deficiency or malabsorption.</p> <p>Freeze whole blood.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Follicle Stimulating Hormone, Plasma/Serum FSH	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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><u>Male:</u> Tanner stage 1: ≤ 3.1 IU/L Tanner stage 2: ≤ 6.9 IU/L Tanner stage 3: ≤ 10.1 IU/L Tanner stage 4: 1.3 - 11.4 IU/L Tanner stage 5: 1.6 - 11.2 IU/L 1 - 5 years: &lt; 1.9 IU/L 5 - 10 years: &lt; 2.3 IU/L Adult: 1.5 - 12.4 IU/L</p> <p><u>Female:</u> Tanner stage 1: ≤ 4.5 IU/L Tanner stage 2: ≤ 7.1 IU/L Tanner stage 3: 1.7 - 8.7 IU/L Tanner stage 4: 1.7 - 10.2 IU/L Tanner stage 5: 1.2 - 9.5 IU/L 1 - 10 years: ≤ (μope...)</p>	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
For: a) Wright's b) Iron Stain c) Cytochemical Stains (see <u>Bone Marrow Aspirate Examination</u> )						
fPSA (see <u>Free Prostate Specific Antigen, Plasma/Serum</u> )						
Fractionated metanephrines (see <u>Metanephrines, Plasma, Metanephrines, Urine</u> )						
Fragile-X Molecular testing for Fragile-X	Cytogenetics (VH)	4 mL peripheral blood in a Lavender EDTA Vacutainer tube KINGSTON GENERAL HOSPITAL MOLECULAR GENETICS REQUISITION	Direct molecular testing for detection of Fragile-X Syndrome is available at Kingston General Hospital which has been funded by the Ministry of Health to provide this service for the Province of Ontario. Any questions or concerns should be directed through the DNA Diagnostic Lab at Kingston General Hospital. See Comments.	See report	2005-08-01	For additional information please contact the DNA Diagnostic Laboratory @ Kingston General Hospital (613) 548- 3232 Ext. 4134. For other Cytogenetics Tests please refer to the Cytogenetics Laboratory Web Page: <a href="http://www.lhsc.on.ca/lab/cytogen">http://www.lhsc.on.ca/lab/cytogen</a>  See report  Avoid collecting and/or shipping specimens on Thursdays and Fridays.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Francisella tularensis Serology Tularensis antibody	Microbiology (VH)	5 mL Gold top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to the Public Health Laboratory		2010-09-13	
Francisella tularensis: PCR	Microbiology	Whole blood: 5 mL (EDTA) Lavender top Vacutainer tube or CSF or Tissue collected in a sterile container National Microbiology Laboratory Requisition	Referred weekdays to the National Microbiology Lab		2014-04-08	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free Androgen Index, Plasma/Serum FAI Free Testosterone	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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 or Gold top tubes are also acceptable</p> <p>Lavender top (EDTA) tubes are <b>NOT</b> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800-1600	<p>Male: 20 49 years: 35.0 92.6 % ≥ 50 years: 24.3 72.1 %</p> <p><u>Female:</u> 20 49 years: 0.3 5.6 % ≥ 50 years: 0.2 3.6 %</p>	2018-03-06	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>The free androgen index (FAI) or free testosterone index (FTI) provides a convenient estimate of the free testosterone level from the independent measurement of both the total testosterone and the sex hormone binding globulin (SHBG) level. It is calculated from the equation:</p> <p>FAI = total testosterone (nmol/L)/SHBG (nmol/L) expressed as a percentage. (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free Dilantin (see <u>Phenytoin,Serum-Free</u> )						
Free Fatty Acids (see <u>Non-esterified fatty acids</u> )						
Free Kappa Light Chains (see <u>Free Light Chains, Serum/Plasma</u> )						
Free Lambda Light Chains (see <u>Free Light Chains, Serum/Plasma</u> )						
Free Light Chains, Serum/Plasma Free Kappa Light Chains Free Lambda Light Chains Serum Free Light Chains	Clinical Immunology	<b>Adult:</b> 5 mL Gold top Vacutainer tube  Red, Light Green (Li-Heparin), or Lavender (EDTA) top tubes are also acceptable <b>GENERAL LABORATORY REQUISITION</b>	Monday - Friday 0800-1600	Free Kappa Chains: 3.3-19.4 mg/L Free Lambda Chains: 5.7-26.3 mg/L Kappa:Lambda ratio: 0.26-1.65 Adjusted Kappa:Lambda ratio for chronic kidney disease: 0.37-3.10	2009-02-13	<b>Note:</b> Serial free light chain analysis should only be performed for patients with AL amyloidosis, light chain myeloma, or non-secretory myeloma. If free light chain testing is ordered and it has been <20 days since the collection date of the last sample run, the test will be cancelled.  A persistent and aberrant Kappa:Lambda ratio supports a diagnosis of monoclonal gammopathy.
Free Phenytoin (see <u>Phenytoin,Serum-Free</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free Prostate Specific Antigen, Plasma/Serum fPSA PSA F Free PSA	Core	<p><b>Adult:</b> 4.5 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>free PSA (g/L): no reference interval available</p> <p>free PSA ratio: The probability of prostate cancer (PCA) is inversely related to the ratio and varies with age. When the total PSA is 4-10 g/L and the free PSA ratio is <math>\leq 0.10</math>, the probability of PCA is 49-65%. When the total PSA is 4-10 g/L and the free PSA ratio is <math>\geq 0.26</math>, the probability of PCA is 9-16%.</p>	2018-03-06	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>If the total PSA result is in the range of 4-10 g/L, a free PSA result could be of value in estimating the risk of prostate cancer in a patient with no previous diagnosis.</p>
Free protoporphyrin (see <u>Protoporphyrin, Whole Blood</u> )						
Free PSA (see <u>Free Prostate Specific Antigen, Plasma/Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free T3, Plasma/Serum Free Triiodothyronine FT3	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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>0 - 6 days: 2.7 - 9.7 pmol/L 6 days - 3 months: 3.0 - 9.3 pmol/L 3 - 12 months: 3.3 - 9.0 pmol/L 1 - 6 years: 3.7 - 8.5 pmol/L 6 - 11 years: 3.9 - 8.0 pmol/L 11 - 20 years: 3.9 - 7.7 pmol/L &gt; 20 years: 3.1 - 6.8 pmol/L Non-thyroidal illness: 1.3 - 6.3 pmol/L First Trimester of Pregnancy: 3.8 - 6.0 pmol/L Second Trimester of Pregnancy: 3.2 - 5.5 pmol/L Third Trimester of Pregnancy: 3.1 - 5.0 pmol/L</p>	2018-03-06	<p>TSH should be the initial test to screen for clinically-suspected hypothyroidism or hyperthyroidism. If TSH is below the lower cut-off, FT4 and FT3 testing will be performed reflexively by the laboratory. If TSH is between the lower and upper cut-offs, no FT4 or FT3 testing will be performed reflexively. If TSH is above the upper cut-off, FT4 testing will be performed reflexively by the laboratory. These cut-offs are the TSH reference intervals in children and the optimal cut-offs to predict abnormal FT4 levels in adults.</p> <p>The TSH cut-offs are: 2 &lt;6 years: &lt;0.70 or &gt;5.97 mIU/L (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free T4, Plasma/Serum Free Thyroxine FT4	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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>0 - 6 days: 11 - 32 pmol/L</p> <p>6 days - 3 months: 12 - 28 pmol/L</p> <p>3 - 12 months: 12 - 26 pmol/L</p> <p>1 - 6 years: 12 - 23 pmol/L</p> <p>6 - 11 years: 13 - 22 pmol/L</p> <p>11 - 20 years: 13 - 21 pmol/L</p> <p>&gt; 20 years: 12 - 22 pmol/L</p> <p>First Trimester of Pregnancy: 12 - 20 pmol/L</p> <p>Second Trimester of Pregnancy: 10 - 17 pmol/L</p> <p>Third Trimester of Pregnancy: 8 - 16 pmol/L</p>	2018-03-06	<p>TSH should be the initial test to screen for clinically-suspected hypothyroidism or hyperthyroidism. If TSH is below the lower cut-off, FT4 and FT3 testing will be performed reflexively by the laboratory. If TSH is between the lower and upper cut-offs, no FT4 or FT3 testing will be performed reflexively. If TSH is above the upper cut-off, FT4 testing will be performed reflexively by the laboratory. These cut-offs are the TSH reference intervals in children and the optimal cut-offs to predict abnormal FT4 levels in adults.</p> <p>The TSH cut-offs are: 2 &lt;6 years: &lt;0.70 or &gt;5.97 mIU/L (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free Testosterone (see <u>Free Androgen Index, Plasma/Serum</u> )						
Free Thyroxine (see <u>Free T4, Plasma/Serum</u> )						
Free Triiodothyronine (see <u>Free T3, Plasma/Serum</u> )						
Freeze Blood (see <u>HLA Freeze PBL, HLA Workup Living Donor Pre-op</u> )						
Frozen Section (see <u>Intra-operative consultation</u> )						
Fructosamine, Serum	Core	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	205 - 285 µmol/L	2005-09-23	
FSH (see <u>Follicle Stimulating Hormone, Plasma/Serum</u> )						
FT3 (see <u>Free T3, Plasma/Serum</u> )						
FT4 (see <u>Free T4, Plasma/Serum</u> )						
Fucosidosis (see <u>Alpha-Fucosidase, Leukocyte/Plasma/Fibroblasts</u> )						
Fungus Culture- Dermatophytes Ringworm Tinea	Microbiology (VH)	Hair Nails Skin MICROBIOLOG Y REQUISITION	Weekdays			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Fungus Culture-Dimorphic Coccidioides Culture Blastomyces Culture Histoplasma Culture Paracoccidioides Culture	Microbiology (VH)	Blood Bone Marrow CSF Body Fluids Respiratory (bronchial wash, sputum, tracheal aspiration) Tissue Wound Material (abscesses, lesions from skin, subcutaneous or mucous membranes). PUBLIC HEALTH LABORATORY TEST REQUISITION	Samples are referred weekdays to the Public Health Lab.			Clinical history is important for adequate testing.



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
FVL (see <u>Screen for Factor V Leiden Mutation</u> )						
G-6-PD Assay (see <u>Glucose-6-Phosphate Dehydrogenase Assay</u> )						
G-Banding (see <u>Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor</u> )						
G6PD Assay (see <u>Glucose-6-Phosphate Dehydrogenase Assay</u> )						
Gabapentin, Serum/Plasma Neurontin	Toxicology/Special Chemistry	6 mL Red or 6 mL Green or 4 mL Lavender top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	12.0 - 120.0 $\mu$ mol/L	2006-06-01	Alert value is 140.0 $\mu$ mol/L.  Minimum effective concentration is 12.0 $\mu$ mol/L. A desirable clinical outcome may be expected between 70.0-120.0 $\mu$ mol/L. Toxicity may occur with increasing frequency above 146.0 $\mu$ mol/L.
GALACTOM (Serum) (see <u>Galactomannan Aspergillus Antigen, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Galactomannan Aspergillus Antigen, Fluid GALTCTOMF ( BAL Fluid)	Clinical Immunology	Bronchoalveolar lavage (BAL) fluid GENERAL LABORATORY REQUISITION	Batched twice weekly Monday/Tuesday and Wednesday/Thursdays routinely  <b>Note:</b> Samples to be in lab no later than noon Monday and Wednesday to be pretreated for set up the following day.	Index: <0.5 Non-Reactive	2013-11-25	<p><b>Test limited to Infectious disease, Hematologists, Respirologists and Microbiologists</b></p> <p>NOTE: Outside clients must have pre-authorization by the LHSC microbiologist before sending.</p> <p>Piperacillin/Tazobactam have been associated with false positive results, if deemed a false positive result please contact the microbiologist.</p> <p>Refer to template associated with the report.</p> <p>Send samples directly to the lab unopened. It is imperative that samples have minimal exposure to air before testing. Store at 2oC-8oC after hours.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Galactomannan Aspergillus Antigen, Serum GALACTOM (Serum)	Clinical Immunology	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Batched twice weekly Monday/Tuesday and Wednesday/Thur sdays routinely <b>NOTE:</b> Samples to be in lab no later than noon <u>Monday</u> and <u>Wednesday</u> .	Index: <0.5 Non- Reactive	2013-11-25	<p><b>Test limited to Infectious disease, Hematologists, Respirologists, Microbiologists</b></p> <p>NOTE: Outside clients must have pre-authorization by the LHSC microbiologist before sending.</p> <p>Piperacillin/Tazobactam have been associated with false positive results, if deemed a false positive result please contact the microbiologist.</p> <p>Refer to template associated with the report. Send samples to the lab <b>unopened</b>. It is imperative that samples have minimal exposure to air before testing. Store (more...)</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Galactose-1-Phosphate and Galactose, Erythrocytes Galactosemia	Biochemical Genetics	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric</b> 0-2 yrs: 3 x 0.5 mL Lavender top 2-10 yrs: 3 mL Lavender top BIOCHEMICAL GENETICS LAB REQUISITION	As required	Galactose-1-Phosphate: 0-50 ug/g Hb  Galactose: <5 ug/g Hb	2010-11-26	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Galactose-1-Phosphate Uridyltransferase- Qualitative, Dried Blood Spot Galactosemia Screen	Biochemical Genetics	Dried blood spots on a Newborn Screening-type card.  Blood can be from a heel prick, finger prick, or Green top (Sodium or Lithium Heparinized) Vacutainer tube. BIOCHEMICAL GENETICS LAB REQUISITION	As required		2010-11-26	
Galactose-6-Sulfatase, Fibroblast MPSIVA Morquio A Disease	Biochemical Genetics	Fibroblast Culture BIOCHEMICAL GENETICS LAB REQUISITION	As required	95-360 nmol/mg protein/17 hr.	2008-06-10	
Galactosemia (see <u>Galactose-1-Phosphate and Galactose, Erythrocytes</u> )						
Galactosemia Screen (see <u>Galactose-1-Phosphate Uridyltransferase-Qualitative, Dried Blood Spot</u> )						
GALTCTOMF ( BAL Fluid) (see <u>Galactomannan Aspergillus Antigen, Fluid</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gamma Glutamyl Transferase, Plasma GGT GGTP	Core	4.5 mL Green (Lithium Heparin) top Vacutainer  Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable.  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	0-5 days: <185 U/L 6 days-6 months: <204 U/L Males >6 months: <61 U/L Females >6 months: <41 U/L	2009-08-07	Hemolysis may affect results  Pediatric values may be high, falling to adult levels at puberty. Elevated in obstructive jaundice, intrahepatic cholestasis and some liver metastases. May be normal or near normal with hepatitis or cirrhosis; also increased by alcohol, anticonvulsants and barbiturates.
Gamma-Hydroxybutyrate, Urine-Qualitative Test GHB	Toxicology/Special Chemistry	Random urine GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Negative	2008-06-06	
GAP (see <u>Electrolytes, Plasma</u> )						
Garamycin (see <u>Gentamicin, Serum/Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gastrin, Serum	Core	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 2-10 years: 3 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION</p>	Referred out Monday-Friday	< 100 ng/L	2017-11-07	<p>Main use is to diagnose Zollinger-Ellison syndrome (gastrinoma).</p> <p>Elevated levels also occur with pernicious anemia, atrophic gastritis, previous vagotomy, renal failure, or use of acid suppressing drugs such as histamine H<sub>2</sub>-receptor antagonists or proton pump inhibitors.</p> <p>Allow blood to clot at room temperature and separate WITHIN 30 minutes by centrifugation. Transfer serum to a labelled tube, cap tightly, and freeze.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gastrointestinal Virus	Microbiology	Faeces (1 to 2 grams) PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to Public Health Laboratory	See report	2019-12-18	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gastrointestinal/Hepatobiliary Specimens for Cytology Esophageal Brush/Wash Stomach Brush/Wash Bileduct Brush/Wash Duodenal Brush/Wash	Cytopathology-UH	Non-Gynaecological: Gastrointestinal/Hepatobiliary CYTOPATHOLOGY REQUISITION-NON-GYNAECOLOGICAL AREA	Weekdays		2005-08-01	Brush devices should be cut just above the brush area and totally immersed in Cytolyt solution.  Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392  Clinical history is an important component for diagnostic interpretation. The specimen is Thinprep processed so the total specimen volume should not exceed one orange top specimen container with Cytolyt included.
Gaucher Disease (see <u>Beta-Glucocerebrosidase, Leukocyte/Fibroblasts</u> )						
GBS Screen (see <u>Group B Streptococcus Screen</u> )						
GC Culture (see <u>Neisseria gonorrhoeae Culture</u> )						
GeneXpert (see <u>Coronavirus SARS-CoV-2 2019 Diagnostic Priority (GXRVP)</u> <b>Adult ED and Critical Care Admissions only</b> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Genomic Microarray (see <u>Prenatal Microarray</u> )						
Gentamicin, Serum/PI asma Garamycin Aminoglycosides	Core (VH)	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.  <b>Pediatric:</b> 0-2 years: 0.6 mL Green top Microtainer (BD 365985) 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	Daily	<u>Therapeutic Range:</u>  <b>Trough (Pre Dose):</b> < = 1.4 mg/L  <b>Peak (Post Dose):</b> 6-10 mg/L	2010-07-12	
Gestational Glucose Tolerance Test (see <u>Glucose Tolerance Test</u> )						
GGT (see <u>Gamma Glutamyl Transferase, Plasma</u> )						
GGTP (see <u>Gamma Glutamyl Transferase, Plasma</u> )						
GHB (see <u>Gamma-Hydroxybutyrate, Urine-Qualitative Test</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gliadin (DGP) Antibodies Anti Deamidated Gliadin Peptide	Core	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	For Deamidated Gliadin Antibody IgA and IgG: <20 CU: Negative 20-30 CU: Weakly Positive >30 CU: Positive	2010-01-07	Referred out Monday - Thursday  The test done for Celiac Disease is Tissue Transglutamase Antibodies.  For screening for diagnosis of Celiac Disease, the patient should not be on a gluten free diet.  False negative results may occur in individuals who are IgA-deficient.
Glomerular Basement Membrane, IgG antibody (see <u>Anti Glomerular Basement Membrane, Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glucagon, Plasma	Core	<p><b>Adult:</b> 4 mL Lavender top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2-3 x 0.5 mL Lavender top Microtainers 2-10 years: 3 mL Lavender top Vacutainer tube</p> <p>GENERAL LABORATORY REQUISITION</p>	Referred out Monday-Thursday	<p>&lt; or =6 hours: 100-650 pg/mL 1-2 days: 70-450 pg/mL 2-4 days: 100-650 pg/mL 4-14 days: declining gradually to adult levels &gt;14 days: &lt; or =80 pg/mL (range based on 95% confidence limits)</p>	2014-07-14	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glucose Tolerance Test GTT Gestational Glucose Tolerance Test	Core	4.5 mL Green top Vacutainer tube 4.5 mL Grey top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	* See Interpretive Comments for the diagnosis of Diabetes Mellitus	2007-01-11	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glucose, Plasma Random Glucose Fasting Glucose	Core	4.5 mL Green top Vacutainer tube  4.5 mL Grey top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	<b>Random</b> < 1 year 2.6-11.0 mmol/L > 1 year 3.4-11.0 mmol/L  Fasting levels - no caloric intake for at least 8 hours 3 years - 16 years: 2.8-6.1 mmol/L Adult (greater than 16 years): 3.9-6.1 mmol/L	2008-11-15	
Glucose,CSF	Core	CSF GENERAL LABORATORY REQUISITION	As required	2.2-3.9 mmol/L		
Glucose,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See Report	2010-05-17	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glucose-6-Phosphate Dehydrogenase Assay G6PD Assay G-6-PD Assay	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender top Microtainer 2-10 years: 3 mL Lavender top tube GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	8.3-17.0 IU/g Hb	2008-11-15	<p>Reticulocytes have higher G-6-PDH levels than mature red cells. It is not recommended that assays be performed after a severe hemolytic crisis, since G-6-PDH levels may appear falsely elevated."</p> <p>Leukocytosis falsely elevates G-6-PDH levels in extreme anemia.            Intermediate Deficiency: 2.0-8.2 IU/g Hb            Severe Deficiency: &lt;2.0 IU/g Hb            Glucose-6-phosphate dehydrogenase (G6PD) is an enzyme in the pentose phosphate pathway, a metabolic pathway that supplies reducing energy to cells. Patients with G6PD deficiency are (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glutamic Acid Decarboxylase-65 Antibodies (see <u>Anti Glutamic Acid Decarboxylase, Serum/CSF</u> )						
Glutethimide, Serum Doriden	Core	5 mL Gold top Vacutainer tube  <b>Avoid gel- separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Therapeutic: 0.9 - 3.7 µmol/L	2005-07-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glycated Hemoglobin Hemoglobin A1c HbA1c	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender top Microtainer 2-10 years: 3 mL Lavender top tube GENERAL LABORATORY REQUISITION	As required	Non-diabetic: <6.0% Prediabetes: 6.0% - 6.4% Diabetes: > or = 6.5% Target levels for Type1 and Type 2 Diabetes: < or =7%	2010-06-28	<p>HbA1c measurement is an index of the integrated plasma glucose values over the past 6-8 weeks, which is not subject to the fluctuations observed in blood glucose concentrations. Therefore we will cancel duplicates as "HbA1c already tested within 6 wks".</p> <p><b>Screening and Diagnosis of Type 2 Diabetes</b></p> <p><b>HbA1c Result (%)</b>  <b>Dysglycemia</b>  <b>Category</b>&lt;5.5Non-diabetic5.5-5.9At Risk6.0-6.4Prediabetes&gt;or=6.5 Diabetes</p> <p><b>Therapeutic Targets</b>  <b>Adults Results (%)</b>  <b>Targets</b>Less than or = 6.5Adults with (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glycol Screen Glycols Ethylene Glycol Propylene Glycol	Core (VH)	5 mL Gold top Vacutainer tube. Lithium Heparin or EDTA plasma is also acceptable.  <b>Pediatric:</b> 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	As required	Negative		CRITICAL VALUE to be phoned to Nurse or Physician immediately:  All positive results. Toxic: >3.2 mmol/L Should be requested specifically if poisoning suspected.  Performed by Gas Liquid Chromatography as part of Glycol Fractionation. Glycol and Volatile Ordering Technical Aid  <b>For SRA staff when a sample is received at UH:</b>  UH SRA: Please call VH SRA when a sample is received. VH SRA: Please alert technologist that a sample is on the way (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glycols (see <u>Glycol Screen</u> )						
GM2 Gangliosidosis (see <u>Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts</u> )						
GMI Gangliosidosis (see <u>Beta-Galactosidase, Leukocyte/Plasma/Fibroblasts</u> )						
Gonorrhoeae culture (see <u>Neisseria gonorrhoeae Culture</u> )						
Gravol (see <u>Diphenhydramine, Urine Qualitative</u> )						
Group and Screen (used for Blood Grouping, Antibody Screen and Crossmatching)	Blood Transfusion	<b>Pediatric &lt;4 months:</b> 1 mL Lavender (EDTA) <b>Infants &gt;4 months and &lt;3 years:</b> 2 mL Lavender (EDTA) top <b>Children &gt;3 years and Adults:</b> 6 mL Pink (EDTA) top Vacutainer tube BLOOD TRANSFUSION REQUISITION or Electronic order	Daily	See report	2012-06-25	Crossmatched blood can be available within 5 to 10 minutes upon receipt of request to convert Group and Reserve to crossmatch. N/A
Group B Strept Screen (see <u>Group B Streptococcus Screen</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Group B Streptococcus Screen Group B Strept Screen GBS Screen	Microbiology (VH)	Placental, vaginal/rectal swab MICROBIOLOGY Y REQUISITION	Daily		2006-07-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Growth Hormone, Plasma/Serum Human Growth Hormone hGH	Core	<p><b>Adult:</b> 4.5 mL Light Green (Li-Heparin) top Vacutainer tube</p> <p><b>Pediatric:</b> 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>	<p>Samples are batched and only performed on Wednesday afternoon. Received samples from outside this timeframe are aliquoted and frozen.</p>	<p><u>Male:</u> 0 10 years: ≤ 6.3 g/L* 11 17 years: ≤ 10.8 g/L* 21 77 years: ≤ 2.5 g/L*</p> <p><u>Female:</u> 0 10 years: ≤ 7.8 g/L* 11 17 years: ≤ 8.1 g/L* 21 77 years: ≤ 9.9 g/L*</p> <p>*Basal levels of growth hormone do not have diagnostic relevance. Stimulation or suppression tests are needed to diagnose a growth hormone-related disorder.</p> <p>Children: ≥ 6 g/L followin (more...)</p>	2017-08-14	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>This assay is affected by pegvisomant (a highly selective growth hormone receptor antagonist).</p> <p>This assay is not suitable for pregnant women due to cross-reactivity with placental growth hormone.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
GSDII (see <u>Alpha-Glucosidase, Dried Blood Spot, Alpha-Glucosidase, Fibroblasts</u> )						
GTT (see <u>Glucose Tolerance Test</u> )						
GXRVP (see <u>Coronavirus SARS-CoV-2 2019 Diagnostic Priority (GXRVP)</u> <b>Adult ED and Critical Care Admissions only</b> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gynaecological Conventional Smear for Cytology PAP Smear Combined Cervical/Endocervical Smear Endocervical Smear Vaginal Smear	Cytopathology-UH	Gynaecological: Conventional Smear  Smear on fixed slide CYTOPATHOLOGY REQUISITION-GYNAECOLOGICAL AREA	Weekdays		2005-08-01	Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392  Clinical history is an important component for diagnostic interpretation. Please check pertinent clinical information on the requisition. Spray the smeared slide immediately with Cytology spray fixative. Allow to dry before placing in the slide transport container. Using a pencil label the frosted end of the smeared slide with the patient's name. <b>Unlabelled slides cannot be processed</b>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gynaecological Liquid Based PAP test for Cytology Liquid based PAP test for Cytology PAP test LBP	Cytopathology-UH	Cervical, endocervical, vaginal sample in a specimen container CYTOPATHOLOGY REQUISITION-GYNAECOLOGICAL AREA	Weekdays		2005-08-01	Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392  Clinical history is an important component for diagnostic interpretation. The specimen in Thinprep processed so the specimen should be collected in specific gyn. collection containers.
H. pylori (see <u>Helicobacter Serology</u> )						
H. Pylori Breath Test <b>test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener</b> C14 Breath test 14C Breath Test PY Test C-Urea Breath Test	Toxicology/Special Chemistry	PY Test Kit PY Test Kit REQUISITION	Monday - Friday 0800-1600	See report		
H63D (see <u>Hemochromatosis HFE gene</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Haldol (see <u>Haloperidol</u> )						
Haloperidol Haldol	Toxicology/Special Chemistry	6 mL Red top or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	11-53 nmol/L	2009-06-04	
Hantavirus serology	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to the Public Health Laboratory	See report	2009-02-22	A case of human Hantavirus infection in Ontario has never been described, despite the presence of infected deer mice (vector) across Canada

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Haptoglobin, Plasma HPT	Core	<p><b>Adult:</b> 4.5 mL Green (Lithium Heparin) top Vacutainer or 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Light Green or Gold top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green or Gold top (Li-Heparin) Vacutainer tube GENERAL LABORATORY REQUISITION</p>	Daily	<p>0-&lt;15 days: 0.00-0.12 g/L 15 days-&lt;1 year: 0.00-2.38 g/L 1-&lt;12 years: 0.00-1.76 g/L 12-&lt;19 years: 0.00-1.93 g/L &gt;19 years: 0.30-2.00 g/L</p>	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>A low plasma haptoglobin level is a very sensitive indicator of hemolysis and is slow to normalize after recovery. To monitor hemolysis, hemoglobin and lactate dehydrogenase are more useful markers. Repeat haptoglobin testing is not indicated for at least 2 weeks and may remain low even once hemoglobin has normalized.</p> <p>May be decreased in intravascular hemolysis and in hepatocellular damage, hapt (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HbA1c (see <u>Glycated Hemoglobin</u> )						
Hbe (see <u>Hepatitis Be Antigen</u> )						
HBe Ag (see <u>Hepatitis Be Antigen</u> )						
HBsAg (see <u>Hepatitis B Surface Antigen</u> )						
HBV Viral Load (see <u>Hepatitis B DNA Viral Load</u> )						
hCG (see <u>Chorionic Gonadotropin (Quantitative), Plasma/Serum, Chorionic Gonadotropin, Fluid</u> )						
HCR (see <u>Hemochromatosis HFE gene</u> )						
HCV (see <u>Hepatitis C Antibody</u> )						
HCV Viral Load - pre-treatment (see <u>Hepatitis C RNA - Quantitative</u> )						
Heart Biopsy Endomyocardial biopsy	Pathology - UH	Heart muscle for diagnosis or post-transplant. Fresh or in saline. PowerChart: E- order choosing appropriate specimen. See Identification of Clinical Specimens	Weekdays Testing not available after hours or weekends		2011-07-21	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Helicobacter Serology H. pylori	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory		2009-02-22	
Hematocrit (HCT) (see <u>Complete Blood Count</u> )						
Hemochromatosis HFE gene HFE C282Y H63D HCR	Molecular Diagnostics	Whole blood-1 x 4 mL Lavender EDTA top Vacutainer tube Tissue: 100mg or 0.5-2.0 cm3 frozen immediately after collection Formalin-fixed imbedded tissue MOLECULAR DIAGNOSTIC REQUISITION	As required Monday - Friday 0800 - 1600 h	See report	2011-12-15	For more information click on: Molecular Diagnostic Laboratory N/A
Hemoglobin (Hb) (see <u>Complete Blood Count</u> )						
Hemoglobin A1c (see <u>Glycated Hemoglobin</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hemoglobin A <sub>2</sub> (see <u>Hemoglobinopathy Screen</u> )						
Hemoglobin Electrophoresis (see <u>Hemoglobinopathy Screen</u> )						
Hemoglobin F (Fetal) (see <u>Hemoglobinopathy Screen</u> )						
Hemoglobin Gene Sequencing HGS	Clinical Immunology	Peripheral Blood  4 mL K2 or K3 EDTA Lavender top Vacutainer tube 5 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: Lavender 1.0 pk., Red 0.5 pk 2-10 years: 2 mL Lavender top, 2 mL Red Hamilton Molecular Diagnostic Genetics Requisition	Weekly	N/A	2019-07-11	
Hemoglobin H (see <u>Hemoglobinopathy Screen</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hemoglobinopathy Screen Hemoglobin F (Fetal) Hemoglobin A <sub>2</sub> Hemoglobin Electrophoresis Hemoglobin H Ferritin Level	Clinical Immunology	Peripheral Blood  4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube 5 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender Microtainer., 0.5 mL Red Microtainer 2-10 years: 2 mL Lavender top, 2 mL Red top GENERAL LABORATORY REQUISITION	Bi-weekly	<b>Hb A:</b> Newborn-1 month: <=10.0 1-3 months: 21.1-56.6 3-6 months: 50.7-85.6 6-7 months: 83.5-96.8 >7 months: 95.5-97.6  <b>Hb F:</b> Newborn-1 month: <=90.0 1-3 months: 42.4-75.6 3-6 months: 12.4-46.0 6-7 months: 1.2-13.2 >7 months: 0.0-1.2  <b>Hb A2:</b> 2.0-3.3  <b>Hb H:</b> Negative	2008-05-27	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hemosiderin,Urine	Flow Cytometry	Random urine GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	Negative  (reported as Positive or Negative)	2006-06-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Heparin Assay Anti Xa Assay	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	1 x 2.7 mL Blue (3.2% Na Citrate) Vacutainer tube  <b>Pediatric:</b> 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling</b> GENERAL LABORATORY REQUISITION	As authorized, Monday to Friday 0800-1600, unless otherwise requested by a Hematologist.	See report	2009-06-10	<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, <b>must be authorized by a Hematologist</b> by paging the adult or pediatric Hematologist on call through 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
Heparin Induced Thrombocytopenia HIT	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursdays as required	Negative	2006-06-01	
Heparin Sulfamidase, Fibroblasts MPSIIIA Sanfilippo A Syndrome	Biochemical Genetics	Fibroblasts BIOCHEMICAL GENETICS LAB REQUISITION	As required	25-75 nmol/mg protein/17 hr.	2008-06-10	
Hepatitis A Antibody IgG Hepatitis A Antibody IgG Hepatitis Anti HAV IgG	Core (UH)	<b>Adult:</b> 5 mL Gold top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION	24/7	See report	2007-05-01	Heparinized samples should be avoided as they cause erroneous results.  Indicates immunity either from past infection or immunization.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis A Antibody IgM Hepatitis A Antibody IgM Hepatitis anti-HAV IgM	Core (UH)	<b>Adult:</b> 5 mL Gold top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION	24/7	See report	2007-05-01	Heparinized samples should be avoided as they cause erroneous results.  Sample will be tested for Hepatitis A IgM antibody. Negative result indicates serology is not compatible with acute Hepatitis A infection. Positive result indicates serology is compatible with recent Hepatitis A infection.
Hepatitis Anti HAV IgG (see <a href="#">Hepatitis A Antibody IgG</a> )						
Hepatitis anti-HAV IgM (see <a href="#">Hepatitis A Antibody IgM</a> )						
Hepatitis B Antiviral Resistance - HEPBAR	Microbiology (VH)	5 mL Gold top Vacutainer tube <b>(A minimum 1 mL of serum)</b> Please completely fill out this Hepatitis B Antiviral Resistance Requisition	Test referred out to National Microbiology Lab once per week.	See report	2008-02-22	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis B Core Antibody Hepatitis B Core Antibody CORE	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION</p>	24/7	See report	2007-05-01	
Hepatitis B Core IgM Antibody	Core	<p><b>Adult:</b> 5 mL Gold top Vacutainer</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2- 10 years: 2 mL Gold top tube PUBLIC HEALTH REQUISITION</p>	Referred out Monday-Friday	See report	2007-05-01	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis B Diagnostic Panel	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube</p> <p>GENERAL LABORATORY REQUISITION</p>	24/7			
Hepatitis B DNA Viral Load HBV Viral Load	Microbiology (VH)	<p>2 x 5 mL Gold top Vacutainer tube</p> <p>HEPATITIS PCR REQUISITION</p>	Referred out to Toronto Public Health Laboratory		2010-09-28	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis B Surface Antibody AUSAB Australian Antibody Immune Status for Hepatitis B	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION</p>	24/7	Negative = 0 Indeterminate = 1-10 Immune = >10		
Hepatitis B Surface Antigen HBsAg HpBsAg	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION</p>	24/7	See report	2007-05-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis Be Antibody	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube</p> <p>GENERAL LABORATORY REQUISITION or PUBLIC HEALTH LABORATORY TEST REQUISITION</p>	Referred weekdays to Public Health Laboratory, Toronto.	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis Be Antigen HBe Ag Hbe	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION</p>	24/7	See report	2007-05-01	
Hepatitis C Antibody HCV HpCab Anti HCV	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION</p>	24/7	See report	2007-05-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis C NS3 Q80K	Core	4 mL EDTA Lavender top Vacutainer tube  HEPATITIS C NS3 Q80K REQUISITION	Referred out Monday-Friday between 0800- 1600 to Public Health Laboratory	See report		If previous sample for HCV Viral Load or genotyping has been performed at PHL within six months, a sample does not have to be redrawn. Please fill out the requisition (see link above) and send to the Core Lab.
Hepatitis C RNA - Quantitative Quantitative RNA HCV Viral Load - pre- treatment PCR Quantitative	Microbiology	<u>Serum:</u> 2 x 5 mL Gold <b>or</b> 6 mL Red Vacutainer tubes  Plasma is also acceptable <u>Plasma:</u> 2 x 4.5 mL Lavender <b>or</b> 6 mL Pink top EDTA tubes HEPATITIS C (HCV) RNA REQUISITION	Referred out to the Toronto Public Health Laboratory		2008-12-22	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis D Antibody	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION</p>	Referred out Monday-Friday between 0800-1600 to Public Health Laboratory	See report		
Hepatitis Donor Transplant Screen Donor Screen	Core (UH)	<p><b>Adult:</b> 5 mL Gold top Vacutainer</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 2 mL Gold top tube GENERAL LABORATORY REQUISITION</p>	As required	See individual tests		<p>Tested only at UH Core Lab. UH only processes TGLN/samples from deceased donors.</p> <p>Sample will be tested for Hepatitis B surface antigen, Hepatitis B core antibody (total), Hepatitis C antibody, HIV, Cytomegalovirus, RPR (screening test for syphilis), HTLV 1/2 and West Nile Virus.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis/HIV testing on <b>exposed individual</b> of needle stick injury or exposure to blood/body fluids. (see <u>Needle Stick Injury - Victim</u> )						
Hepatitis/HIV testing on <b>source</b> of needlestick injury or blood/body fluid exposure. (see <u>Needle Stick Injury - Source</u> )						
Heptacarboxylic acid (see <u>Porphyrin Screen and Quantitation, 24-Hour Urine, Porphyrin Screen and Quantitation, Feces, Porphyrin Screen and Quantitation, Random Urine</u> )						
Hereditary Cancer - Breast/Ovarian (see <u>Breast Cancer (BRCA1 and BRCA2 Screening)</u> )						
Hereditary Colorectal/Gastric Cancer (see <u>Colon Cancer (Proband)</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hereditary Sensory Neuropathy HSN1	Molecular Diagnostics	Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION	As Required Monday - Friday 0800 - 1630 h	See report		For more information click on: Molecular Diagnostic Laboratory N/A Hereditary sensory neuropathy type I (HSN1) is the most common hereditary disorder of peripheral sensory neurons, and is an autosomal dominant condition resulting in progressive degeneration of dorsal root ganglia and motor neurons with onset in the second or third decades. Mutations in SPTLC1, encoding serine palmitoyltransferase, long chain base subunit-1 have been shown to be responsible for this condition <sup>1,2</sup> . Early reports in the literature suggest that mutations both in exon 5 (more...)



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hereditary Spherocytosis Screening Test	Flow Cytometry	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender Microtainer 2-10 years: 3 mL Lavender top tube GENERAL LABORATORY REQUISITION	Monday - Thursday 0800 - 1500 Friday 0800 - 1200	Negative for Hereditary Spherocytosis	2007-11-01	
Herpes simplex IgG Total Antibody (HSVg)	Microbiology	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION		See report	2010-06-07	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Herpes Simplex Virus PCR Herpes simplex Type 1/Type 2 HSVPCR	Virology Laboratory	CSF Plasma - EDTA (Lavender top Vacutainer tube) Swabs - lesions Tissue Fluids VIROLOGY REQUISITION	CSF samples are tested once daily Monday to Friday. Blood and lesions are tested three times a week on Monday, Wednesday and Friday. Tissues and Fluids are sent to Public Health Laboratory for testing	See report	2011-10-20	
Heterophile Antibodies (see <a href="#">Heterophile Antibody Screen</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Heterophile Antibody Screen Infectious Mononucleosis Heterophile Antibodies Paul-Bunnell	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender top Microtainer 2-10 years: 3 mL Lavender top tube GENERAL LABORATORY REQUISITION	As required	Negative		
Hexacarboxylic acid (see <u>Porphyrin Screen and Quantitation, 24-Hour Urine, Porphyrin Screen and Quantitation, Feces, Porphyrin Screen and Quantitation, Random Urine</u> )						
Hexosaminidase (see <u>Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts</u> )						
HFE (see <u>Hemochromatosis HFE gene</u> )						
hGH (see <u>Growth Hormone, Plasma/Serum</u> )						
HGS (see <u>Hemoglobin Gene Sequencing</u> )						
High Density Lipoprotein Cholesterol (see <u>Cholesterol-HDL, Plasma</u> )						
High Resolution Banding (see <u>Chromosome Analysis, Blood</u> )						
High Risk Obstetric Human Immunodeficiency Virus (see <u>HIV - High Risk Obstetrical/High Risk IV Drug User</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
High Sensitivity C-Reactive Protein High sensitivity CRP Assay hsCRP	Core	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out as required	hsCRP is considered a valuable risk stratification measurement in females > 60 years and males > 50 years. Values > 2.0 mg/L in these patients warrant further investigation. Refer to the CCS 2012 guideline for revised hsCRP CVD risk criteria.	2009-07-08	This test is useful for cardiac risk assessment only. A different CRP test ("C-Reactive Protein (CRP)") should be used to monitor or assess inflammatory disorders.  This test will be used for cardiac risk assessment only.

High sensitivity CRP Assay (see [High Sensitivity C-Reactive Protein](#))

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
High Sensitivity Troponin T hs-TnT Troponin T - High sensitivity TNT - High sensitivity	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube  <b>Pediatric:</b> 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	≤ 14 ng/L	2012-02-01	<b>Please note that the hs-TnT reporting units are ng/L.</b>  Order hs-TnT on patients with symptoms of myocardial ischemia to diagnose AMI. Reference limit is based on 99th percentile value in healthy population. hs-TnT may be significantly elevated in non-ACS patients. Evaluate hs-TnT results in the clinical context and not in isolation.  Algorithm Details can be found <a href="https://lhsc.omni-assistant.net/lab/Document/DocumentDownloader.aspx?Df_Guid=e595a48b-3d88-4f5d-97ac-07a64fc0fd22">https://lhsc.omni-assistant.net/lab/Document/DocumentDownloader.aspx?Df_Guid=e595a48b-3d88-4f5d-97ac-07a64fc0fd22</a>
HIST (see <u>Anti Histone Group, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Histoplasma Antigen	Microbiology	Urine MICROBIOLOGY REQUISITION	Daily, once received by referral laboratory		2019-11-05	<p>Testing restricted to Infectious Diseases (ID) service following a Microbiologist consultation.</p> <p><u>Positive:</u> 0.4-19.0 ng/mL</p> <p><u>Positive Above the Limit of Quantification:</u> Results greater than 19.0 ng/mL fall outside the linear range of the assay. These results are positive, but not accurately quantifiable.</p> <p><u>Limitations:</u> Result is not intended to be used as the sole means for clinical diagnosis or patient management decisions. Cross-reactions are seen with blastomycosis, paracoccidioidomycosis, penicilliosis, less frequently in (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Histoplasma Culture (see <u>Fungus Culture-Dimorphic</u> )						
Histoplasma Serology	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory		2010-09-13	
HIT (see <u>Heparin Induced Thrombocytopenia</u> )						
HIV - High Risk Obstetrical Patients (see <u>HIV - High Risk Obstetrical/High Risk IV Drug User</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>HIV - High Risk Obstetrical/High Risk IV Drug User HIV - High Risk Obstetrical Patients</p> <p>High Risk Obstetric Human Immunodeficiency Virus</p>	Core (UH)	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	As needed		2012-11-13	<p>Tested only at UH Core Lab.</p> <p><b>High Risk Obstetrics:</b></p> <p>This test is for specimens from the mother only. Any other specimen type from an obstetrical case (e.g. cord blood) must be authorized by the Microbiologist on call before testing can proceed.</p> <p><b>Note:</b> This test is only available in the High Risk Obstetrical Powerplan Module</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HIV - Viral Load	Microbiology	2 x 4 mL Lavender (EDTA) top Vacutainer tubes HIV Viral Load Requisition	Referred <b>STAT</b> weekdays to Public Health Laboratory	See report	2010-09-28	<p>This is not a diagnostic test. Test is only available on patients known to be positive. Results are provided for prognostic purposes only and will be reported directly to physician.</p> <p>Sample must be spun and separated within 4 hours of collection. Ship to Microbiology immediately. Off hours, specimen receiving staff must spin sample immediately and aliquot and freeze plasma.</p> <p>Document time sample is separated on the requisition.</p>
HIV Antibody (see <u>HIV Serology, Routine - HIV 1 and 2</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HIV PCR	Microbiology	<b>Adult:</b> 5 mL Lavender EDTA top Vacutainer tube <b>Pediatric:</b> 2 mL Lavender (EDTA) top Vacutainer tube HIV PCR TEST REQUISITION	Referred weekdays to the Public Health Laboratory	See report	2011-05-01	Test detects HIV-1 only. Requests for HIV-2 PCR must be approved by the Microbiologist  Sample must be received at Toronto Public Health within 5 days of collection.
HIV Serology - <b>Transplant</b> Human Immunodeficiency Virus	Core (UH)	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	24/7		2002-05-17	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HIV Serology, Routine - HIV 1 and 2 HIV Antibody	Microbiology (VH)	6 mL Red top Vacutainer tube or 5 mL Gold top Vacutainer tube. PUBLIC HEALTH LABORATORY - HIV SEROLOGY TEST REQUISITION	Referred weekdays to Public Health Laboratory		2009-02-22	<p>The "HIV Ag/Ab Combo Screen" simultaneously detects both HIV p24 antigen (Ag) and antibodies (Ab) to HIV type 1 and type 2 (HIV-1/HIV-2) in human serum or plasma.</p> <p>Please note that the HIV Ag/Ab Combo result does not distinguish between the detection of HIVp24 antigen, HIV-1 antibodies, or HIV-2 antibodies.</p> <p>A specimen with a borderline or reactive result on an HIV screen test will proceed to confirmatory testing according to the HIV testing algorithm.</p> <p>For more information on HIV testing for Transplant pat (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HIV/Hepatitis on <b>exposed individual</b> of needle stick injury or exposure to blood/body fluids. (see <u>Needle Stick Injury - Victim</u> )						
HIV/Hepatitis testing on <b>source</b> of needlestick injury or blood/body fluid exposure. (see <u>Needle Stick Injury - Source</u> )						
HLA Antibody BM/SC Recipient Workup BoneMarrow/StemCell Recipient Antibody Workup	Transplant	1 x 6mL Red top Vacutainer tube-No additives or separator gel. (2mL to 6 mL for paed) TRANSPLANT LABORATORY REQUISITION	As required Monday to Friday except Stat holidays	cPRA 0-100%	2020-08-24	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Antibody Screen PRA (Panel Reactive Antibodies) HLA Monthly Serum	Transplant	6 mL Red top Vacutainer tube - No additives or separator gel TRANSPLANT LABORATORY REQUISITION	Some samples will be archived for possible testing at a later date. The status of the patient on a transplant waiting list dictates when/if the sample will be tested.	0-100%  Specificity testing: Individual antibodies will be listed in TGLN for patients on the transplant lists. Transfusion Refractory Test results will be listed in Cerner.	2020-06-29	Patients that are being assessed for placement on the LHSC or CBS Kidney, Kidney/Pancreas, Pancreas, Liver/Kidney, Liver or Heart waiting list should have this test ordered.  Anti-HLA antibodies indicate potential sensitization to potential organ donors and some blood products. Samples will be stored in the laboratory when received.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Assessment- Liver Recipient HLA Liver Workup	Transplant	2 x 4 mL Lavender (EDTA) top Vacutainer tubes  1 x 6mL Red top Vacutainer tube - No additives or separator gel TRANSPLANT LABORATORY REQUISITION		cPRAs: 0-100%  HLA typing: see report	2020-06-29	Patients that are being assessed for placement on the LHSC liver waiting list should have this test ordered. Antibody testing and HLA typing will be performed only when the recipient is activated on the waiting list.  Anti-HLA antibodies indicate potential sensitization to potential organ donors and some blood products.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Assessment-Non-Renal (for Heart patients)	Transplant	8 x 6mL dark Green (Sodium Heparin) top Vacutainer tubes without gel separator 2 x 4 mL Lavender (EDTA) top Vacutainer tubes 1 x 6mL Red top Vacutainer tube-No additives or separator gel <b>TRANSPLANT LABORATORY REQUISITION</b>	Monday to Friday	cPRAs: 0-100% (HLA Antibody Testing)  HLA Typing: see report  Autologous Crossmatch: Negative / Borderline / Positive	2020-06-29	<p>Patients that are being assessed for placement on the LHSC Heart waiting list should have this test ordered.</p> <p>Patients will have Class I and Class II HLA Typing, cPRA and antibody specificities tested. Patient will also have an autologous flow crossmatch performed.</p> <p>Anti-HLA antibodies indicate sensitization to potential organ donors and some blood products. The cPRA is an indicator of how broadly anti-HLA antibody in the patient reacts to random donors. Elevated cPRA s may reflect a higher level of difficulty in finding an acceptable donor. (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Assessment- Renal Recipient (for Kidney, Kidney/Pancreas, Pancreas alone or Liver/Kidney patients)	Transplant	8 x 6mL dark Green (Sodium Heparin) top Vacutainer tubes without gel separator 2 x 4 mL Lavender (EDTA) top Vacutainer tubes 1 x 6mL Red top Vacutainer tube-No additives or separator gel TRANSPLANT LABORATORY REQUISITION	Monday to Friday	cPRAs: 0-100% (HLA Antibody Testing)  HLA Typing: see report  Autologous Crossmatch: Negative / Borderline / Positive	2020-06-29	<p>Patients that are being assessed for placement on the LHSC Kidney, Kidney/Pancreas, Pancreas, Liver/Kidney waiting list should have this test ordered. Patients will have Class I and Class II HLA Typing, cPRA and antibody specificities tested. Patient will also have an autologous flow crossmatch performed.</p> <p>Anti-HLA antibodies indicate sensitization to potential organ donors and some blood products. The cPRA is an indicator of how broadly anti-HLA antibody in the patient reacts to random donors. Elevated cPRA s may reflect a higher level of difficulty in finding an a (more...)</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA B27	Transplant	2 x 4mL Lavender (EDTA) top Vacutainer tubes TRANSPLANT LABORATORY REQUISITION	As required Monday to Friday except Stat holidays		2020-06-29	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA BoneMarrow/StemCel I Histocompatibility- Donor BoneMarrow/StemCel I Donor initial HLA Typing	Transplant	2 x 4 mL Lavender (EDTA) top Vacutainer tubes  Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients.  <b>Paediatric            Patients:</b> <1 year: 2 mL EDTA 1-10 years: 2 mL EDTA 10-18 years: 4 mL EDTA  Contact the laboratory if these volumes are not possible: 519- 663-3320 (more...)	As required Monday to Friday except Stat holidays		2020-06-29	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA BoneMarrow/StemCel I Histocompatibility- Recipient BoneMarrow/StemCel I recipient initial HLA Typing	Transplant	4 x 4 mL Lavender (EDTA) top Vacutainer tubes  1 x 6 mL Red top Vacutainer tube - No additives or separator gel  Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients.  <b>Paediatric            Patients:</b> <1 year: 2 mL EDTA + 2 mL clotted 1-10 years: 2 mL EDTA + 6 mL clotted 10-18 (more...)	As required Monday to Friday except Stat holidays	See report	2020-06-29	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Celiac Investigation	Transplant	2 x 4 mL Lavender (EDTA) top Vacutainer tubes TRANSPLANT LABORATORY REQUISITION	As required Monday to Friday except Stat holidays		2020-06-29	
HLA Class I and II Typing (see <u>HLA Typing Case (ABCD)</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Confirmatory Typing- Donor	Transplant	<p>2 x 4 mL Lavender (EDTA) top Vacutainer tubes</p> <p>Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients.</p> <p><b>Paediatric Patients:</b>            &lt;1 year: 2 mL EDTA            1-10 years: 2 mL EDTA            10-18 years: 4 mL EDTA</p> <p>Contact the laboratory if these volumes are not possible: 519-663-3320 (more...)</p>	As required Monday to Friday except Stat holidays		2020-06-29	<p>BM/SC transplant workups are coordinated by the Bone Marrow Transplant Coordinator who can be contacted via the LHSC switchboard (519-658-8500)</p> <p>Confirmatory HLA typings should be performed at the centre that is to do the transplant. Therefore, some testing for the paediatric program may be sent to the Toronto program.</p> <p>A low resolution HLA Class I typing will be performed. The results must match the original testing.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Confirmatory Typing- Recipient	Transplant	<p>4 x 4 mL Lavender (EDTA) top Vacutainer tubes</p> <p>Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients.</p> <p><b>Paediatric Patients:</b>            &lt;1 year: 2 mL EDTA            1-10 years: 2 mL EDTA            10-18 years: 4 mL EDTA</p> <p>Contact the laboratory if these volumes are not possible: 519-663-3320 (more...)</p>	As required Monday to Friday except Stat holidays		2020-06-29	<p>BM/SC transplant workups are coordinated by the Bone Marrow Transplant Coordinator who can be contacted via the LHSC switchboard (519-658-8500)</p> <p>Confirmatory HLA typings should be performed at the centre that is to do the transplant. Therefore, some testing for the paediatric program may be sent to the Toronto program.</p> <p>A low resolution HLA Class I typing will be performed. The results must match the original HLA typing obtained on the previous sample.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Disease Association HLA Pharmacogenomics	Transplant	<p>2 x 4 mL Lavender (EDTA) top Vacutainer tubes</p> <p>Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients.</p> <p><b>Paediatric Patients:</b>            &lt;1 year: 2 mL EDTA            1-10 years: 2 mL EDTA            10-18 years: 4 mL EDTA</p> <p>Contact the laboratory if these volumes are not possible: 519-663-3320 (more...)</p>	Monday to Friday	See report	2020-06-29	<p>You will be prompted to indicate the antigen and disease of interest when the HLA Disease Association order is selected.</p> <p><b>Antigen/Allele of InterestDisease Comments</b>            A29Birshot/UveitisB27 Ankylosing SpondylitisOrder HLAB27 TestB51BehcetDQ2/D Q8CeliacOrder HLA Celiac InvestigationDQB1*06:02Narcolepsy</p> <p><b>Antigen/Allele of InterestDisease Comments</b>            B*57:01Abacavir HypersensitivityB*15:02Carbamazepine Hypersensitivity(Asians)A*31:01Carbamazepine Hypersensitivity/SJS(Caucasians)B*5 (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Donor Specific Antibody (DSA)	Transplant	6 mL Red top Vacutainer tube - No additives or separator gel TRANSPLANT LABORATORY REQUISITION	Monday to Friday except on Stat holidays	DSA detected or not detected	2020-06-29	<p>This test should only be ordered when following a patient in a London transplant program.</p> <p>Contact the Transplant Laboratory to discuss other situations. (519-663-3320)</p> <p>Antibodies directed against donor HLA antigens may predict a risk of rejection</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Freeze PBL Freeze Blood	Transplant	Freeze Cells from a patient or donor at times other than pre-op.  <u>Donor Requirements:</u> 6 x 6 mL Sodium Heparin (dark green tops, no separator gel)  Note: smaller volumes apply for paediatric patients. Contact the Transplant Laboratory for details: 519-663-3320 TRANSPLANT LABORATORY REQUISITION	As required Monday to Friday except Stat holidays		2020-06-29	Living donor transplant workups, including the freezing of donor cells are coordinated by the Living Donor Transplant Coordinator who can be contacted via the LHSC switchboard (519-658-8500)
HLA Liver Workup (see <u>HLA Assessment-Liver Recipient</u> )						
HLA Monthly Serum (see <u>HLA Antibody Screen</u> )						
HLA Pharmacogenomics (see <u>HLA Disease Association</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Pre-op Liver Recipient	Transplant	6 mL Red top Vacutainer tube - No additives or separator gel TRANSPLANT LABORATORY REQUISITION	Monday to Friday	<p>cPRAs: 0-100% (HLA Antibody Testing) DSA detected or not detected</p> <p>Antibodies with MFI&gt;5000 reported as unacceptable Only strong (unacceptable) will be used to calculate cPRA SUBJECT TO CHANGE</p> <p>Antibodies with 5000&gt;MFI&gt;1000 will be reported as weak/indeterminate. SUBJECT TO CHANGE</p>	2020-06-29	<p>Patients that are being prepared for a Liver Transplant should have this pre-op test ordered prior to transplant.</p> <p>Anti-HLA antibodies indicate sensitization to potential organ donors and some blood products. Antibodies directed against donor HLA antigens may predict a risk of rejection</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Pre-op Recipient	Transplant (UH)	6 mL Red top Vacutainer tube - No additives or separator gel TRANSPLANT LABORATORY REQUISITION	<p>This sample may be used in the prospective/retrospective flow crossmatch and updated SAB testing may be performed.</p> <p>All samples will be archived for possible testing at a later date.</p>	<p>cPRAs: 0-100% (HLA Antibody Testing)</p> <p>DSA detected or not detected</p>	2020-06-29	<p>Pre-op patients that are being prepared for transplant at LHSC (Kidney, Kidney/Pancreas, Pancreas, Liver/Kidney, or Heart) should have this test ordered. Liver patients: see HLA Pre-op Liver</p> <p>The sample may be used for cPRA, crossmatching, DSA testing or it may be stored for future testing as outlined in the current program-specific policies.</p> <p>Anti-HLA antibodies indicate sensitization to potential organ donors and some blood products. Antibodies directed against donor HLA antigens may predict a risk of rejection</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Serum for Crossmatch LD-Recipient	Transplant	6 mL Red top Vacutainer tube - No additives or separator gel TRANSPLANT LABORATORY REQUISITION	Monday to Friday except on Stat holidays  This test should be ordered to be drawn on the same day the final crossmatch against a living donor is to be performed.	Crossmatch Positive or Negative cPRAs: 0-100% (HLA Antibody Testing) DSA detected or not detected	2020-06-29	<p>This sample will be one of the samples used for a flow cytometer crossmatch against a living donor.</p> <p>In addition the sample may be used for cPRA or DSA testing as outlined in the program-specific polices.</p> <p>A positive crossmatch may indicate the presence of anti-donor antibodies.</p> <p>Anti-HLA antibodies indicate sensitization to potential organ donors and some blood products. Antibodies directed against donor HLA antigens may predict a risk of rejection</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Transfusion Refractory	Transplant	6 mL Red top Vacutainer tube - No additives or separator gel TRANSPLANT LABORATORY REQUISITION	Monday to Friday	Antibodies detected or not detected  Any HLA antibodies that were detected will be reported in the comment field in Cerner as Weak, Moderate and Strong based on MFI values.	2020-06-29	This test is ordered for recipient antibody identification in preparation for receiving HLA matched platelets  Anti-HLA antibodies indicate sensitization to potential donors and some blood products

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Transfusion Typing Transfusion ABC	Transplant	<p>2 x 4 mL Lavender (EDTA) top Vacutainer tubes</p> <p>Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients.</p> <p><b>Paediatric Patients:</b>            &lt;1 year: 2 mL EDTA            1-10 years: 2 mL EDTA            10-18 years: 4 mL EDTA</p> <p>Contact the laboratory if these volumes are not possible: 519-663-3320 (more...)</p>	Monday to Friday			<p>This test is performed in preparation for receiving HLA matched platelets.</p> <p>Results will be faxed upon request.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Typing Case (ABCD) HLA Class I and II Typing	Transplant	2 x 4 mL Lavender (EDTA) top Vacutainer tubes  Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients.  <b>Paediatric Patients:</b> <1 year: 2 mL EDTA 1-10 years: 2 mL EDTA 10-18 years: 4 mL EDTA  Contact the laboratory if these volumes are not possible: 519-663-3320 (more...)	Monday to Friday		2020-06-29	Testing is normally performed for patients involved in one of the London Transplant Programs. Please contact the laboratory (519-663-3320) if other situations apply to your patient.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Workup Deceased Donor Deceased Donor HLA Typing and Deceased Donor Crossmatch	Transplant	<p> <u>Adult Donor</u>            blood for a            workup            involving a            kidney or            kidney/pancrea            s transplant (+/-            other organs):            10 x 8.5 mL            ACD (Solution            A) (yellow            tops)*            2 x 4 mL            Lavender EDTA            top Vacutainer            tube         </p> <p> <u>Adult Donor</u>            blood for a            workup            involving a            heart transplant            only:            8 x 8.5 ml.            ACD (Solution            A) (yellow            tops)*            1 x 4 mL            Lavender EDTA            top Va (more...)         </p>	As required		2020-06-29	<p> <b>Stat T.A.T:</b>            Prospective HLA            Typing: 4 to 5 hours            from when the            technologist is notified            and samples are            available for testing.         </p> <p>           Prospective            crossmatching: 4 to 6            hours from when the            technologist is notified.            Crossmatching of            imported donors for            HSP recipients may            take longer since the            HLA typing will be            confirmed at this time         </p> <p>           A deceased donor            situation must be            coordinated by TGLN            and/or the local Donor            Coordinators/Donor            Transplant Specialists.         </p> <p>           TGLN: 1-877-363-8456         </p> <p>           Local Donor            Coordinators: (more...)         </p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Workup Living Donor Additional or Final Additional Kidney Living donor Crossmatch Final Kidney Living donor Crossmatch	Transplant	<p><u>Donor Requirements:</u> 14 x 6mL Sodium Heparin (dark green tops, no separator gel)</p> <p>Note: smaller volumes apply for paediatric patients. Contact the Transplant Laboratory for details: 519-663-3320 TRANSPLANT LABORATORY REQUISITION</p>	As required Monday to Friday except Stat holidays	Living Donor Crossmatch: Negative / Borderline / Positive	2020-06-29	<p>Living donor transplant workups are coordinated by the Living Donor Transplant Coordinator who can be contacted via the LHSC switchboard (519-658-8500).</p> <p>The cPRA is an indicator of how broadly any patients HLA antibody reacts to random donors. Elevated cPRAs may reflect a higher level of difficulty in finding an acceptable donor. A positive flow cytometry crossmatch indicates the likely presence of donor specific antibodies.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Workup Living Donor Initial Initial Kidney Living donor Crossmatch and HLA Typing	Transplant	<p> <u>Donor Requirements:</u>            14 x 6mL Sodium Heparin (dark green tops, no separator gel)            2 x 4 mL Lavender (EDTA) top Vacutainer tubes         </p> <p>           Note: smaller volumes apply for paediatric patients. Contact the Transplant Laboratory for details: 519-663-3320            TRANSPLANT LABORATORY REQUISITION         </p>	Test scheduleAs required Monday to Friday except Stat holidays	Living Donor Crossmatch: Negative / Borderline / Positive	2020-06-29	<p>           Living donor transplant workups are coordinated by the Living Donor Transplant Coordinator who can be contacted via the LHSC switchboard (519-658-8500)         </p> <p>           A positive flowcytometry crossmatch indicates the likely presence of donor specific antibodies.         </p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Workup Living Donor Pre-op Freeze Blood	Transplant	<p><u>Donor Requirements:</u> 6 x 6mL Sodium Heparin (dark green tops, no separator gel)</p> <p>Note: smaller volumes apply for paediatric patients. Contact the Transplant Laboratory for details: 519-663-3320 TRANSPLANT LABORATORY REQUISITION</p>	As required Monday to Friday except Stat holidays			This donor blood will be frozen in liquid nitrogen for possible future testing.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HMG-CoA Reductase (HMGCR) IgG Antibodies, Serum 3-hydroxy-3-methyl-glutaryl-CoA reductase antibodies Anti-HMGCR antibodies HMG-CoA Reductase antibodies	Clinical Immunology	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION</p>	Batch analysis	Negative: <20 U Positive: ≥20 U	2021-07-28	<p>This test is restricted to Neurologists and Rheumatologists at LHSC/SJHC upon approval by Dr. Adrian Budhram. Accepted from referred in locations.</p> <p>HMGCR antibodies are associated with necrotizing autoimmune myopathy.</p>

HMG-CoA Reductase antibodies (see HMG-CoA Reductase (HMGCR) IgG Antibodies, Serum)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Homocysteine Total Homocysteine	Core (UH)	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Note:</b> <b>Specimens not placed on ice immediately may exhibit a 10-20% increase in concentration.</b> GENERAL LABORATORY REQUISITION	Thursdays	AgeReference Interval<13 10 umol/L1-<12 years3 8 umol/L12-<15 years: Female4 10 umol/L12-<15 years: Male5 10 umol/L>=18 years<=14 umol/L		Drugs that interfere with homocysteine metabolism, e.g. nitric oxide, methotrexate, isoniazid, penicillamine and various antiepileptic drugs: carbamazepine, phenytoin, may give elevated levels of total homocysteine.  Do not store samples at room temperature. Keep Vacutainer on ice until centrifugation then freeze. Freeze plasma at -30 degrees Celsius.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Homovanillic Acid, Urine HVA	Toxicology/Special Chemistry	24-hour urine or random urine. <b>Random urine testing available for pediatric patients only.</b> GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	<b>Random Urine (mol/mmol creatinine)</b> 0 - 2 years: ≤ 20.2 2 - 4 years: ≤ 13.6 5 - 9 years: ≤ 9.4 10 - 19 years: ≤ 7.9 > 19 years: ≤ 4.7  <b>24-hour Urine (mol/day)</b> 0 - 2 years: ≤ 15.4 2 - 4 years: ≤ 25.8 5 - 9 years: ≤ 29.6 10 - 19 years: ≤ 39.5 > 19 years: ≤ 45.6	2017-07-04	VHHU24 (for 24-hour urine; includes VMA and HVA) or HVAR (for random urine; includes VMA and HVA)  Orders for VMA and HVA are coupled so that the levels of both analytes are measured and reported for each sample.  <b>For STAT requests, please call the toxicology lab at ext. 64664 to make arrangements.</b>  For 24-hour urine collections, transfer an aliquot of the measured urine to a 5-mL Greiner tube.
HpBsAg (see <u>Hepatitis B Surface Antigen</u> )						
HpCab (see <u>Hepatitis C Antibody</u> )						
HPT (see <u>Haptoglobin, Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HPV testing, for Gynaecological Liquid Based PAP test (Cytology), Liquid based PAP test (Cytology) PAP test LBP	Cytopathology-UH	Cervical, endocervical, vaginal samples CYTOLOGY AND HPV TESTING REQUISITION	Specimens are sent to Life Labs weekly for testing (Wednesday morning)		2018-08-28	<p>Cytopathology Laboratory UH Room A3-242 UH (519) 685-8500 x 36391/36392</p> <p>Clinical history is an important component for diagnostic interpretation The specimen is ThinPrep processed and must be collected in specific Gyn collection containers (PreservCyt)</p>
hs-TnT (see <u>High Sensitivity Troponin T</u> )						
hsCRP (see <u>High Sensitivity C-Reactive Protein</u> )						
HSN1 (see <u>Hereditary Sensory Neuropathy</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HTLV Serology (HTLV 1 / 2) Human T Lymphotropic Virus	Microbiology (VH)	Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to the Public Health Laboratory		2010-09-28	
Human Cytomegalovirus (HCMV) Anti-viral Resistance Genotyping	Virology Laboratory	HCMV positive plasma 5 mL Lavender EDTA Vacutainer tube  Requisition for Viral STI, Polyoma and Herpesvirus Testing	Referred to National Microbiology Lab		2012-12-07	HCMV Anti-viral Resistance Genotyping is available on HCMV positive patients only
Human Growth Hormone (see <u>Growth Hormone, Plasma/Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Human Herpes Virus Type 6	Microbiology (VH)	Blood - 5 mL Lavender top (EDTA) Vacutainer tube (A minimum 1 mL of whole blood is required) or CSF - Encephalitis cases only (minimum 300 uL CSF) Sick Kids Molecular Microbiology Referred In Viral Requisition	Referred out Monday-Wednesday to SickKids	See report	2010-09-28	
Human Immunodeficiency Virus (see <u>HIV Serology - Transplant</u> )						
Human T Lymphotropic Virus (see <u>HTLV Serology (HTLV 1 / 2)</u> )						
Hunter Syndrome (see <u>Iduronate-2-Sulfate Sulfatase, Leukocytes/Plasma/Fibroblasts</u> )						
Hurler Syndrome (see <u>Alpha-Iduronidase, Leukocyte/Fibroblasts, Alpha-Iduronidase, Plasma</u> )						
HVA (see <u>Homovanillic Acid, Urine</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hydroxyproline,Urine	Test not available (Various)	24 Hour Urine with 20 mL of 6 mol/L (6N) HCL preservative.	<b>TEST NO LONGER AVAILABLE</b>		2012-04-17	Effective April 17, 2012 Hydroxyproline is no longer available. For bone density testing, please order C-Telopeptide (serum/plasma)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hypercoagulable Screen Thrombophilia Screen	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	<p><b>Adult:</b> 5 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes <b>and</b> 2 x 4 mL Lavender (EDTA) top Vacutainer tubes</p> <p><b>Pediatric:</b> 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling and</b> one 4 mL Lavender (EDTA) top Vacutainer tube GENERAL LABO (more...)</p>	Weekly	See individual tests	2008-11-27	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hyperkalemic Periodic Paralysis Type 1 (see <u>Paramyotonia Congenita Hyperkalemic Periodic Paralysis</u> )						
Hypersensitivity Pneumonitis (see <u>Aspergillus fumigatus IgG Antibodies, Farmers Lung IgG Antibodies, Serum</u> )						
Hypoxanthine-Guanine Phosphoribosyl Transferase, Whole blood Lesch-Nyhan Syndrome	Biochemical Genetics	6 mL Green (Sodium Heparinized) top Vacutainer tube BIOCHEMICAL GENETICS LAB REQUISITION	Test must be prearranged before collection by calling the lab at 519-685-8500  Specimen Receiving ext. 71561	See report issued by lab	2008-06-10	
IC (see <u>Immune Complexes</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Iduronate-2-Sulfate Sulfatase, Leukocytes/Plasma/Fibroblasts MPSII Hunter Syndrome	Biochemical Genetics	<p>1. 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer</p> <p>2. 4.5 mL Green (Lithium Heparin) top Vacutainer tube</p> <p>3. Fibroblasts</p> <p><b>1. &amp; 2.</b> GENERAL LABORATORY REQUISITION</p> <p><b>3.</b> BIOCHEMICAL GENETICS LAB REQUISITION</p>	As required	<p>Leukocyte: 30-53 nmol/mg protein/4 hr.</p> <p>Plasma: 167-475 nmol/ml plasma/4 hr.</p> <p>Fibroblast: 31-110 nmol/mg protein/4 hr.</p>	2008-06-10	
IFE (see <u>Immunofixation Electrophoresis, Serum, Immunofixation Electrophoresis, Urine</u> )						
IFE Serum (see <u>Immunofixation Electrophoresis, Serum</u> )						
IFES (see <u>Immunofixation Electrophoresis, Serum</u> )						
IFEU24 (see <u>Immunofixation Electrophoresis, Urine</u> )						
IFEUR (see <u>Immunofixation Electrophoresis, Urine</u> )						
IgA (see <u>Immunoglobulin A, Plasma/Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
IgD (see <u>Immunoglobulin D, Serum- IgD</u> )						
IgE, Total (see <u>Immunoglobulin E, Serum</u> )						
IGF-1 (see <u>Insulin-Like Growth Factor, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
IGFBP3, Serum Insulin-Like Growth Factor Binding Protein 3	Core	6 mL Red top Vacutainer tube Gold or Light Green (heparin) top tubes are also acceptable. GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	2 months 5 years: 0.7 5.2 mg/L 6 8 years: 1.3 6.5 mg/L 9 11 years: 1.8 8.4 mg/L 12 13 years: 2.7 9.5 mg/L 14 16 years: 3.3 10.0 mg/L 17 19 years: 2.9 8.7 mg/L 20 39 years: 2.9 7.8 mg/L 40 49 years: 3.3 6.7 mg/L 50 70 years: 3.0 6.9 mg/L ≥70 years: 2.2 5.7 mg/L  <u>Reference Intervals Based on Tanner Stage:</u> Male: Tanner stage 1: 1.4 5.2 mg/L Tanner stage 2: 2.3 6.3 mg/L (more...)	2012-06-04	Test is available ONLY to Endocrinologists from London Health Sciences Centre and St. Joseph's Health Care. Requests from all other physicians within LHSC/SJHC must have biochemist approval. <b>Note:</b> Specimens from outside LHSC/SJHC will be accepted.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
IGFI (see <u>Insulin-Like Growth Factor, Serum</u> )						
IgG (see <u>Immunoglobulin G, Plasma/Serum</u> )						
IgG Antibodies to double stranded DNA (see <u>Anti double stranded DNA, IgG</u> )						
IgG fractionation (see <u>IgG Subclasses, Serum/Plasma</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
IgG Subclasses, Serum/Plasma IgG fractionation IgG subtypes IgG subsets IgG1 IgG2 IgG3 IgG4	Clinical Immunology	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 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 GENERAL LABORATORY REQUISITION</p>	Monday Friday 0800-1600	<p><b>Subclass IgG1 g/L:</b></p> <p>0-&lt;2 years: 1.94-8.42 2-&lt;4 years: 3.15-9.45 4-&lt;6 years: 3.06-9.45 6-&lt;8 years: 2.88-9.18 8-&lt;10 years: 4.32-10.20 10-&lt;12 years: 4.23-10.60 12-&lt;14 years: 3.42-11.50 14-&lt;18 years: 3.15-8.55 ≥18 years: 3.82-9.29</p> <p><b>Subclass IgG2 g/L:</b></p> <p>0-&lt;2 years: 0.23-3.00 2-&lt;4 years: 0.36-2.25 4-&lt;6 ye (more...)</p>	2009-05-13	IgG subclass testing includes IgG1, IgG2, IgG3 and IgG4 as reported values.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
IgG subsets (see <a href="#">IgG Subclasses, Serum/Plasma</a> )						
IgG subtypes (see <a href="#">IgG Subclasses, Serum/Plasma</a> )						
IgG/Alb CSF/Serum Ratio (see <a href="#">CSF Index</a> )						
IgG1 (see <a href="#">IgG Subclasses, Serum/Plasma</a> )						
IgG2 (see <a href="#">IgG Subclasses, Serum/Plasma</a> )						
IgG3 (see <a href="#">IgG Subclasses, Serum/Plasma</a> )						
IgG4 (see <a href="#">IgG Subclasses, Serum/Plasma</a> )						
IgM (see <a href="#">Immunoglobulin M, Plasma/Serum</a> )						
IgM antibodies to AGM1 (see <a href="#">Anti GM1, IgM serum</a> )						
IgM antibodies to Asialo GM1 (see <a href="#">Anti GA1 IgM, Serum</a> )						
IgM antibodies to Ganglioside Monosialic Acid (see <a href="#">Anti GM1, IgM serum</a> )						
IgM vs Asialo-GM1 (GA1) (see <a href="#">Anti GA1 IgM, Serum</a> )						
IgM vs GA1 (see <a href="#">Anti GA1 IgM, Serum</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Image-Guided Fine Needle Aspirate Cytology Aspiration Biopsy Bone Breast Kidney Liver Lung Lymph Node Pancreas Salivary Gland Soft Tissue Thyroid Other FNA	Cytopathology-UH	<b>Non-Gynaecologica            I: Aspiration            Biopsy</b>  Orange top routine specimen container containing 30 mL Cytolyt solution/specimen material CYTOPATHOLOGY REQUISITION-NON-GYNAECOLOGICAL AREA	Weekdays		2005-08-01	If there is a clinical suspicion of <b>lymphoma</b> , a portion of the first and second pass should be submitted for Flow Cytometry in an appropriate fixative.  Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392  Pager Numbers: Cytology SJHC - 10498 Cytology Victoria - 17227  Clinical history is an important component for diagnostic interpretation.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Imipramine, Serum/Plasma Tofranil	Core	6 mL Red top Vacutainer tube or 4 mL Lavender (EDTA) Vacutainer tube  Avoid gel-separator tubes GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Imipramine + Desipramine: 640-1080 nmol/L	2005-07-01	

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immune Complexes Circulating immune complexes IC CIC	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube or EDTA plasma  <b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube  GENERAL LABORATORY REQUISITION	Batch Analysis once/20 business days	Negative: ≤19 RU/mL	2010-01-11	<p>This assay DOES NOT quantitate C1q protein.</p> <p>Results higher than top standard will be reported as &gt;200 RU/mL.</p> <p>CIC as measured by C1q binding are found sporadically in the normal population as a result of infection and can also be elevated after eating. Results from different technologies, methodologies and manufacturers kits may vary widely due to differences in standardization.</p> <p>CIC testing is used to aid diagnosis only. CIC results are not diagnostic proof of the presence of absence of disease. Review the results in conj (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immune Status for Hepatitis B (see <u>Hepatitis B Surface Antibody</u> )						
Immunofixation Electrophoresis, Serum IFE IFE Serum IFES Light Chains	Clinical Immunology	5 mL Gold top Vacutainer tube  Light Green (Li-Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Interpretative analysis	2009-02-27	<p>Protein electrophoresis (PEL) is always performed first. The PEL result will determine if IFE is performed. IFE is performed when an abnormal globulin band is detected on PEL that has not been identified previously by IFE. If the band has been identified previously by IFE and the PEL pattern has not changed significantly, the IFE will not be repeated for <math>\geq 4</math> years.</p> <p>IFE uses specific antisera to identify monoclonal immunoglobulins.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunofixation Electrophoresis, Urine IFE IFEUR IFEU24 Light Chains Bence Jones Protein	Clinical Immunology	24-hour urine or random urine A 24-hour urine collection is the preferred specimen for analysis of Bence Jones protein (free light chains). If a 24-hour urine is not available, the first voided morning specimen is recommended. GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Interpretative analysis	2009-08-19	<p>Protein electrophoresis (PEL) is always performed first (unless the total protein concentration in the urine sample is &lt; 0.06 g/L, in which case IFE will be performed directly). The PEL result will determine if IFE is performed. IFE is performed when an abnormal globulin band is detected on PEL that has not been identified previously by IFE. If the band has been identified previously by IFE and the PEL pattern has not changed significantly, the IFE will not be repeated for <math>\geq 4</math> years.</p> <p>IFE uses specific antisera to identify monoclonal immunoglobulins.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunoglobulin A, Plasma/Serum IgA	Core	<p><b>Adult:</b> 4.5 mL Light Green top Vacutainer tube (5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube are also acceptable)</p> <p><b>Pediatric:</b> 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top tube</p> <p>GENERAL LABORATORY REQUISITION</p>	Daily	<p>&lt;1 year: 0.0-0.1 g/L 1-&lt;3 years: 0.0-0.8 g/L 3-&lt;6 years: 0.1-1.4 g/L 6-&lt;14 years: 0.3-2.2 g/L 14-&lt;19years: 0.4-2.9 g/L Adult: 0.7-4.0 g/L</p>	2010-01-11	Serum IgG, IgA, and IgM are tested simultaneously as a group.



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunoglobulin D, Serum- IgD IgD	Core	5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Referred out Thursdays as required	7.7-132.1 mg/L	2010-03-12	
Immunoglobulin E, Allergen Specific (see <u>Allergen Specific IgE, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunoglobulin E, Serum IgE, Total	Core	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  Plasma is also acceptable. Green Vacutainer (Li Heparin)  <b>Pediatric:</b> 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Batch analysis, performed Thursdays	0 1 year: ≤15 kU/L 1 6 years: ≤60 kU/L 6 10 years: ≤90 kU/L 10 16 years: ≤200 kU/L >16 years: ≤100 kU/L	2010-01-11	Samples should not be taken from patients receiving therapy with high biotin doses (i.e. > 5 mg/day) until at least 8 hours following the last biotin administration.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunoglobulin G, Plasma/Serum IgG	Core	<p><b>Adult:</b> 4.5 mL Light Green top Vacutainer tube (5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube are also acceptable)</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION</p>	Daily	<p>0-&lt;15 days: 3.2-12.1 g/L 15 days-&lt;1 year: 1.5-6.3 g/L 1-&lt;4 years: 3.2-9.9 g/L 4-&lt;10 years: 5.0-11.7 g/L 10-&lt;19 years: 6.0-13.1 g/L Adult: 7.0-16.0 g/L</p>	2010-01-11	Serum IgG, IgA, and IgM are tested simultaneously as a group.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunoglobulin G,CSF CSF IgG CSFI	Core	<p><b>Adult:</b>            1.0 mL of CSF and a 5 mL Gold or 6 ml Red top Vacutainer</p> <p>Serum from a 4.5 ml Green (Lithium Heparin) is also acceptable.</p> <p><b>Pediatric:</b>            0-2 years: 0.5 mL Gold or Red Microtainer            2-10 years: 3 mL Gold or Red Vacutainer tube</p> <p>GENERAL LABORATORY REQUISITION</p>	Daily	10-30 mg/L	2010-01-11	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunoglobulin M, Plasma/Serum IgM	Core	<p><b>Adult:</b> 4.5 mL Light Green Vacutainer tube or 4 mL Lavender top tube (5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube are also acceptable)</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION</p>	Daily	<p>0-&lt;15 days: 0.0-0.3 g/L 15 days-&lt;13 weeks: 0.1-0.7 g/L 13 weeks-&lt;1 year: 0.1-0.8 g/L</p> <p>1-&lt;19 years: 0.5-1.8 g/L (Female) 1-&lt;19 years: 0.4-1.4 g/L (Male) Adult: 0.4-2.3 g/L</p>	2010-01-11	Serum IgG, IgA, and IgM are tested simultaneously as a group.
Immunoreactive trypsin (see <u>Trypsin/Trypsinogen, Serum</u> )						
Immunoreactive trypsinogen (see <u>Trypsin/Trypsinogen, Serum</u> )						
Infectious Mononucleosis (see <u>Epstein Barr Virus Serology, Heterophile Antibody Screen</u> )						
Influenza Virus (see <u>Respiratory Virus Panel (RPCR)</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Influenza Virus Serology-Test not available Virus Culture (recommended method of testing for Influenza)	Test not available (Various)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube				
Initial Kidney Living donor Crossmatch and HLA Typing (see <u>HLA Workup Living Donor Initial</u> )						
Inorganic Phosphate (see <u>Phosphate, 24-Hour Urine, Phosphate, Plasma, Phosphate,Urine-Random</u> )						
Inorganic Phosphate (fluid) (see <u>Phosphate,Fluid</u> )						
Inorganic Phosphorus, PO4 (see <u>Phosphate, Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
INR International Normalized Ratio PT Prothrombin Time	Core	2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer  <b>Pediatric:</b> 0 months-10 years: 1.8 or 1 mL Blue top (3.2% Sodium Citrate) tube GENERAL LABORATORY REQUISITION	As required	Age/Range: < 5 days: 0.9-1.6 5 days-Adult: 0.9-1.1	2011-01-14	<b>PT results will not be released on patients. For the INR based Maddrey Score please use the following link:</b> Maddrey Score. This score is based on ISI and PT control values. Please use current ISI of 1.1 and PT control of 11.7 seconds. These values will be updated when necessary. Use MELD score as alternative.  INR: $\geq 4.5$ Detects abnormalities in the extrinsic pathway. Increased in liver disease, Vitamin K deficiency, obstructive jaundice and hemorrhagic disease of the newborn.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Insulin Antibodies, Serum Anti Insulin	Core	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION (if approved, a hard copy of the requisition is required)	Referred out Monday-Thursday	Less than 0.4 kU/L	2015-11-26	
Insulin, Serum	Core	<b>Adult:</b> 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube  Light Green (Li-Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> recommended GENERAL LABORATORY REQUISITION	Batched, tested on Wednesdays	18 - 173 pmol/L	2018-03-06	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
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Insulin-Like Growth Factor Binding Protein 3 (see IGFBP3, Serum)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Insulin-Like Growth Factor, Serum Somatomedin C IGFI IGF-1	Endocrinology	<p><b>Adult:</b>            5 mL Gold or Red top Vacutainer tube</p> <p><b>Pediatric:</b>            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 <b>NOT</b> acceptable  <b>GENERAL LABORATORY REQUISITION</b></p>	Monday- Friday 0800-1600	Age (years) Male (g/L) Female (g/L) 11-100 (more...)	2014-11-17	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Intact Parathyroid Hormone (see <u>Parathyroid Hormone, Plasma</u> )						
Intact PTH (see <u>Parathyroid Hormone, Plasma</u> )						
Integrated Prenatal Screen (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
International Normalized Ratio (see <u>INR</u> )						
Intra-operative consultation Frozen Section	Pathology	Specimens are always STAT, fresh and unfixed PowerChart: E-order choosing appropriate specimen. See Identification of Clinical Specimens.	Monday - Friday 0800-1800  After hours, page the Anatomical Pathologist or Resident, Neuropathologist or Resident.	See report		
Intrinsic Factor Antibodies, Serum Anti Intrinsic Factor	Core (all campuses)	6 mL Red or 5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Negative	2000-09-11	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Iodine, Urine: Random or 24-Hour	Core	24 hour urine collected in an <b>unused</b> 24-hour urine container or random urine GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	24-Hour urine: 0.79-3.62 umol/d, Conversion factor ug/d x 0.0079  Random urine: 0.33-2.76 umol/L, conversion factor ug/dL x 0.0788		
Iodine, Plasma	Core	6 mL K2-EDTA Royal Blue Vacutainer tube  GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	0.24-0.63 µmol/L  Conversion factor ug/dL x 0.0788		
Ionized Calcium (see <u>Calcium-Ionized, Whole blood</u> )						
IPS (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
Iron Binding Capacity Saturation (see <u>Unsaturated Iron Binding Capacity</u> )						
Iron Overload (see <u>Unsaturated Iron Binding Capacity</u> )						
Iron Overload Screen (see <u>Transferrin Saturation</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Iron, Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0.02-0.24 µmol/L  µmol/mol creatinine AgeFe maleMale0-112.0-28.42.0-27.112-191.3-17.31.3-16.820-291.5-19.51.1-14.930-391.8-23.61.3-17.440-492.1-28.01.4-18.350-592.5-33.11.6-21.160-692.5-32.61.7-22.170-792.6-34.01.8-23.8≥803.1-41.82.0-27.1  24 Hour Urine: 0.05-0.36 µmol/d  <u>Conventional Units:</u> (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
Iron, Plasma	Core UH & VH	4.5 mL Green top Vacutainer <b>Pediatric:</b> 0-2 years: 0.6 mL Green Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Male: 8-29 µmol/L Female: 7-26 µmol/L	2008-11-15	<p>Plasma samples containing RBC hemolysate may have slightly increased iron values.</p> <p>Useful in confirming the diagnosis of iron-deficiency anemia or hemochromatosis.</p> <p>Assessment of patients with acute iron poisoning. Serum ferritin is the preferred method for assessing iron stores.</p> <p>The concentration of iron in serum/plasma is dependent on the diet and is subject to circadian variations. Values are higher in A.M.</p> <p>Increased levels found with liver damage, hemolytic anemia, pernicious anemia, hemochromat (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Iron, Tissue	Trace Elements	Fresh or frozen tissue is acceptable TRACE ELEMENTS REQUISITION	Batched analysis	<b>Liver:</b> 3.6-35.8 µmol/g  ** Reference range is tissue dependent.		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:  Gold standard for diagnosis of haemochromatosis-liver biopsy.
Islet Cell Antibodies (see <u>Anti Islet Cell Antibodies, Serum</u> )						
Isopropanol (see <u>Alcohol Fractionation (by Gas Liquid Chromatography)</u> )						
JAK2(V617F) (see <u>Polycythemia Vera</u> )						
JC (see <u>Polyoma Virus</u> )						
Karyotype (see <u>Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor</u> )						
Keppra (see <u>Levetiracetam</u> )						
Ketones (see <u>Beta Hydroxybutyrate, Plasma/Serum</u> )						
Ketones, Fluid	Core	Fluid or CSF GENERAL LABORATORY REQUISITION	As required	Negative	2009-09-08	For Urine Ketones order DIPU

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Kidney (see <u>Image-Guided Fine Needle Aspirate Cytology</u> , <u>Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
Kidney Biopsy (see <u>Renal Biopsy</u> )						
Kleihauer (see <u>Fetal Maternal Hemorrhage Screen</u> )						
Krabbe Disease (see <u>Beta-Galactocerebrosidase</u> , <u>Leukocyte/Fibroblasts</u> )						
KRAS ERAS NRAS	Molecular Diagnostics	FFPE Refer to Pathology	Monday to Friday 0800-1600h	See report		
L-Asparaginase Asparaginase Activity	Core	4 mL Lavender top Vacutainer tube L- ASPARAGINAS E REQUISITION	Referred out Monday- Thursday	See report	2019-02-13	
Lactate Dehydrogenase Isoenzymes (serum) LD Isoenzymes	Test not available		Test no longer available effective February 1, 2001.			
Lactate Dehydrogenase,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report	2010-05-17	Hemolysis may affect results.



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lactate Dehydrogenase, Plasma LDH LD	Core	4.5 mL Green (Lithium Heparin) top Vacutainer  Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable.  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Children: 0-20 days: <600 U/L 21 days-15 years: 300 U/L  Adult: Male (>15 years): <225 U/L Female (>15 years): <214 U/L	2008-11-15	Hemolysis may cause falsely elevated results.  Increases occur due to necrosis of liver, skeletal muscle, red blood cells, bone marrow and malignancies. Very non-specific.  In healthy children, levels may be elevated up to 800 IU/L.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lactate, Plasma	Core UH & VH	6 mL Grey top Vacutainer tube  <b>Pediatric:</b> 2-10 years: 2 mL Grey top tube GENERAL LABORATORY REQUISITION	As required	0.50-2.20 mmol/L	2008-11-15	Hemolyzed, lipemic and icteric samples may cause interference with results. >4.0 mmol/L (Emergency Department only) Increased in sustained hypoxia and several metabolic disorders. Lactic acidosis is a frequent cause of increased anion gap. <b>Centrifuge and separate plasma within 15 minutes of blood collection.</b>
Lactate,CSF	Core	CSF GENERAL LABORATORY REQUISITION	As required	See report		RBC hemolysis may cause interference (xanthochromia) with results.
Lactate-D (see <u>D-Lactate,Serum</u> )						
Lactate: Pyruvate Ratio (see <u>Pyruvate, Whole Blood</u> )						
Lactate:Pyruvate Ratio (see <u>Pyruvate, CSF</u> )						
Lamictal (see <u>Lamotrigine,Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lamotrigine, Serum Lamictal	Toxicology/Special Chemistry	6 mL Red top Vacutainer tube or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Once per week	4.0-39.0 µmol/L		
Lanoxin (see <u>Digoxin</u> )						
LATS (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						
LBP (see <u>Gynaecological Liquid Based PAP test for Cytology, HPV testing, for Gynaecological Liquid Based PAP test (Cytology),</u> )						
LCFA (see <u>Long Chain Fatty Acids, Plasma/Serum</u> )						
LD (see <u>Lactate Dehydrogenase, Plasma</u> )						
LD Isoenzymes (see <u>Lactate Dehydrogenase Isoenzymes (serum)</u> )						
LDH (see <u>Lactate Dehydrogenase, Plasma</u> )						
LDL (see <u>Cholesterol-LDL, Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lead, 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): 0.00-0.18 µmol/L  Conventional Units: 0.0-36.8 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
Lead, Whole blood	Trace Elements	Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units</u> (Reported on Patient Chart): <b>Reference Range</b> All ages: 0.00-0.10 µmol/L <b>Alert Value:</b> 0-16 years:>0.12 µmol/L <b>Action Value:</b> 0-16 years:>0.48 µmol/L >=17 years:>1.00 µmol/L  <u>Conventional Units:</u> <b>Reference Range</b> All ages:0.0-20.0 µg/L <b>Alert Value:</b> 0-16 years:>25.0 µg/L <b>Action Value:</b> 0-16 years:>100.0 µg/L >=17 (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
Lead,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-14.5 nmol/L  µmol/mol creatinineAgeFe maleMale0-110-1.720-1.6512-190-1.050-1.0220-290-1.190-0.9030-390-1.430-1.0640-490-1.700-1.1150-590-2.010-1.2860-690-1.980-1.3470-790-2.070-1.45≥800-2.540-1.65  24 Hour Urine: 0-19.3 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-3.0 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
Leber's Hereditary Optic Neuropathy LHON	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		<p>For more information click on: Molecular Diagnostic Laboratory N/A</p> <p>Please note that these samples will be subjected to direct mutational analysis which may not account for all cases of the disease diagnosed.</p> <p>Further information will be supplied with the test result.</p> <p><u>Analysis:</u> Lebers hereditary optic neuropathy (LHON), is a maternally inherited disease resulting in optic nerve degeneration and cardiac dysrhythmia<sup>1</sup>. Three mitochondrial DNA point mutations (nt.#3460G&gt;A, nt.#11778G&gt;A and nt.#14484T&gt;C (more...))</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Leflunomide Arava Teriflunomide	Core (VH)	6 mL Red top or 4 mL Lavender (EDTA) top Vacutainer tube GENERAL LABORATORY REQUISITION	Weekly, test is performed on Thursdays	50-100 ug/mL  Note: For couples planning a pregnancy, confirmation of teriflunomide concentrations (either father or mother receiving therapy) of <0.02 ug/mL in two separate tests at least 14 days apart is highly recommended.	2013-05-27	If the results are to be faxed back from the referral laboratory, please indicate so clearly on the request.
Legionella Antigen Detection	Microbiology (VH)	Urine PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory		2006-07-01	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Legionella Culture	Microbiology (VH)	Respiratory (suctioned sputum, tracheal aspiration or bronchial wash) Fluids (CSF, pericardial, peritoneal, pleural) Tissue (liver, lung, renal) Wounds or Abscess Material MICROBIOLOGY REQUISITION	Daily			
<u>Leishmania (see Ova and Parasites-Blood and Tissue)</u>						
Leishmaniasis Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube 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.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Leptospira Antibody	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekly to National Microbiology Laboratory		2009-02-22	
Lesch-Nyhan Syndrome (see <u>Hypoxanthine-Guanine Phosphoribosyl Transferase, Whole blood</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Leukemia/Lymphoma Investigation	Flow Cytometry (VH)	<p>Bone marrow collected in K<sub>2</sub> EDTA  <b>(preferred for Acute Leukemia and Lymphoma)</b>  or  Peripheral blood collected in a 4 mL Lavender K<sub>2</sub> EDTA top Vacutainer tube  <b>(preferred for Chronic Leukemia)</b>  Referred-In  Samples:  FLOW  CYTOMETRY  REQUISITION</p>	<p>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.  For after hours and weekend requests, page the Hematologist on-call at (519) 685-8500 x 14999.</p>	<p>See report  * For new acute leukemia patients, preliminary results are communicated to the attending physician immediately upon completion of analysis with approval from the Hematopathologist or designate on the same day as the sample is received.</p>	2006-06-01	
Leukocyte Count (LKC) (see <u>Complete Blood Count</u> )						
Leukocyte Cystine (see <u>Cystine, Leukocyte</u> )						
Leukocytes,Urine	Core	Random urine GENERAL LABORATORY REQUISITION	As required	0 cells/uL		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Levetiracetam Keppra	Core	6 mL Red top Vacutainer tube (preferred)  Plasma is also acceptable from EDTA Lavender or Royal Blue top; Sodium Heparin green top, Sodium Citrate light blue top. GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	12.0 46.0 g/mL Toxic level not well established. Interpretation should include a clinical evaluation.		
LH (see <u>Luteinizing Hormone, Plasma/Serum</u> )						
LHON (see <u>Leber's Hereditary Optic Neuropathy, Mitochondrial Genome Sequencing and Depletions/Integrity Pane</u> )						
Li (see <u>Lithium, Serum</u> )						
Li-Fraumeni Syndrome (see <u>P53 Carrier Testing</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lidocaine, Serum/Plasma Xylocaine	Core	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Plasma (heparin or EDTA) is also acceptable.</p> <p><u>Blood collection tubes with separator gels are not acceptable for this test.</u> GENERAL LABORATORY REQUISITION</p>	Referred out Monday- Thursday	1.5-5.0 mg/L	2009-09-29	
Light Chain Screen (see <u>Protein Electrophoresis, Urine</u> )						
Light Chains (see <u>Immunofixation Electrophoresis, Serum, Immunofixation Electrophoresis, Urine</u> )						
<u>LINCL (see <u>Tripeptidyl Peptidase 1, Dried Blood Spot/Fibroblast</u>)</u>						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lipase	Core (all sites)	4.5 mL Green (Lithium Heparin) top Vacutainer  Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	13-60 U/L	2014-06-02	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>LIPID LADEN MACROPHAGE INDEX for OIL RED O- Respiratory and Exfoliative Samples for Cytology Bronchoalveolar lavage (BAL) for LLM -Oil Red O</p>	<p>Cytopathology- UH</p>	<p>Non- gynecological: Respiratory BAL CYTOLOGY REQUISITION- Non Gynecological Area</p>	<p>Weekdays</p>	<p>See report</p>	<p>2019-06-07</p>	<p>Specimens procured at VH- CALL ext. 55410 to alert the cytotechnologist. DELIVER fresh sample directly to VH, Rm. D2- 700, Pathology Attention: CYTOLOGY</p> <p>Clinical history is an important component for diagnostic interpretation. Fixed specimens will not be processed for Oil Red O. The total fresh specimen volume should not exceed one orange top specimen container.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lipid Profile Cholesterol, Triglyceride, HDL, LDL	Core UH & VH	4.5 mL Green top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 1 mL Green top tube GENERAL LABORATORY REQUISITION	As required	See reference ranges and interpretive comments for individual tests.  Increased risk of cardiovascular disease at triglycerides level greater than 2.0 mmol/L; increased risk of acute pancreatitis at triglycerides level greater than 10.0 mmol/L (Lancet 2014;384:626-635).	2010-12-03	
Lipoprotein (a) Lpa Lp(a) Lipoprotein a Lipoprotein A	Core	4 mL Lavender (EDTA) top Vacutainer tube or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Greater than 30 mg/dL associated with 1.7-fold increased risk of cardiovascular disease Less than 8.94 mg/dL lower limit for reporting	2014-07-28	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lipoprotein A (see <u>Lipoprotein (a)</u> )						
Lipoprotein a (see <u>Lipoprotein (a)</u> )						
Liquid based PAP test (Cytology) (see <u>HPV testing, for Gynaecological Liquid Based PAP test (Cytology),</u> )						
Liquid based PAP test for Cytology (see <u>Gynaecological Liquid Based PAP test for Cytology</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lithium, Serum Li	Core (VH)	5 mL Gold top Vacutainer tube  <b>Pediatric:</b>  0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	0.60-1.20 mmol/L	2008-11-15	<p>The light metal, lithium, was discovered in mineral compounds, by August Arfvedson in 1817 and electrolytically purified by Sir Humphrey Davy (also, independently by Brand) in 1818. Lithium alters the intraneuronal metabolism of catecholamines by an unknown mechanism. It is used to suppress the manic phase of manic depressive psychosis. Toxicity from Lithium salts leads to ataxia, slurred speech and confusion.</p> <p><b>Toxic:</b>&gt;1.5 mmol/L - CRITICAL VALUE to be phoned to Nurse or Physician immediately: Indicated in management of acute manic episodes in patients with b (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Liver (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
Long Acting Thyroid Stimulator (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						
Long Chain Fatty Acids, Plasma/Serum C24/C22 Long Chain Fatty Acid Ratio C26/C22 Long Chain Fatty Acid Ratio C26:0 Long Chain Fatty Acid Concentration Very Long Chain Fatty Acids LCFA VLCFA	Toxicology/Special Chemistry	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube or 5 mL Gold top Vacutainer GENERAL LABORATORY REQUISITION	Once a week	C24/C22 Ratio: 0-1.094 C26/C22 Ratio: 0-0.0350 C26:0 Concentration: 0-1.466 umol/L	2010-01-26	
Lorazepam, Urine- <b>Qualitative</b> test is available only upon request Ativan	Toxicology/Special Chemistry	Random urine GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	See report		
Low Density Lipoprotein Cholesterol (see <u>Cholesterol-LDL, Plasma</u> )						
Lp(a) (see <u>Lipoprotein (a)</u> )						
Lpa (see <u>Lipoprotein (a)</u> )						
Ludomil (see <u>Maprotiline, Serum/Plasma</u> )						
Luminal (see <u>Phenobarbital, Serum/Plasma</u> )						
Lung (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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Lupus Anticoagulant (see Anticardiolipin)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Luteinizing Hormone, Plasma/Serum LH	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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><u>Male:</u> Tanner stage 1: <math>\leq 1.30</math> IU/L Tanner stage 2: <math>\leq 2.91</math> IU/L Tanner stage 3: 0.65 - 4.19 IU/L Tanner stage 4: 1.16 - 6.23 IU/L Tanner stage 5: 1.15 - 7.17 IU/L Adult: 1.70 - 8.60 IU/L</p> <p><u>Female:</u> Tanner stage 1: <math>&lt; 0.31</math> IU/L Tanner stage 2: <math>\leq 4.01</math> IU/L Tanner stage 3: <math>\leq 7.93</math> IU/L Tanner stage 4: 0.68 - 19.80 IU/L Tanner stage 5: 0.48 - 21.60 IU/L Follicular phase: 2.40 - 12.60 IU/L Ovulatory phase: 14.00 - (more...)</p>	2009-12-01	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. <math>&gt; 5</math> mg/day) until at least 8 hours after the last biotin administration.</p> <p>In rare cases, interference due to extremely high titers of antibodies to test-specific antibodies, streptavidin, or ruthenium can occur.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lyme Disease Antibody <i>Borrelia burgdorferi</i>	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer tube Serology: PUBLIC HEALTH LABORATORY TEST REQUISITION	Serology is referred out weekdays to the Public Health Laboratory.		2010-09-13	CSF is no longer supported as an appropriate specimen type for Lyme serology or PCR investigations. Serology from blood is the reference standard.
Lymph Node (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
Lymphocyte Mitogen (see <u>Lymphocyte Proliferation</u> )						
Lymphocyte Proliferation Lymphocyte Mitogen	Core (all campuses)	2 X 6 mL Dark Green top Vacutainer tubes (Sodium Heparin) SICK KIDS LYMPHOCYTE PROLIFERATION - PHA REQUISITION	Sample must arrive at the testing lab on Thursday by 10:00 with a completed requisition.	See report.	2012-09-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lymphocyte Subset Enumeration	Flow Cytometry (VH)	Peripheral blood collected in 4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube. Referred-In Samples: FLOW CYTOMETRY 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.	CD19%CD19 Absolute x 109/LStart AgeEnd AgeRef LowRef HighStart AgeEnd AgeRef LowRef High0 Mins3 Months6320 Mins3 Months0.302.003 Months6 Months11413 Months6 Months0.433.006 Months1.00 YEARS14376 Months1.00 YEARS0.612.60 1.00 YEARS2.00 YEARS16351.00 YEARS2.00 YEARS0.722.60 2.00 YEARS6.00 YEARS14332.00 YEARS6.00 YEARS0.391.40 6.00 (more...)	2011-01-11	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lymphocytes (see <u>Differential Leukocyte Count (Peripheral Blood)</u> )						
Lymphocytosis Investigation (Peripheral Blood)	Flow Cytometry (VH)	Peripheral blood collected in a 4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender Microtainer 2-10 years: 3 mL Lavender top tube Referred-In Samples: FLOW CYTOMETRY 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.	See report	2006-06-01	
Lymphoma (see <u>Chromosome Analysis, Lymph Node/Tumor</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lymphoma Prep	Pathology	Tissue biopsy, fresh or in saline Powerchart: eOrder choosing appropriate specimen and "Special handling lymphomaprep, Introp-frozen" See Identification of Clinical Specimens	Refer to Collection Information	See report	2009-10-08	Deliver as directed to Pathology Laboratory. Specimen should reach Pathology within 15-30 minutes. May be done as part of a Frozen section to make a diagnosis of lymphoproliferative disorder or to narrow the differential diagnosis and confirm adequate sampling of the tissue.
Lysosomal Acid Lipase (see <u>Acid Lipase</u> )						
M. faeni (see <u>Farmers Lung IgG Antibodies, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>Macroprolactin, Serum/Plasma</p>	<p>Core</p>	<p>5 mL Gold top or 6 mL Red top Vacutainer tube</p> <p>Lithium heparin plasma is also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	<p>Referred out Monday- Thursday</p>	<p><u>Prolactin</u></p> <p>Female: Less than 25 ug/L Male: Less than 18 ug/L</p> <p><u>Macroprolactin</u></p> <p>Normal: Less than 0.200 ug/L Borderline: 0.20 - 0.400 ug/L Abnormal: Greater than 0.400 ug/L</p>	<p>2014-07-03</p>	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Magnesium for Trace Elements, Urine Trace Elements Magnesium, Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0.6-4.9 mmol/L mmol/mol creatinine Age Fe male Male 0-1170-58770-56012-1945-35743-34720-2951-40439-30830-3961-48845-36040-4973-58047-37950-5986-68555-43660-6984-67657-45770-7988-70562-493>80108-86570-560  24 Hour Urine: 1.0-7.0 mmol/d  <u>Conventional Units:</u>  Random Urine: (more...)	2011-01-24	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
Magnesium, 24-Hour Urine	Core	24 hour urine collected in 24 hour urine container GENERAL LABORATORY REQUISITION	As required	<b>24 hour urine:</b> 2.50-8.50 mmol/24h	2011-01-24	<p>Reference Ranges are based on Non-Occupationally exposed population.</p> <p>Useful to confirm suspected urinary magnesium loss, evaluate magnesium metabolism, abnormal serum magnesium concentrations, electrolyte status and in the workup of nephrolithiasis.</p> <p>Urinary excretion of magnesium is diet dependent.</p> <p><b>Low urine magnesium:</b> In states of hypomagnesaemia decreased urinary magnesium indicates a non-renal cause: decreased dietary magnesium (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Magnesium, 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): 1.65-2.52 mmol/L  Conventional Units: 40.1-61.2 mg/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
Magnesium,Plasma	Core	<p>4.5 mL Green (Lithium Heparin) top Vacutainer tube</p> <p><b>Pediatric:</b>  0-2 years: 0.5 mL Green top Microtainer  2-10 years: 2 mL Green top Vacutainer tube</p> <p>GENERAL LABORATORY REQUISITION</p>	As required.	0.65-1.05 mmol/L	2008-11-15	<p>Reference Ranges are based on Non-Occupationally exposed population.</p> <p>Low: &lt;0.5 mmol/L;  High: &gt;2.00 mmol/L to be phoned to Nurse or Physician immediately</p> <p>Useful in the diagnosis of hypomagnesaemia as the cause of unexplained cardiac arrhythmias, tetany, neuromuscular disorders, and refractory hypocalcaemia/hypokalaemia.</p> <p>Useful to monitoring magnesium sulphate during anticonvulsant therapy (especially in pre-eclampsia) or therapy causing renal magnesium loss (e.g. cisplatinum).  (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Magnesium, 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): 1.31-1.81 mmol/L  Conventional Units: 31.8-44.0 mg/L	2014-11-17	Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Major Estrogen (see <u>Estradiol, Plasma/Serum</u> )						
Malaria Prep (see <u>Malaria Screen</u> )						
Malaria Screen Malaria Prep Malarial Parasites	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender Microtainer 2-10 years: 3 mL Lavender top tube GENERAL LABORATORY REQUISITION	Available 24 hours a day, 7 days per week	Negative	2011-01-14	
Malarial Parasites (see <u>Malaria Screen</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Manganese, 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): 171-697 nmol/L  Conventional Units: 9.4-38.3 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
Manganese,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):  0-12 months:7.3-50.2 nmol/L 1-5 years:14.9-67.0 nmol/L 6-9 years:5.3-40.8 nmol/L 10-13 years:7.6-36.4 nmol/L ≥14 years:8.0-20.7 nmol/L  Conventional Units: 0-12 months:0.40-2.76 µg/L 1-5 years:0.82-3.68 µg/L 6-9 years:0.29-2.24 µg/L 10-13 years:0.42-2.00 µg/L ≥14 years:0.44-1.14 µg/L (more...)	2010-08-26	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
Manganese,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 1.3-9.1 nmol/L µmol/mol creatinineAgeFe maleMale0- 110.14-1.080.14- 1.0312-190.09- 0.660.09-0.6420- 290.10-0.750.08- 0.5730-390.13- 0.900.09-0.6640- 490.15-1.070.10- 0.7050-590.18- 1.260.11-0.8160- 690.17-1.250.12- 0.8470-790.18- 1.300.13-0.91≥ 800.22-1.600.14- 1.03  24 Hour Urine: 1.8-14.6 nmol/d  <u>Conventional</u> <u>Units:</u>  Random Urine: (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
Manganese, 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): 98-355 nmol/L  Conventional Units: 5.4-19.5 µg/L		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Maprotiline, Serum/Plasma Ludiomil	Core	2 x 5 mL Gold top Vacutainer tube or 2 x 4 mL Lavender EDTA Vacutainer tubes GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	180 -720 nmol/L	2005-07-01	
Maroteaux-Lary Syndrome (see <u>Aryl Sulfatase B, Leukocytes/Fibroblasts</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks) Enhanced First Trimester Screen eFTS MSS Integrated Prenatal Screen IPS Triple Marker Triple Screen Down Syndrome Screen Alphafetoprotein (Pregnancy) Open Neural Tube Defect (ONTD) Open Spina Bifida (OSB)	Core	5 mL Gold top Vacutainer tube preferred  6 mL Red top Vacutainer is also accepted  <b>Light Green top tubes (Litheparin) or Lavender top tubes (EDTA) are not acceptable</b> North York General Hospital Prenatal Screening Requisition Form	Referred out Monday-Friday	Not available. Result depends on clinical information.	2009-02-12	The NYGH MSS laboratory will fax results directly to the ordering provider and any other health care providers, as requested on the prenatal screening requisition form.  Risks generated are dependent on accuracy and completeness of clinical information provided on the prenatal screening requisition form.  Once the blood has clotted and been centrifuged, transfer a minimum of 2 mL of serum to a labelled plastic transport tube.
MCAD (see <u>Medium Chain Acyl CoA Dehydrogenase Deficiency(MCAD)</u> )						
MDMA (see <u>Amphetamine Screen,Urine</u> )						
Mean Cell Volume (MCV) (see <u>Complete Blood Count</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Measles Serology - Measles IgG/IgM Rubeola Virus Serology	Microbiology	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Lab	See report	2006-07-01	

MECP2 (see Rett Syndrome)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Medium Chain Acyl CoA Dehydrogenase Deficiency(MCAD) ACADM MCAD	Molecular Diagnostics	Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR GENETICS LABORATORY REQUISITION			2018-11-02	<p>Full ACADM gene sequencing and del/dup analysis.</p> <p>Medium chain acyl CoA dehydrogenase (ACADM, a.k.a. MCAD) deficiency is a recessive trait associated with defective oxidation of fatty acids which may have serious clinical sequelae. In the Ontario population approximately 90% (PMID:20434380) of alleles associated with ACADM (MCAD) deficiency have a single A&gt;G mutation at nucleotide #985. Thus approximately 81% of clinically affected members of this population would be expected to be homozygous for the 985A&gt;G mutation, 18% would be com (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
MELAS (see <u>Mitochondrial Genome Sequencing and Depletions/Integrity Pane</u> )						
Mellaril (see <u>Thioridazine and Metabolite, Serum/Plasma</u> )						
MEN 1 (see <u>Multiple Endocrine Neoplasia: Type 1</u> )						
Mercury, 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): 0.0-31.2 nmol/L  Conventional Units: 0.00-6.25 µg/L		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Mercury,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-15.0 nmol/L µmol/mol creatinineAgeFe maleMale0-110- 1.780-1.7012- 190-1.080- 1.0520-290- 1.230-0.9430- 390-1.480- 1.0940-490- 1.760-1.1550- 590-2.080- 1.3260-690- 2.050-1.3970- 790-2.140-1.50≥ 800-2.630-1.70  24 Hour Urine: 0-20.0 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-3.0 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
Mercury,Whole blood	Trace Elements	Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	<p><u>SI Units</u> (Reported on Patient Chart): <b>Reference Range</b> 0 -16 years:0.0-8.6 nmol/L≥17 years:0.0-18.4 nmol/L<b>Alert Value:</b>All age ranges&gt;50 nmol/L<b>Action Value:</b>All age ranges&gt;200 nmol/L</p> <p><u>Conventional Units:</u> <b>Reference Range</b>0 -16 years: 0.00-1.72 µg/L≥17 years: 0-3.70 µg/L<b>Alert Value:</b>All age ranges&gt;10 µg/L<b>Action Value:</b>All age (more...)</p>		<p>Reference Ranges are based on Non-Occupationally exposed population.</p> <p>Find Interpretive Comment and Clinical Information here:</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
MERF (see <u>Mitochondrial Genome Sequencing and Depletions/Integrity Pane</u> )						
Metachromatic Leukodystrophy (see <u>Aryl Sulfatase A, Leukocyte/Fibroblasts/Urine, Sulfatides, Urine</u> )						
Metadol (see <u>Methadone,Urine Qualitative</u> )						
Metanephrine (see <u>Metanephrines, Plasma, Metanephrines, Urine</u> )						
Metanephrines, Plasma Plasma metanephrines Fractionated metanephrines Metanephrine Normetanephrine 3-methoxytyramine	Core	<b>Adult:</b> 4 mL Lavender top (EDTA) Vacutainer tube  <b>Pediatric:</b> 2-10 years: 3 mL Lavender top (EDTA) Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Metanephrine: < 0.50 nmol/L Normetanephrine : < 0.90 nmol/L 3-methoxytyramine : < 0.30 nmol/L	2014-05-13	
Metanephrines, Urine Metanephrine Normetanephrine 3-methoxytyramine Fractionated metanephrines Total (conjugated and unconjugated) metanephrines	Toxicology/Special Chemistry	24-hour urine GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	metanephrine: ≤ 1.5 mol/day normetanephrine : ≤ 2.9 mol/day 3-methoxytyramine : ≤ 2.4 mol/day	2018-12-03	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Methadone, Serum	Core	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><b>Biochemist approval is required for this test.</b></p> <p>Blood collection tubes with separator gels are not recommended for this test.</p> <p>6 mL Royal Blue top Vacutainer tubes for serum collection are also acceptable.</p> <p>GENERAL LABORATORY REQUISITION</p>	Referred out Monday Thursday	100 400 ng/mL Potentially toxic range: $\geq 2000$ ng/mL	2005-02-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Methadone,Urine Qualitative Metadol	Toxicology/Special Chemistry	Minimum 10 mL random urine collected in a sterile container. GENERAL LABORATORY REQUISITION	Monday-Friday: 0800-1600	See report	2005-07-01	
Methamphetamine (see <u>Amphetamine Screen,Urine</u> )						
Methanol (see <u>Alcohol Fractionation (by Gas Liquid Chromatography)</u> )						
METHB (see <u>Co oximetry</u> )						
Methemoglobin (see <u>Co oximetry</u> )						
Methicillin Resistant Staph Aureus Screen (see <u>MRSA Screen</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Methotrexate, Plasma/ Serum	Core	<p>4.5 mL Green (Lithium Heparin) top Vacutainer tube</p> <p>Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tubes are also acceptable</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	<p>High-risk Concentrations for toxicity (after high dose methotrexate):</p> <p>24 hrs. post dose: &gt;10 µmol/L</p> <p>48 hrs. post dose: &gt;1 µmol/L</p> <p>72 hrs. post dose: &gt;0.2 µmol/L</p>	2012-03-01	<p>Specimens from patients who have received glucarpidase (carboxypeptidase G2) as a high dose methotrexate rescue therapy should not be tested by the Enzyme Immunoassay due to interference.</p> <p>Antineoplastic chemotherapeutic agent. A clear relationship between serum concentration and therapeutic efficacy has not been clearly defined. Serum concentration monitoring has had a significant impact on drug-related toxicity. It is important that patients at high risk for toxicity be identified within 48 hrs. after initiation of methotrexate administration (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Methylmalonic Acid, Plasma	Core	2 X 4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	0.1-0.4 umol/L	2010-09-27	
Methylmalonic Acid, Urine Methylmalonic Aciduria Monitoring	Biochemical Genetics	Random urine BIOCHEMICAL GENETICS LAB REQUISITION	As required	See report issued by lab	2008-06-10	
Methylmalonic Aciduria Monitoring (see <a href="#">Methylmalonic Acid, Urine</a> )						
Methylphenidate, Urine Ritalin™ Concerta™	Toxicology/Special Chemistry	Minimum 10 mL random urine collected in a sterile container GENERAL LABORATORY REQUISITION			2014-01-15	
Micro array (see <a href="#">Microarray</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Microalbumin,Urine Urine Microalbumin Albumin/Creatinine Ratio Microalbumin/Creatinine Ratio	Core (VH)	Random specimen (no preservative) preferred or Collection of 24-Hour Urine Sample GENERAL LABORATORY REQUISITION	As required	<u>Microalbumin/Cr            eatinine Ratio:</u>  Male: 0.0 - ≤2.0 mg/mmol creatinine Female: 0.0 - ≤ 2.8 mg/mmol creatinine  <u>Microalbumin/Cr            eatinine ratio for            Microalbuminuria            (MAU):</u>  Male: 2.0 - 20.0 mg/mmol creatinine Female: 2.8 - 28 mg/mmol creatinine  <b>Microalbumin/C            reatinine ratio            for Overt            Diabetic            Nephropathy:</b>  Male: >20.0 mg/mm (more...)	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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Microalbumin/Creatinine Ratio (see Microalbumin,Urine)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Microarray Micro array aCGH Array comparative genomic hybridization Array CGH	Cytogenetics (VH)	-Peripheral Blood in EDTA: 3 mL minimum (1 mL minimum for newborns) -Fibroblast Cell Culture: 2 x T25 confluent flasks at room temperature -Extracted DNA: 2ug total (min. 70 ng/uL)  Follow-Up Testing : 1)Q-PCR or Targeted Microarray - EDTA (1-3mL) 2) FISH or Chromosome Analysis NaHep (1-3mL) MICROARRAY REQUISITION( must include patient's name, address, Ontari (more...)	As required	See report	2011-03-16	For additional information please refer to the Molecular Diagnostics Laboratory

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Microbial Count Air	Microbiology/Epidemiology	Specimen is agar strip but may be settle plate, agar plate, or impinger solution. MICROBIOLOGY REQUISITION	Daily  Turn-around-time varies with the organisms in question.			
Microspolyspora faeni (see <u>Farmers Lung IgG Antibodies, Serum</u> )						
Microsporidia Investigation	Microbiology (VH)	Faeces or Bowel Aspirate  For all other specimens contact the lab before collecting for specific instructions regarding preservation and transport. PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Toronto Public Health Laboratories		2010-09-13	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Minimal Residual Disease Investigation	Flow Cytometry (VH)	Bone marrow collected in K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube Peripheral blood collected in K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube Referred-In Samples: FLOW CYTOMETRY REQUISITION	Monday-Friday 0800-1700  Fridays or prior to STAT holidays, routine specimens must be received in the Flow Cytometry Laboratory at Victoria Hospital by 1300.	See report	2006-06-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Mitochondrial Genome Sequencing and Depletions/Integrity Pane mtDNA sequencing LHON MELAS MERF	Molecular Diagnostics	Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR GENETICS LABORATORY REQUISITION			2018-11-01	Mitochondrial encoded: NC_012920.1: MT-TY, MT-TW, MT-TV, MT-TT, MT-TS2, MT-TS1, MT-TR, MT-TQ, MT-TP, MT-TN, MT-TM, MT-TL2, MT-TL1, MT-TK, MT-TI, MT-TH, MT-TG, MT-TF, MT-TE, MT-TD, MT-TA, MT-RNR2, MT-RNR1, MT-ND6, MT-ND5, MT-ND4L, MT-ND4, MT-ND3, MT-ND2, MT-ND1, MT-CYB, MT-CO3, MT-CO2, MT-CO1, MT-TC, MT-ATP8, MT-ATP6 Nuclear encoded: APTX(NM_001195224.8.1), DGUOK(NM_080916.2), DNA2(NM_001080449.2), FBXL4(NM_001278716.1), GFER(NM_005262.2), MGME1(NM_052865.3), (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Mitochondrial Myopathy (see <u>Mitochondrial Respiratory Chain Enzyme</u> )						
Mitochondrial Respiratory Chain Enzyme Mitochondrial Myopathy	Biochemical Genetics	Fresh muscle Fresh Liver  BIOCHEMICAL GENETICS LAB REQUISITION	As required	Please refer to report issued by lab	2008-06-10	
Mitotane	Core	5 mL Gold or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out	Therapeutic: 14-20 mg/L Toxic: > 20 mg/L	2011-10-20	
MLD (see <u>Aryl Sulfatase A, Leukocyte/Fibroblasts/Urine, Sulfatides, Urine</u> )						
MMF (see <u>Mycophenolic Acid</u> )						
Mogadon (see <u>Nitrazepam, Serum</u> )						
Molecular testing for Fragile-X (see <u>Fragile-X</u> )						
Molybdenum Cofactor Deficiency (see <u>Sulfocysteine, Urine</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Molybdenum, 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): 2.1-10.4 nmol/L  Conventional Units: 0.2-1.0 µg/L		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Molybdenum, 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): 5.2-21.9 nmol/L  Conventional Units: 0.5-2.1 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
Molybdenum, Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0.14-1.25 µmol/L µmol/mol creatinine Age Fe male Male 0-11 15-14 21-19 10-9 110-88 20-29 11-10 28-78 30-39 13-12 410-91 40-49 16-14 710-96 50-59 19-17 412-11 160-69 18-17 113-11 670-79 19-17 914-12 5≥80 24-21 915-142  24 Hour Urine: 0.20-1.90 µmol/d  <u>Conventional Units:</u>  Random Urine: 13.0-120.0 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
Molybdenum, 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): 4.2-16.7 nmol/L  Conventional Units: 0.4-1.6 µg/L	2010-01-11	Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Monilia (see <u>Fungus Culture-Systemic or Subcutaneous</u> )						
Monoclonal Protein Screen (see <u>Protein Electrophoresis, Serum, Protein Electrophoresis, Urine</u> )						
Monocytes (see <u>Differential Leukocyte Count (Peripheral Blood)</u> )						
Morphine (see <u>Opiates Screen,Urine</u> )						
Morphine Glucuronide (see <u>Opiates Screen,Urine</u> )						
Morquio A Disease (see <u>Galactose-6-Sulfatase, Fibroblast</u> )						
Morquio B Disease (see <u>Beta-Galactosidase, Leukocyte/Plasma/Fibroblasts</u> )						
Mouth Culture	Microbiology (VH)	Mouth, tongue, gums MICROBIOLOG Y REQUISITION	Daily			Gram stain is examined for spirochaetes/fusiform bacilli (Vincent's organisms) and yeast.
MPA (see <u>Mycophenolic Acid</u> )						
MPSI (see <u>Alpha-Iduronidase, Leukocyte/Fibroblasts, Alpha-Iduronidase, Plasma</u> )						
MPSII (see <u>Iduronate-2-Sulfate Sulfatase, Leukocytes/Plasma/Fibroblasts</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
MPSIIIA (see <u>Heparin Sulfamidase, Fibroblasts</u> )						
MPSIIIB (see <u>Alpha-N-Acetylglucosaminidase, Plasma</u> )						
MPSIIIC (see <u>AcCoA: Alpha-Glucosamine Acetyltransferase, Fibroblasts</u> )						
MPSIVA (see <u>Galactose-6-Sulfatase, Fibroblast</u> )						
MPSIVB (see <u>Beta-Galactosidase, Leukocyte/Plasma/Fibroblasts</u> )						
MPSVI (see <u>Aryl Sulfatase B, Leukocytes/Fibroblasts</u> )						
MPSVII (see <u>Beta-Glucuronidase, Leukocyte/Plasma/Fibroblasts</u> )						
MRSA Screen Methicillin Resistant Staph Aureus Screen	Microbiology (VH)	Nasal Perianal Urine Wound Swabs (Specify site) MICROBIOLOG Y REQUISITION	Daily	See report	2007-10-09	
MSS (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
mtDNA sequencing (see <u>Mitochondrial Genome Sequencing and Depletions/Integrity Pane</u> )						
Mucopolysaccharide Characterization	Biochemical Genetics	Random urine BIOCHEMICAL GENETICS LAB REQUISITION	As required	See report issued by lab	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Mucopolysaccharide Screen,Urine Acid Mucopolysaccharide	Biochemical Genetics	Random urine BIOCHEMICAL GENETICS LAB REQUISITION	As required	<p>≤ 1 year: 3.9-22.8 mg GAG/mmol creatinine</p> <p>1 year - 8 years: 3.6-13.4 mg GAG/mmol creatinine</p> <p>8 years - 15 years: 1.9-8.6 mg GAG/mmol creatinine</p> <p>&gt;15 years: 0.0-5.4 mg GAG/mmol creatinine</p>	2008-06-10	

Multimer Analysis (see Von Willebrand F: Multimers)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Multiple Endocrine Neoplasia: Type 1 MEN 1	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 Multiple endocrine neoplasia type 1 (MEN 1) is a familial cancer syndrome characterised by parathyroid hyperplasia, pituitary adenomas, and neuroendocrine tumours of the pancreas and duodenum. In 1997, the MEN1 tumour suppressor gene was identified, and since then numerous germline mutations have been reported to be distributed throughout the gene (PMID:15714081, PMID:10090472, PMID:16595707, PMID:17342152). These mutatio (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Mumps Serology - Mumps IgG/IgM	Virology Laboratory	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory	See report	2006-07-01	
Murine Typhus (see <u>Rickettsia Serology</u> )						
Muscle Biopsy	Pathology - UH	Muscle, fresh and glutaraldehyde fixed SURGICAL PATHOLOGY REQUISITION or through PowerChart, order a Surgical Pathology Request and print requisition from there	As required	See report		Must be done between 0730 and 1500 Monday to Friday.  Outside this time period, prearrangements with the Neuropathology Lab at x35717 must be made to ensure technical availability.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Muscle Specific Tyrosine Kinase Antibodies ACHR Variant MuSK Antibodies MuSK Ab	Core	<p><b>Adult:</b> 1-2 x 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 2-10 years: 1-3 x 3.5 mL Gold top Vacutainer tube</p> <p>UBC Neuro-Immunology Laboratory Requisition must be completed by neurologist</p>	Referred out Monday	Negative	2010-01-11	<p>Borderline results should be repeated.</p> <p><b>This test is available exclusively neurologists at LHSC/SJH.</b></p> <p>Associated with Myasthenia Gravis Centrifuge at 4 C, transfer serum to cryovials and store at 4 C.</p>
MuSK Ab (see Muscle Specific Tyrosine Kinase Antibodies)						
MuSK Antibodies (see Muscle Specific Tyrosine Kinase Antibodies)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Mycobacterium Culture Acid fast Bacilli Culture (AFB) TB Culture	Microbiology (VH)	- Abscess/aspirate fluid -Blood -Body Fluids (pleural, pericardial, peritoneal, etc.) -Bone Marrow -CSF -Faeces -Gastric Lavage -Respiratory (includes bronchial alveolar lavages, sputum or tracheal aspirations) -Tissue -Urine	Referred out weekdays to Public Health Laboratory.  Microscopic results are reported as soon as possible. Culture requires up to 8 weeks.  Positives are reported upon detection.		2010-06-10	

Mycophenolate (see Mycophenolic Acid)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Mycophenolic Acid Mycophenolate Cellcept MPA MMF	Toxicology/Special Chemistry	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Samples are tested Monday-Saturday	No established therapeutic range. Please see interpretive comments.	2010-01-11	
Mycoplasma PCR - Respiratory	Microbiology (VH)	Respiratory samples (including bronchial washes, tracheal aspirates, nasopharyngeal swabs, sputum) PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory		2006-07-01	Faulty collection and delay in transport of specimens are the primary causes of test failure.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>Mycoplasma/Ureaplasma Culture Ureaplasma/Mycoplasma Culture</p>	<p>Microbiology (VH)</p>	<p>Male (Adult): Urethra Urine (1mL minimum)</p> <p>Female (Adult): Cervix Products of Conception Vaginal lesion Amniotic fluid (1 mL minimum) Urine (1 mL minimum)</p> <p>Newborn/Neonates Endotracheal suction tube transported in Virus/Chlamydia/Mycoplasma transport media.</p> <p>PUBLIC HEALTH LABORATORY TEST REQUISITION</p>	<p>Referred out weekdays to the Public Health Laboratory.</p>		<p>2010-09-13</p>	<p>Faulty collection and delay in transport of specimens are the primary causes of test failure.</p> <p>2-8oC if shipped within 48 hours Freeze at -70oC and ship on ice packs if &gt;48 hours</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>Myelin-Associated Glycoprotein IgM, Serum Anti MAG, Serum Anti-MAG, IgM Anti Myelin-Associated Glycoprotein IgM</p>	<p>Clinical Immunology</p>	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION</p>	<p>Batch analysis</p>	<p>&lt;1000 BTU</p>	<p>2010-01-11</p>	<p>This test is restricted to neurologists at LHSC/SJHC upon approval by Dr. Budhram.</p> <p>Accepted from referred in locations.</p> <p>High concentrations of IgM MAG autoantibodies are found in approximately 50% of patients with peripheral neuropathies accompanied by IgM monoclonal gammopathies. Lower concentrations of MAG IgM autoantibodies can also be found in patients with inflammatory neuropathies, multiple sclerosis, systemic lupus erythematosus and healthy individuals.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Myositis Antibodies Profile Autoimmune Myositis Panel Myositis-specific antibodies Anti Mi-2 alpha Anti Mi-2 beta Anti TIF1 gamma Anti MDA5 Anti NXP2 Anti SAE1 Anti Ku Anti PM-Scl 100 Anti PM-Scl 75 Anti JO1 Anti SRP Anti PL-7 Anti PL-12 Anti EJ Anti OJ Anti Ro-52	Clinical Immunology	<b>Adult:</b> 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  EDTA, heparin or citrate plasma is also an acceptable specimen type  <b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Batch analysis	Negative	2019-04-04	<b>This test is available exclusively to Rheumatologists and Respirologists at LHSC/SJH and accepted from referred in locations.</b>  Immunoblot results will be reported as either negative or positive for specific antibodies as the following.  1+ Weak Positive 2+ Positive 3+ Strong Positive
Myositis-specific antibodies (see <u>Myositis Antibodies Profile</u> )						
Mysoline (see <u>Primidone, Serum</u> )						
N-Telopeptide, Urine <b>no longer available- see C-Telopeptide</b> Telopeptide-N Bone Loss Marker	Test not available (Various)				2007-12-19	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
NAB (see <u>Neutralizing Antibodies to Interferon-Beta</u> )						
Nares Colonization screen (see <u>Nasal Colonization Screen</u> )						
Nasal Colonization Screen Nares Colonization screen	Microbiology (VH)	Nasal swab MICROBIOLOG Y REQUISITION	Daily			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>Needle Stick Injury - Source Blood/Body Fluid Exposure: Source patient Hepatitis/HIV testing on <b>source</b> of needlestick injury or blood/body fluid exposure. HIV/Hepatitis testing on <b>source</b> of needlestick injury or blood/body fluid exposure.</p>	Core (UH)	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	As required			<p>Testing done in the Core Laboratory, UH only. The Core Laboratory is licenced to do HIV testing on the source patient <b>only when an employee of London Health Sciences Centre or St. Joseph's Health Centre is exposed (victim). All other HIV testing on source patients must be sent to the Public Health Laboratory and the specimen must be accompanied by the proper Public Health requisition.</b> HIV testing on victims will be sent to Public Health Laboratory.</p> <p>Testing on the source patient of a needle stick injury or blood/body fluid exposure includes the following tests: (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>Needle Stick Injury - Victim            Blood/Body Fluid Exposure: Exposed individual            Hepatitis/HIV testing on <b>exposed individual</b> of needle stick injury or exposure to blood/body fluids.            HIV/Hepatitis on <b>exposed individual</b> of needle stick injury or exposure to blood/body fluids.</p>	<p>Core (UH)</p>	<p>5 mL Gold top Vacutainer tube <b>and</b> 6 mL Red top Vacutainer tube            GENERAL LABORATORY REQUISITION AND PUBLIC HEALTH LABORATORY HIV TEST REQUISITION</p>	<p>Hepatitis testing: As required            HIV Testing: Referred weekdays to Public Health Laboratory as necessary</p>			<p>The Core Laboratory is only licenced to do HIV testing on the source patient only. HIV testing on the exposed individual is sent to Public Health Laboratory.</p> <p>The following tests are done on victims of a needle stick injury or blood/body fluid exposure:            Hepatitis B surface antigen            Hepatitis B surface antibody            Hepatitis C antibody            HIV (a separate requisition and blood sample are required)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Neisseria gonorrhoeae Culture GC Culture Gonorrhoeae culture	Microbiology (VH)	Cervical swab Eye swab (newborns) Rectal swab Throat swab Urethra swab Vaginal swab from sexual assaultor <b>any fluid or cyst material</b> MICROBIOLOGY REQUISITION	Daily		2006-07-01	
Neisseria gonorrhoeae Nucleic Acid Amplification Test	Microbiology (VH)	- Cervix or Urethra Swab - Pharyngeal/throat swab - Penile Meatal swab - Rectal Swab - Urine - Vaginal swab PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory.		2010-09-13	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Nembutal (see <u>Pentobarbital, Serum</u> )						
Neopterin/Biopterin Ratio, Urine (see <u>Pterin Analysis, Urine</u> )						
Neoral (see <u>Cyclosporine</u> )						
Nerve Biopsy	Neuropathology	Nerve, 2% glutaraldehyde fixed PowerChart: E-order choosing appropriate specimen. See Identification of Clinical Specimens.	Weekdays	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Neuromyelitis Optica Spectrum Panel Anti Myelin Oligodendrocyte Glycoprotein and Anti Aquaporin4, IgG Anti AQP4 antibody Anti NMO antibody Anti MOG antibody	Clinical Immunology	5 mL Gold top or 6 mL Red top Vacutainer tube as well as EDTA, heparin or citrate plasma is acceptable  <b>Pediatric:</b> 0-2 years: Red 0.5pk. 2-10 years: 2 mL Red top  CSF will also be accepted. Note: CSF samples will also be accepted and only be processed if accompanied by a serum sample. GENERAL LABORATORY REQUISITION	Batch analysis	Negative	2018-06-04	This test is available to LHSC Neurologists only 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.  This test can be used to help distinguish between Multiple Sclerosis (MS) and Neuromyelitis Optica Spectrum Disorders (NMOSD).
Neurontin (see <u>Gabapentin, Serum/Plasma</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Neutralizing Antibodies to Interferon-Beta NAB	Core	5 mL Gold top Vacutainer tube UBC Neuro-Immunology Laboratory Requisition must accompany the specimen and is to be filled in by the MS clinic	Referred out Mondays		2009-07-28	
Neutrophil Oxidative Burst Index (NOBI) (see <u>Chronic Granulomatous Screening Investigation</u> )						
Neutrophils (see <u>Differential Leukocyte Count (Peripheral Blood)</u> )						
Nickel, 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): 0.0-47.7 nmol/L  Conventional Units: 0.0-2.8 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
Nickel, 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): 0.0-22.2 nmol/L  Conventional Units: 0.0-1.3 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
Nickel,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-59.6 nmol/L µmol/mol creatinineAgeFe maleMale0-110- 7.10-6.812-190- 4.30-4.220-290- 4.90-3.730-390- 5.90-4.440-490- 7.00-4.650-590- 8.30-5.360-690- 8.20-5.570-790- 8.50-6.0≥800- 10.50-6.8  24 Hour Urine: 0-85.2 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-3.5 µg/L µg/g creatinineAgeFe maleMale0-110- 3.70-3.5 (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
Nickel, 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): 0.0-22.2 nmol/L  Conventional Units: 0.0-1.3 µg/L		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Niemann-Pick Disease Type A and Type B (see <u>Spingomyelinase, Fibroblast</u> )						
Niobium, 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): 0.0-0.5 nmol/L  Conventional Units: 0.000-0.049 µg/L	2014-11-17	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
Niobium, 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): 0.00-0.38 nmol/L  Conventional Units: 0.000-0.035 µg/L	2014-11-17	Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Nitrazepam, Serum Mogadon	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	Monday - Friday 0800-1600	100-800 nmol/L	2009-06-10	
Nitroprusside (see Thiocyanate, Serum/Plasma)						
Non-esterified fatty acids Free Fatty Acids	Core	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday - Thursday	280 - 700 µmol/L	2006-11-22	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Non-Image Guided Fine Needle Aspiration Biopsy for Cytology Aspiration Biopsy Bone Breast Kidney Liver Lung Lymph Node Pancreas Salivary Gland Soft Tissue Thyroid Other FNA	Cytopathology-UH	<b>Non-Gynaecologica            I: Aspiration            Biopsy</b>  Orange top routine specimen container containing 30 mL Cytolyt solution/specim en material CYTOPATHOL OGY REQUISITION- NON- GYNAECOLOG ICAL AREA	Weekdays		2005-08-01	If there is a clinical suspicion of <b>lymphoma</b> , a portion of the first and second pass should be submitted for Flow Cytometry in an appropriate fixative.  Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392  Pager Numbers: Cytology SJHC - 10498 Cytology Victoria - 17227  Clinical history is an important component for diagnostic interpretation.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Non-Syndromic Recessive Deafness RD	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		<p>Genes Tested (hg19;HGVS nomenclature):GJB2(NM_004004.5), GJB6(NM__001110219.2) N/A</p> <p>Severe deafness or hearing impairment is the most prevalent inherited sensory disorder, affecting about 1 in 1,000 children. Although a number of mutant genes have been identified that are responsible for syndromic (multiple phenotypic disease) deafness such as Waardenburg syndrome and Usher 1B syndrome, little is known about the genetic basis of non-syndromic (single phenotypic disease) deafness (PMID:913982 (more...))</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Noradrenalin (see <u>Catecholamines, Urine</u> )						
Noradrenaline (see <u>Catecholamines, Plasma (Norepinephrine, Epinephrine, Dopamine)</u> )						
Norepinephrine (see <u>Catecholamines, Plasma (Norepinephrine, Epinephrine, Dopamine), Catecholamines, Urine</u> )						
Norfluoxetine (see <u>Fluoxetine, Serum/Plasma</u> )						
Normetanephrine (see <u>Metanephrines, Plasma, Metanephrines, Urine</u> )						
Norpramine (see <u>Desipramine, Serum/Plasma</u> )						
Nortriptyline, Serum/Plasma Amitriptyline (metabolite) Aventyl	Core	2 x 5 mL Gold top Vacutainer or 2 x 4 mL Lavender EDTA Vacutainer  <b>Avoid gel- separator tubes</b> GENERAL LABORATORY REQUISITION	As required	200-600 nmol/L	2005-07-01	Referred out Monday - Thursday  <b>Toxic:</b> Greater than 1800 nmol/L
NRAS (see <u>KRAS</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Olanzapine, Urine Qualitative Zyprexa	Toxicology/Special Chemistry	Minimum 10 mL random urine collected in a sterile container GENERAL LABORATORY REQUISITION	Monday-Friday: 0800-1600		2011-06-14	
Olanzapine, Serum/Plasma	Toxicology/Special Chemistry	6 mL Red top Vacutainer tube or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Once a week	Therapeutic Range for 5 to 20 mg/day dose: 32-256 nmol/L Peak achieved at 6 hours Effective level >30 nmol/L		
Oligoclonal Banding (see <u>Protein Electrophoresis, CSF</u> )						
Oligosaccharide Screen, Urine	Biochemical Genetics	Random urine BIOCHEMICAL GENETICS LAB REQUISITION	Batched and tested as required	See report issued by lab	2008-06-10	
Open Neural Tube Defect (ONTD) (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
Open Spina Bifida (OSB) (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
Opiate Screen (see <u>Opiates Screen, Urine</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Opiates Screen,Urine Opiate Screen Morphine Morphine Glucuronide	Core UH & VH	Random urine GENERAL LABORATORY REQUISITION	As required	Negative	2008-11-15	<p data-bbox="1661 224 1997 467">Please order Urine Oxycodone separately, as the urine Opiates Screen is a poor screening tool for Oxycodone.</p> <p data-bbox="1661 521 1997 1317">A positive result for the Opiates Screen indicates that the drug (any combination of codeine, morphine, hydromorphone or hydrocodone) may be present in urine at a minimum total concentration of 300 ng/mL. This result is to be regarded as preliminary/presumptive unless subsequently verified by a definitive confirmation test (available upon request by calling the Toxicology Laboratory).</p> <p data-bbox="1661 1370 1997 1484">Note 1. The Opiates Screen is a poor screening test (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Organic Acid - Screening, Urine	Biochemical Genetics	Random urine BIOCHEMICAL GENETICS LAB REQUISITION	As required	See report issued by lab	2008-06-10	
Orotic Acid, Urine Urea Cycle Disorder	Biochemical Genetics	Random urine BIOCHEMICAL GENETICS LAB REQUISITION	As required	0.0-7.7 ug/mg creatinine	2008-06-10	
Osmolality, 24-Hour Urine	Core	24 Hour urine GENERAL LABORATORY REQUISITION	As required	300-900 mosm/kg	2006-05-16	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Osmolality,Urine/Serum/Plasma	Core	Random urine collected in a sterile container or 5 mL Gold or 4.5 mL Green top Vacutainer  <b>Pediatric:</b>  0-2 years: 1 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	As required	<b>Urine:</b> 300-900 mOsm/Kg  <b>Serum/Plasma:</b> 275-295 mOsm/Kg		
Other FNA (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ova and Parasite Screen	Microbiology (VH)	Faeces  <b>See Critical Information Required before submitting samples.</b> For samples other than faeces, contact the lab before collecting for specific instructions regarding preservation and transport. MICROBIOLOGY REQUISITION	Daily  If full Ova and Parasites requested, the sample will be referred out Monday-Friday		2011-07-21	
Ova and Parasites (see <u>Cryptosporidium</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ova and Parasites- Blood and Tissue Leishmania Trypanosoma Echinococcus Schistosoma Trichinella Toxoplasma	Microbiology (VH)	<b>Note:Please contact a Medical Microbiologist before specimen collection:</b>  Specimen type varies with species PUBLIC HEALTH LABORATORY TEST REQUISITION	Monday - Thursday	See report	2010-09-13	
Ova and Parasites- Ticks/Arthropods Ticks Arthropods	Microbiology (VH)	Ticks, mites etc. PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily	See report	2007-05-29	
Oxalate, 24-Hour Urine	Core	24-hour urine GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Child (0-16 years): 161-483 mol/day Male: 92-564 mol/day Female: 46-368 mol/day	2018-01-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Oxalate, 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	< 6 months: ≤ 0.37 mmol/mmol creatinine 6-24 months: ≤ 0.26 mmol/mmol creatinine 2-5 years: ≤ 0.14 mmol/mmol creatinine 6-12 years: ≤ 0.08 mmol/mmol creatinine > 18 years: ≤ 0.04 mmol/mmol creatinine	2018-01-15	
Oxycontin (see <u>Urine Oxycodone</u> )						
Oxygen Affinity (see <u>p50 O2 Affinity Hemoglobin</u> )						
P-ANCA / Anti-MPO (anti-myeloperoxidase antibody) (see <u>ANCA</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
p50 O2 Affinity Hemoglobin Oxygen Affinity	Clinical Immunology	Peripheral Blood  4 mL K2 or K3 EDTA Lavender top Vacutainer tube 5 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: Lavender 1.0 pk., Red 0.5 pk 2-10 years: 2 mL Lavender top, 2 mL Red Hemoglobinopa thy Investigations Form	Weekly	N/A	2019-07-11	McMaster University Medical Centre Molecular Genetics Laboratory, Room 2N22 1200 Main Street West, Hamilton, ON L8N 3Z5 Telephone: 905-521- 2100 ex.76944 Fax: 905-521-7913 Email: moleculargenetics@hh sc.ca  N/A  Attach CBC chart to requisition



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
P53 Carrier Testing Li-Fraumeni Syndrome	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 Germline mutations of the p53 gene are associated with Li-Fraumeni Syndrome, a rare autosomal dominant disorder characterized by a wide spectrum of tumours sarcomas, breast carcinomas, brain tumours and adrenocortical carcinomas. In most of the cases, tumours will develop in children and young adults. Germline p53 mutations are mostly missense mutations most commonly (>90%) <b>1,2</b> found within the DNA-binding domain of the p53 gene which is coded for by exons 5 through 8, and (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
PAB (see <u>Prealbumin, Serum</u> )						
Pancreas (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
Pancreatic Antibodies (see <u>Anti Islet Cell Antibodies, Serum</u> )						
Panel includes: (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Comprehensive Myositis Panel, Serum</u> )						
PAP Smear (see <u>Gynaecological Conventional Smear for Cytology</u> )						
PAP test (see <u>Gynaecological Liquid Based PAP test for Cytology, HPV testing, for Gynaecological Liquid Based PAP test (Cytology),</u> )						
Paracetamol (see <u>Acetaminophen</u> )						
Paracoccidioides Culture (see <u>Fungus Culture-Dimorphic</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Paramyotonia Congenita Hyperkalemic Periodic Paralysis Hyperkalemic Periodic Paralysis Type 1 PMC	Molecular Diagnostics	Whole blood-1 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION	As required Monday - Friday 0800 - 1600h	See report		For more information click on:  Molecular Diagnostic Laboratory N/A Paramyotonia congenita (PMC) of Von Eulenburg is an autosomal dominant muscular disease characterized by exercise and cold- induced myotonia and weakness. A number of missense mutations <sup>1,2</sup> in the alpha-subunit of the adult skeletal muscle voltage-gated sodium channel (SCN4A) gene have been identified to cause a spectrum of muscular diseases. These include PMC of Von Eulenburg, PMC without cold paralysis, potassium-aggravating myotonia, and hyperkalemic (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Paraneoplastic Antibody Panel, Serum/CSF Anti-Hu (ANNA-1) Anti-Yo (PCA-1) Anti-Ri (ANNA-2) Anti-CV2 (CRMP5) Anti-Ma2/Ta Anti-Amphiphysin Anti-Recoverin Anti-SOX1 Anti-Titin Anti-Zic4 Anti-GAD65 Anti-Tr (DNER)	Clinical Immunology	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube</p> <p>EDTA, heparin or citrate plasma are also acceptable</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube</p> <p>CSF samples will also be accepted. Suggest CSF be submitted with serum for testing.</p> <p>CLINICAL IMMUNOLOGY REQUISITION</p>	Batched analysis	Negative	2021-06-22	<p>This test is available only to external clients.</p> <p>Paraneoplastic syndromes are a group of rare disorders; some of which are caused by autoimmune reactions against antigens co-expressed by cancer cells and neurons. Below are the most frequent cancers associated with paraneoplastic syndromes and autoantibodies.</p> <p><b>Antibodies against Associated Neurological Disorders Frequently Associated Tumors</b></p> <p>Hu (ANNA-1)Paraneoplastic encephalomyelitis Small cell lung cancer, neuroblastoma Yo (PCA-1)Paraneoplastic cerebellar (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Parathormone (see <u>Parathyroid Hormone, Plasma</u> )						
Parathyrin (see <u>Parathyroid Hormone, Plasma</u> )						
Parathyroid Hormone Related Peptide (see <u>Parathyroid Hormone-Related Peptide, Plasma</u> )						
Parathyroid Hormone, Fine Needle Aspirate PTH FNA	Core (VH)	<p>Two samples: The first is uncontaminated Plasma-Lyte and serves as a blank.</p> <p>The second is 1 mL of Plasma-Lyte that has been used to rinse the biopsy needle as described below.</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	≤ 10.6 pmol/L	2012-10-30	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Parathyroid Hormone, Plasma PTH Intact Parathyroid Hormone Intact PTH Parathormone Parathyrin	Core	<p><b>Adult:</b> 4 mL Lavender or 6 mL Pink top (EDTA) Vacutainer tube</p> <p><b>Pediatric:</b> 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 separated from the cells immediately after collection; EDTA plasma is the pre (more...)</p>	As required	1.6-6.9 pmol/L	2010-06-09	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
Parathyroid Hormone-Related Peptide, Plasma Parathyroid Hormone Related Peptide Parathyroid Related Peptide PTHrP PTH-RP	Core	<b>Adult:</b> 4 mL Lavender top (EDTA) Vacutainer tube  <b>Pediatric:</b> 2-10 years: 2 mL Lavender top (EDTA) Vacutainer tube  Red, Gold, Light Green, or Dark Green top tubes are <b>NOT</b> acceptable. GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	≤4.2 pmol/L	2015-02-04	
Parathyroid Related Peptide (see <u>Parathyroid Hormone-Related Peptide, Plasma</u> )						
Parietal Antibodies (see <u>Anti Parietal Cell Antibody</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Paroxetine, Serum Paxil	Core	6 mL Red or Navy top Vacutainer tube  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	up to 150 nmol/L	2007-01-29	
Paroxysmal Nocturnal Hemoglobinuria Investigation	Flow Cytometry (VH)	Peripheral blood collected in a 4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  Referred-In Samples: FLOW CYTOMETRY 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.	No PNH clones are a normal result.	2006-06-01	Test is positive in Paroxysmal Nocturnal Hemoglobinuria (PNH) and HEMPAS.  Call Flow Cytometry Lab (519) 685-8500 x 57450 for further details.  Negative result is normal expression of GPI linked proteins.  Positive result is a percent of GPI linked proteins are absent from RBCs and/or WBCs.



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Partial Thromboplastin Time (Activated)- PTT APTT PTT	Core	2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer  <b>Pediatric:</b> 1.8 mL Blue (3.2% Sodium Citrate) top *In cases where access is difficult, a 0.9 mL Blue top tube is acceptable GENERAL LABORATORY REQUISITION	As required	0 min - 5 days: 31-54 seconds 5 days - 1 month: 25-60 seconds 1 month - 3 months: 32-55 seconds 3 month - 6 months: 29-50 seconds 6 months - Adult: 20-29 seconds  Therapeutic range for Heparin: 60-85 secs.	2011-01-14	
Parvovirus Serology (Human) B19	Microbiology (VH)	Blood-5 mL Gold top vacutainer PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory.		2010-09-13	Adequate clinical and epidemiological information must accompany the specimen.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Paternity (for medical indications ONLY)	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 A series of four polymorphic VNTR's are analyzed in each of the individuals.
Paul-Bunnell (see <a href="#">Heterophile Antibody Screen</a> )						
Paxil (see <a href="#">Paroxetine, Serum</a> )						
PBG (see <a href="#">Porphyrin Precursors, 24-Hour Urine, Porphyrin Precursors, Random Urine</a> )						
PCA (see <a href="#">Protein C Assay</a> )						
PCA-2/Anti-MAP1B (see <a href="#">Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</a> )						
PCH Donath-Landsteiner Test Donath-Landsteiner Hemolysin Test	Blood Transfusion (UH)	2 x 6 mL Red (clotted) top Vacutainer BLOOD TRANSFUSION REQUISITION or Electronic order	As required Monday-Friday	See report		Hematologist Consult required N/A Positive in paroxysmal cold hemoglobinuria (PCH).
PCR Quantitative (see <a href="#">Hepatitis C RNA - Quantitative</a> )						
PELS (see <a href="#">Protein Electrophoresis, Serum</a> )						
PELU24 (see <a href="#">Protein Electrophoresis, Urine</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<u>PELUR (see Protein Electrophoresis, Urine)</u>						
Pemphigus/Pemphigoid Antibodies Anti Skin Antibodies Skin Antibodies	Core (all campuses)	5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Referred out Monday-Friday	Negative		Dilutions 1:20 to 1:160  Grossly hemolyzed, lipemic or microbially contaminated specimens may interfere with the performance and should be documented.
<u>Pentacarboxylic acid (see Porphyrin Screen and Quantitation, 24-Hour Urine, Porphyrin Screen and Quantitation, Feces, Porphyrin Screen and Quantitation, Random Urine)</u>						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Pentobarbital, Serum Nembutal	Core	6 mL Red top Vacutainer tube or 6 mL Dark Green (Sodium Heparin) or Lithium Heparin top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer Sick Kids: Therapeutic Drug Monitoring Requisition	Send STAT by All Canadian Courier to Hospital for Sick Children (Sick Kids). Test must be sent immediately. Include Hospital for Sick Childrens requisition and PaLM worksheet with instructions to fax and phone results to the <b>VH Core Lab.</b>  Tel: 519-685-8500 x 52573 Fax: 519-685-8360	Hypnotic: 4 - 22 mol/L Toxic >40 umol/L  Therapeutic Coma: 90 - 220 mol/L	2007-10-30	
Percocet (see <u>Urine Oxycodone</u> )						
Percodan (see <u>Urine Oxycodone</u> )						
Pertofone (see <u>Desipramine, Serum/Plasma</u> )						
Pertussis (see <u>Bordetella pertussis Investigation (PertPCR)</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
pH, Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report	2010-06-30	
Phenobarbital, Serum/ Plasma Anticonvulsant Luminal Phenobarbitone	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.  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Adult: 65-172 µmol/L  <18 years old: 65-110 µmol/L	2008-11-15	Long acting barbiturate with anticonvulsant, sedative-hypnotic properties. Because Primidone (Mysoline) is partially metabolized to phenobarbital, it is measured together with Primidone. <b>Toxic:</b> >215 µmol/L CRITICAL VALUE to be phoned to Nurse or Physician immediately:
Phenobarbitone (see <u>Phenobarbital, Serum/Plasma</u> )						
Phenylalanine (see <u>Amino Acids, Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Phenylketonuria (see Amino Acids, Plasma)						
Phenytoin, Serum-Free Free Phenytoin Free Dilantin	Toxicology/Special Chemistry	2 x 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 2-10 yrs: 2 x 2 mL Red top 0-2 yrs: Red 2 x 0.5pk. GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	2.4-8.0 µmol/L	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Phenytoin, Serum/Plasma-Total Anticonvulsant Dilantin	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.  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Adult: 40-79 µmol/L  < 3 months: 24-55 µmol/L	2008-11-15	CRITICAL VALUE to be phoned to Nurse or Physician immediately:  <b>Toxic:</b> ≥120 µmol/L Note: Falsely elevated Phenytoin concentrations have been observed in patients with renal failure due to assay interference with metabolites of Phenytoin.
Philadelphia Chromosome (see <u>Chronic Myelogenous Leukemia, by Karyotype/FISH, Chronic Myelogenous Leukemia, by PCR</u> )						
Phosphate, 24-Hour Urine Inorganic Phosphate	Core	24 hour urine in acid washed container GENERAL LABORATORY REQUISITION	As required	13.0-42.0 mmol/d		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Phosphate, Plasma Inorganic Phosphate Inorganic Phosphorus, PO4	Core	4.5 mL Green top Vacutainer <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	< 1 year 01.30-2.60 mmol/L 1 year - 4 years 1.16-2.10 mmol/L 4 years - 14 years 1.10-1.90 mmol/L > 14 years 0.80-1.33 mmol/L	2008-11-15	Hemolysis may affect results.  In very rare cases gammopathy, in particular type IgM (Waldenstrom's macroglobulinemia) may cause unreliable results.  Useful in the diagnosis and management of a variety of disorders including bone, parathyroid and renal disease. Phosphate levels alone are of limited diagnostic value and should be correlated with serum calcium levels.  Serum phosphate concentrations are dependent on meals and hormone regulation (PTH, vitamin D). (more...)



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Phosphate,Fluid Inorganic Phosphate (fluid)	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report	2010-05-17	
Phosphate,Urine- Random Inorganic Phosphate	Core	Random urine GENERAL LABORATORY REQUISITION	As required	11-42 mmol/d		
Phospholipase A2 Receptor (PLA2R) Antibodies Anti-PLA2R	Core	<b>Adult:</b> 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 2 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Negative <14 RU/mL Borderline 14 - 19 RU/mL Positive >19 RU/mL	2020-06-02	<b>This test is available exclusively to SJHC/LHSC nephrologists.</b>  Anti-PLA2R antibodies can be detected in the serum of up to 70-80% of patients with primary membranous nephropathy.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Phytanic Acid, Serum or Plasma	Core	6 mL Red or 6 mL Green (Sodium Heparinized) top Vacutainer GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	< 5 years: ≤ 3.5 μmol/L (97.5%ile) ≥ 5 years: ≤ 2.2 μmol/L (97.5%ile)	2006-09-06	
PICC tip Culture (see <u>Vascular Tip Culture</u> )						
Pigeon IgG Antibodies Pigeon Precipitins	Core	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	<30 mg/L	2010-01-11	
Pigeon Precipitins (see <u>Pigeon IgG Antibodies</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Pinworm Investigation	Microbiology (VH)	Sample from perianal skin PUBLIC HEALTH LABORATORY TEST REQUISITION	Weekdays		2006-07-01	
PKA (see <u>Pyruvate Kinase Deficiency Assay</u> <b>TEST NO LONGER AVAILABLE</b> )						
PKU (see <u>Amino Acids, Plasma</u> )						
PKU-DHPR Deficient (see <u>Dihydropteridine Reductase, Dried Blood Spot</u> )						
PKU-Pterin Deficient (see <u>Pterin Analysis, Urine</u> )						
Plasma metanephrines (see <u>Metanephrines, Plasma</u> )						
Platelet Aggregation (see <u>Platelet Function Screen</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Platelet Antibodies Platelet Immunology Anti Platelet Antibodies Platelet Associated IgG	Blood Transfusion	<p><b>Samples required from mother and father (NAIT) or patient (PTP):</b></p> <p>10 mL whole blood collected in Red top or Serum Separator tube            30 mL whole blood collected in Sodium Citrate (blue) or ACD (yellow) tubes</p> <p><b>Sample required from baby:</b></p> <p>2 mL whole blood collected in EDTA (Lavender) tube</p> <p><b>Sample requir (more...)</b></p>	Referred out Monday-Thursday before 1400 h	See report issued by the Platelet Immunology Lab, Hamilton		Samples must be packaged in Transfusion Medicine lab at Victoria Hospital for courier pick up before 1400 hrs

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Platelet Associated IgG (see <u>Platelet Antibodies</u> )						
Platelet Count (see <u>Complete Blood Count</u> )						
Platelet Function Screen Platelet Aggregation	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	Samples <b>must</b> be drawn at the Victoria Hospital Campus of LHSC  Specialized glass tubes are no longer available. Please draw 10 2.7 mL plastic blue top Vacutainer tubes. GENERAL LABORATORY REQUISITION	As required Monday-Friday	Normal aggregation	2006-06-01	Used to diagnose platelet function abnormalities.  A measure of the platelet's ability to be stimulated by Arachidonic acid, Collagen, ADP and Ristocetin. All samples must be maintained at room temperature.
Platelet Immunology (see <u>Platelet Antibodies</u> )						
Pleural, Peritoneal, Pericardial, CSF, Ocular (see <u>Fluids for Cytology</u> )						
PMC (see <u>Paramyotonia Congenita Hyperkalemic Periodic Paralysis</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Pneumococcal Antibody Titre Pneumococcal Antibody Titre, Pre Vaccine Pneumococcal Antibody Titre, Post Vaccine Pneumococcal Antibody Titre, Single Sample	Core	6 mL Red top tube  <b>Pediatric:</b> 0-2 yrs: 6 x 0.5 mL Red top micropick 2-10 yrs: 2 x 3 mL Red top tube SICK KIDS PNEUMOCOCCAL ANTIBODY TITRE REQUISITION	Referred out as required. Pre and Post specimens must be sent together.	Results sent directly to physician. See report.	2011-10-20	<u>Note:</u> This test is only available through consultation with a Clinical Immunologist (Drs. Moote/Kim/Jeimy/Kuprowski) for the evaluation of primary immunodeficiency.  Aliquot serum and freeze. Must send both Pre and Post specimens at the same time.
Pneumococcal Antibody Titre, Post Vaccine (see <u>Pneumococcal Antibody Titre</u> )						
Pneumococcal Antibody Titre, Pre Vaccine (see <u>Pneumococcal Antibody Titre</u> )						
Pneumococcal Antibody Titre, Single Sample (see <u>Pneumococcal Antibody Titre</u> )						
Pneumocystis Investigation	Microbiology (VH)	Bronchial Alveolar Lavage (BAL) Bronchial Wash Induced Sputum MICROBIOLOGY REQUISITION	Weekdays			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Polycythemia Vera JAK2(V617F)	Molecular Diagnostics	Whole blood-1 x 4 mL Lavender EDTA top Vacutainer tube JAK2 REQUISITION MOLECULAR DIAGNOSTICS REQUISITION	As required Monday - Friday 0800 - 1600 h	See report		<p>For more information click on:</p> <p>Molecular Diagnostic Laboratory N/A Myeloproliferative neoplasms (MPNs) are a group of diseases in which the bone marrow makes too many red blood cells, platelets, or certain white blood cells. Polycythaemia vera (PV), essential thrombocythaemia (ET), and primary myelofibrosis (PMF) are three main types of MPNs. The molecular pathogenesis of these disorders is unknown, but mutations of a tyrosine kinase gene, JAK2, have been implicated (PMID: 15781101, 15858187). It is known that a single point mutation in this gene, c.1849 (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Polyoma Virus BK Virus JC	Virology Laboratory	See Special Processing below for further information:  <b>BK Virus:</b> -4 mL Lavender top EDTA Vacutainer tube (2 mL of plasma required)  <b>JC Virus:</b> -A minimum of 600 L of CSF -EDTA plasma (2 mL) -Urine (20 mL) -CNS biopsy HUMAN POLYOMA JC VIRUS REQUISITION	BK Virus is tested weekly on Tuesday and Thursday.  JC Virus is referred Monday-Wednesday to the National Microbiology Lab.	See report for interpretation	2010-09-13	
Pompe Disease (see <u>Alpha-Glucosidase, Dried Blood Spot, Alpha-Glucosidase, Fibroblasts</u> )						
Porphobilinogen (see <u>Porphyrin Precursors, 24-Hour Urine, Porphyrin Precursors, Random Urine</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrin Precursors, 24-Hour Urine ALA D-ALA PBG Aminolevulinic acid Delta-aminolevulinic acid Porphobilinogen Precursor porphyrins	Core	24-hour urine collected in a container with no preservative GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Delta-aminolevulinic acid: $\leq 50$ mol/d Porphobilinogen: $\leq 9$ mol/d  Reference intervals are for adults only and are not available for individuals 17 years of age or younger.	2011-11-09	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrin Precursors, Random Urine ALA D-ALA PBG Aminolevulinic acid Delta-aminolevulinic acid Porphobilinogen Precursor porphyrins	Core	Random Urine GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Creatinine (Cr): reference interval not available for random urine Delta- aminolevulinic acid: 1.0-5.0 mol/mmol Cr Porphobilinogen: 0.1-0.8 mol/mmol Cr  Reference intervals are for adults only and are not available for individuals 17 years of age or younger.	2011-11-09	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrin Screen and Quantitation, 24-Hour Urine Uroporphyrin III Heptacarboxylic acid Hexacarboxylic acid Pentacarboxylic acid Coproporphyrin I Coproporphyrin III	Core	24-hour urine collected with 5 g sodium carbonate. Containers with appropriate additives are obtained from the Core Laboratory. GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Reference Range Screen: Normal  <u>Quantitation:</u> Uroporphyrin III: $\leq 20$ nmol/d Heptacarboxylic acid: $\leq 16$ nmol/d Hexacarboxylic acid: $\leq 2$ nmol/d Pentacarboxylic acid: $\leq 2$ nmol/d Coproporphyrin I: 5-90 nmol/d Coproporphyrin III: 15-242 nmol/d Copro III/Copro I ratio: 2.6-5.3  Interpretation provided on report.  Reference intervals are for adults only and are not available for indiv (more...)	2003-07-08	<b>Screen will be performed first. Quantitation will automatically be performed (and billed) if preliminary screen is positive.</b>  Transfer an aliquot of at least 20 mL of the measured urine to a sterile container. Final pH should be 7-10. Keep aliquot protected from light. If wrapped with foil, specimen must be labelled inside and outside of the light-protecting wrap. Store and ship urine aliquot frozen. Indicate the 24-hour total volume (in L) and collection date.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrin Screen and Quantitation, Feces Uroporphyrin III Heptacarboxylic acid Hexacarboxylic acid Pentacarboxylic acid Coproporphyrin I Coproporphyrin III Protoporphyrin	Core (VH)	Feces (Random) GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Screen: Normal  <u>Quantitation:</u> Uroporphyrin III: ≤1.0 nmol/g Heptacarboxylic acid: ≤1.0 nmol/g Hexacarboxylic acid: ≤1.0 nmol/g Pentacarboxylic acid: ≤1.0 nmol/g Coproporphyrin I: ≤13.0 nmol/g Coproporphyrin III: ≤12.0 nmol/g Copro III/Copro I ratio: ≤1.6 Protoporphyrin: ≤ 38.0 nmol/g  All results are reported as nmol/g dry weight.  Interpretation provided on report.  Referen (more...)	2012-12-10	<b>Screen will be performed first. Quantitation will automatically be performed (and billed) if preliminary screen is positive.</b>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrin Screen and Quantitation, Random Urine Uroporphyrin III Heptacarboxylic acid Hexacarboxylic acid Pentacarboxylic acid Coproporphyrin I Coproporphyrin III	Core	Random Urine GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Reference Range Screen: Normal  Quantitation: Creatinine (Cr): reference interval not available for random urine Uroporphyrin III: $\leq 2.0$ nmol/mmol Cr Heptacarboxylic acid: $\leq 1.3$ nmol/mmol Cr Hexacarboxylic acid: $\leq 0.7$ nmol/mmol Cr Pentacarboxylic acid: $\leq 1.0$ nmol/mmol Cr Coproporphyrin I: 0.3-8.5 nmol/mmol Cr Coproporphyrin III: 1.7-26.3 nmol/mmol Cr Copro III/Copro I ratio: 2.6-5.3 (more...)	2011-11-09	<b>Screen will be performed first. Quantitation will automatically be performed (and billed) if preliminary screen is positive.</b>  pH should be adjusted to 8-10 with sodium carbonate immediately upon receipt in the lab. Keep specimen protected from light. Store and ship urine frozen.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrin Screen, Plasma Variegate Porphyria	Core	<b>Adult or Pediatric:</b> 2 x 4 mL Lavender (EDTA) top Vacutainer tubes  Red, Gold, or Light Green (Li-heparin) top tubes are <b>NOT</b> acceptable. GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Negative	2021-08-06	The plasma porphyria screen is a sensitive test for variegate porphyria and may also be helpful to diagnose and differentiate between other forms of porphyria.  After centrifugation, transfer at least 2 mL of plasma to a light-protected tube. Store and ship plasma frozen.
Post-Bronch Sputum (see <u>Respiratory and Exfoliative samples for Cytology</u> )						
Potassium (see <u>Electrolytes,Plasma</u> )						
Potassium (fluid) (see <u>Electrolytes,Fluid</u> )						
Potassium (urine) (see <u>Electrolytes,Urine</u> )						
Potassium, 24-Hour Urine	Core	24 Hour Urine GENERAL LABORATORY REQUISITION	Weekdays	30-130 mmol/d		RBC hemolysis may cause interference with results.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Potassium,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report	2010-05-17	Hemolysis may affect results.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Potassium,Plasma	Core	<p>4.5 mL Green top Vacutainer</p> <p>Serum from a 5mL Gold top or 6mL Red top is also acceptable.</p> <p><b>Pediatric:</b>  0-2 years: 0.6 mL Green Microtainer  2-10 years: 3 mL Green top tube</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	<p>0-3 months: 4.00-6.50 mmol/L</p> <p>&gt;3 months: 3.50-5.00 mmol/L</p>	2008-11-15	<p>Hemolysis during collection, delay in separation, refrigeration of unseparated blood, marked leucocytosis and/or thrombocytosis and muscle activity of limb immediately prior to venipuncture may cause significant increase in potassium.</p> <p>0-3 months: &gt;6.5 mmol/L  &gt;3 months: &lt;3.0 or &gt;6.0 mmol/L</p> <p>Useful for monitoring potassium status in patients on intravenous therapy, in diabetic ketoacidosis or on diuretics. Investigation of mineralocorticoid status, evaluation of electrolyte balance, acid-base disturbances, cardiac arrhythmia, muscular weakness, hepatic encephalopat (more...)</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Potassium,Urine-Random	Core	Random urine GENERAL LABORATORY REQUISITION	As required	30-120 mmol/L		RBC hemolysis may cause interference with results.

Powassan (see Arbovirus Flavivirus Serology/PCR)

PRA (Panel Reactive Antibodies) (see HLA Antibody Screen)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prealbumin, Serum Transthyretin PAB	Core	<p><b>Adult:</b> 5 mL Gold top Vacutainer</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Gold top Microtainer 2-10 years: 3 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION</p>	Daily	<p>0-&lt;15 days: 0.00-0.11 g/L 15 days-&lt;1 year: 0.04-0.24 g/L 1-&lt;5 years: 0.11- 0.23 g/L 5-&lt;13 years: 0.13-0.26 g/L 13-&lt;16 years: 0.17-0.31 g/L 16 years-&lt;19 years: 0.16-0.33 g/L (Female) 16 years-&lt;19 years: 0.20-0.35 g/L (Male) Adult: 0.2-0.4 g/L</p>	2010-01-11	<p>This test is used as a nutritional marker Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes. Intralipid causes artificially high prealbumin results.</p> <p>Prealbumin is a transport protein for thyroxin synthesized in the liver. It has a half-life of 2 days, much shorter than that of albumin. PAB is therefore a sensitive marker of nutritional status. Serum concentrations of PAB are not significantly affected by hydration status as is albumin. Like (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Precursor porphyrins (see <u>Porphyrin Precursors, 24-Hour Urine, Porphyrin Precursors, Random Urine</u> )						
Pregnancy Test	Core	<b>For Female Patients Only</b> 4.5 mL Green top or 5 mL Gold/Red top Vacutainer or first morning urine sample (preferred) GENERAL LABORATORY REQUISITION	As Required	Positive or Negative	2011-02-18	
Prenatal Care Set - (including Hep. B surface antigen, Rubella, Syphilis, HIV)	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer tube PRENATAL SCREENING REQUISITION	Referred out weekdays to Public Health Laboratory	See report	2009-02-22	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prenatal Microarray Microarray Array CGH aCGH Genomic Microarray	Cytogenetics (VH)	Amniotic Fluid CVS Fetal blood / Cord Blood Maternal Blood Sample PRENATAL MICROARRAY REQUISITION (must include patient's name, address, Ontario Health Insurance Number, PIN (if applicable), originating location, Dr's full name and address, and pertinent clinical information.  Follow up or parental samples, use the CYTOGENETI CS REQUISITION	Batched as required	See final report		The Cytogenetics Lab is staffed from 0700- 1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab).  For additional information please refer to the Cytogenetics Webpage.  See final report

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prenatal Titre Antibody Titre	Blood Transfusion	2 x 6 mL Pink (EDTA) top Vacutainer tubes BLOOD TRANSFUSION REQUISITION or Electronic order	Daily Urgent, if indicated	See report	2006-11-16	Titration of clinically significant alloantibody is a reflex order by the Blood Transfusion Laboratory for pregnant women only. N/A The antibody titre is a semiquantitative assay of the amount of antibody and is used primarily to monitor obstetrical patients who have produced blood group antibodies that can cause hemolytic disease of the newborn.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Primidone, Serum Anticonvulsant Mysoline	Core	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red Vacutainer tube</p> <p><b>Blood collection tubes with separator gels are not recommended for this test.</b> GENERAL LABORATORY REQUISITION</p>	Referred out Monday - Thursday	Therapeutic: 23.0 55.0 mol/L	2009-03-10	
Priority PCR COVID-19 Testing (see <u>Coronavirus SARS-CoV-2 2019 Diagnostic Priority (GXRVP)</u> <b>Adult ED and Critical Care Admissions only</b> )						
ProAVP (see <u>Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Procainamide, Serum Pronestyl	Core	5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	<b>Procainamide:</b> 16.9 - 42.3 $\mu$ mol/L  <b>N- Acetylprocaina mide:</b> 43.3 - 65.0 $\mu$ mol/L		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Products of Conception Chromosome Analysis QF-PCR Microarray	Cytogenetics (VH)	Amnion (0.1-5cm <sup>2</sup> ), cord (1cm <sup>3</sup> ), chorionic villi or fetal skin (0.5-1cm <sup>2</sup> ) preferred - In a sterile container, containing Hank's Balanced Salt Solution (HBSS) 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 pe (more...))	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 Cytogenetics Webpage.            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.</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Progesterone, Plasma/Serum	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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><u>Male:</u> 4 weeks - 1 year: <math>\leq 2.1</math> nmol/L 1 - 9 years: <math>\leq 1.1</math> nmol/L Adult: <math>&lt; 0.6</math> nmol/L</p> <p><u>Female:</u> 4 days - 1 year: <math>\leq 4.1</math> nmol/L 1 - 9 years: <math>\leq 1.1</math> nmol/L Follicular phase: <math>\leq 0.6</math> nmol/L     Early follicular phase: <math>\leq 1.0</math> nmol/L     Intermediate follicular phase: <math>\leq 0.7</math> nmol/L     Late follicular phase: <math>\leq 0.7</math> nmol/L     Ovulatory phase: <math>\leq 13.2</math> nmol/L      Luteal phase: 13.1 - 46.3 nmol/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. <math>&gt; 5</math> mg/day) until at least 8 hours after the last biotin administration.</p> <p>Interpret progesterone result with caution since lipemia may artificially decrease result.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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Prograf (see Tacrolimus)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prolactin, Plasma/Serum	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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><u>Male:</u> Tanner stage 1: 2 - 16 g/L Tanner stage 2: 2 - 12 g/L Tanner stage 3: 3 - 17 g/L Tanner stage 4: 3 - 12 g/L Tanner stage 5: 3 - 14 g/L Adult: 4 - 15 g/L</p> <p><u>Female:</u> Tanner stage 1: 2 - 16 g/L Tanner stage 2: 2 - 16 g/L Tanner stage 3: 3 - 18 g/L Tanner stage 4: 3 - 18 g/L Tanner stage 5: 3 - 18 g/L Non-pregnant Adult: 5 - 23 g/L First Trimester of Pregnancy: 10 - 101 g/L Second (more...)</p>	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
Pronestyl (see <u>Procainamide, Serum</u> )						
Propafenone, Serum/P lasma Rythmol	Core	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Plasma (Sodium Heparin) is also acceptable.</p> <p><b>Blood collection tubes with separator gels are not acceptable for this test.</b> GENERAL LABORATORY REQUISITION</p>	Referred out Monday- Thursday	0.2-1.6 g/mL		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prophase Banding (see <u>Chromosome Analysis, Blood</u> )						
Propylene Glycol (see <u>Glycol Screen</u> )						
Prostate Specific Antigen, Plasma/Serum PSA Total PSA	Core	<b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube  Red, Gold, or Lavender (EDTA) top tubes are also acceptable <b>GENERAL LABORATORY REQUISITION</b>	As required	<b>Male:</b> <60 years: ≤ 3.89 g/L 60-<70 years: ≤ 5.40 g/L ≥70 years: ≤ 6.22 g/L	2018-03-06	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.  If the total PSA result is in the range of 4-10 g/L, a free PSA result could be of value in estimating the risk of prostate cancer in a patient with no previous diagnosis.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein & Glucose,CSF	Core	CSF GENERAL LABORATORY REQUISITION	As required	Protein: 200-400 mg/L  Glucose: 2.2-3.9 mmol/L	2008-11-16	<p>Simultaneous serum specimen and CSF specimens should be taken. Blood in the CSF specimen invalidates the protein value.</p> <p>Used for investigating possible central nervous system (CNS) infection. To detect increased permeability of the blood-brain barrier to plasma proteins. To detect increased intrathecal production of immunoglobulins.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein C Assay PCA	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling GENERAL LABORATORY REQUISITION</b>	Weekly	<b>0 - 5 days:</b> 0.17-0.53 U/mL <b>5 days - 1 month:</b> 0.20-0.64 U/mL <b>1 month - 3 months:</b> 0.21-0.65 U/mL <b>3 months - 6 months:</b> 0.28-0.80 U/mL <b>6 months - 1 year:</b> 0.37-0.81 U/mL <b>1 year - 5 years:</b> 0.40-0.92 U/mL <b>5 years - 10 years:</b> 0.45-0.93 U/mL <b>10 years - 16 years:</b> 0.55-1.11 U/mL <b>16 years - Adult:</b> 0.69-1.38 U/mL  Uncertainty of Measurement: 0.40 0.03 (more...)	2006-06-01	Level is decreased in Protein C deficiency, a prothrombotic condition.  Testing not recommended during Warfarin therapy.  Blue (Sodium Citrate) top tubes should be centrifuged within 4 hours of collection.  The blood specimen must be double centrifuged to prepare platelet free plasma.  Centrifuge the primary tube or tubes for 10 minutes at 3000 rpm, aliquot and re-spin for an additional 10 minutes at 3000 rpm at room temperature (18 to 20 degrees Celsius). Ensure the temperature does not exce (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein Electrophoresis, CSF Oligoclonal Banding	Clinical Immunology	Both specimen types are required: 1. CSF <b>and</b> 2. Either a 5 mL Gold top or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Batched	Negative for oligoclonal banding.  IgG: 10-30 mg/L Albumin: <350 mg/L IgG/Albumin Ratio: 0.00-0.23 IgG/Alb Index: 0.25-0.85 with no visible banding in electrophoresis  For accurate interpretation, the CSF and serum must be assayed together and the results compared.	2009-02-27	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein Electrophoresis, Serum PELS Monoclonal Protein Screen SPE Serum Protein Electrophoresis	Clinical Immunology	5 mL Gold top Vacutainer tube  Light Green (Li-Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> acceptable <b>GENERAL LABORATORY REQUISITION</b>	Monday - Friday 0800-1600	Albumin: 35.7 54.9 g/L Alpha 1: 1.9 4.1 g/L Alpha 2: 4.5 9.8 g/L Beta 1: 3.0 6.0 g/L Beta 2: 2.0 5.4 g/L Gamma: 7.1 15.6 g/L	2010-01-25	Based on consultation with the main users of the test, it has been decided to limit the collection frequency to $\geq 3$ weeks for repeat testing. If serum protein electrophoresis is ordered and it has been <20 days since the collection date of the last sample run, the test will be cancelled.  Abnormal bands are identified by immunofixation electrophoresis.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein Electrophoresis, Urine PELUR PELU24 Monoclonal Protein Screen Light Chain Screen Bence Jones Protein Screen Urine Protein Electrophoresis	Clinical Immunology	24-hour urine or random urine A 24-hour urine collection is the preferred specimen for analysis of Bence Jones protein (free light chains). If a 24-hour urine is not available, the first voided morning specimen is recommended. GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Interpretative analysis	2009-02-27	Based on consultation with the main users of the test, it has been decided to limit the collection frequency to $\geq 3$ weeks for repeat testing. If urine protein electrophoresis is ordered and it has been $<20$ days since the collection date of the last sample run, the test will be cancelled.  Abnormal bands are identified by immunofixation electrophoresis.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein S Antigen (Free) PSAG	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 1.8 mL Blue Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling</b> GENERAL LABORATORY REQUISITION	Weekly	<b>Adult:</b> 0.60-1.40 U/mL		Level is decreased in Protein S deficiency, a prothrombotic condition.  Testing not recommended during Warfarin therapy and in pregnancy. Blue (Sodium Citrate) top tubes should be centrifuged within 4 hours of collection.  The blood specimen must be double centrifuged to prepare platelet free plasma.  Centrifuge the primary tube or tubes for 10 minutes at 3000 rpm, aliquot and re-spin for an additional 10 minutes at 3000 rpm at room temperature (18 to 20 degrees Celsius). Ensure the temperature does not exceed 20 degrees Celsius. (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein, 24-Hour Urine	Core	24 Hour urine collection GENERAL LABORATORY REQUISITION	Weekdays	0.050-0.150 g/d		
Protein,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report		
Protein,Plasma-Total	Core	4.5 mL Green top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.6 mL Green Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	0-1 day: 34-50 g/L 1 day-1 month: 46-68 g/L 1 month-1 year: 48-76 g/L 1 year-17 years: 60-80 g/L ≥ 18 years: 64-83 g/L	2008-11-15	Lipemic samples may cause interference with results.  Useful in the diagnosis and monitoring of hyper- and hypogammaglobulinaemia protien losing states and malnutrition.  Values are lower in recumbent patients.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein,Urine	Core	Random urine GENERAL LABORATORY REQUISITION	As required	<p>Reference range for urine protein: 0.0 0.15 g/L</p> <p>Reference ranges for protein:creatinine ratio: children and adults: &lt;23 mg/mmol creatinine pregnant women: &lt;30 mg/mmol creatinine</p>	2008-11-15	<p>Contamination of urine with menstrual blood, prostatic secretions, or semen may contribute to increased urine protein levels (false-positives).</p> <p>Useful in the evaluation of renal disease. Screening for monoclonal gammopathy. Increased amounts of protein in the urine may be due to:</p> <ul style="list-style-type: none"> <li>(1) Glomerular proteinuria: caused by defects in the glomerular filtration barrier permeability (e.g. glomerulonephritis or nephrotic syndrome);</li> <li>(2) Tubular proteinuria: inadequate tubular reabsorption of proteins (e.g. interstitial nephritis);</li> <li>(3) Overflow (more...)</li> </ul>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein-Total, CSF	Core	CSF GENERAL LABORATORY REQUISITION	As required	200-400 mg/L	2008-11-15	<p>Simultaneous serum specimen and CSF specimens should be taken.</p> <p>Blood in the CSF specimen invalidates the protein value.</p> <p>Used for investigating possible, central nervous system (CNS) infection. To detect increased permeability of the blood-brain barrier to plasma proteins. To detect increased intrathecal production of immunoglobulins.</p>
Prothrombin Gene (see <u>Thrombophilia (Prothrombin)</u> )						
Prothrombin Time (see <u>INR</u> )						
Prothrombin/Factor V Prothrombin (see <u>Thrombophilia (associated with Factor V deficiency)</u> )						
Protoporphyrin (see <u>Porphyrin Screen and Quantitation, Feces</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protoporphyrin, Whole Blood Free protoporphyrin Erythrocyte protoporphyrin	Core	<p><b>Adult:</b> 2 x 4 mL Lavender (EDTA) top Vacutainer tubes</p> <p><b>Pediatric:</b> 2-10 years: 2 x 2 mL Lavender (EDTA) top Vacutainer tubes</p> <p>Red, Gold, or Light Green (Litheparin) top tubes are <b>NOT</b> acceptable. GENERAL LABORATORY REQUISITION</p>	Referred out Monday-Thursday	<p>Free protoporphyrin: 0.4-1.0 mol/L Ercs</p> <p>Reference interval is for adults only and is not available for individuals 17 years of age or younger.</p>	2021-07-05	
Protriptyline, Serum <b>TESTING ON HOLD as of 11/09/15</b> Triptil	Test not available (Various)	2 x 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	250-900 nmol/L	2005-07-01	Referred out Monday - Thursday Toxic: Greater than 1900 nmol/L
Prozac (see <a href="#">Fluoxetine, Serum/Plasma</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
PSA (see <u>Prostate Specific Antigen, Plasma/Serum</u> )						
PSA F (see <u>Free Prostate Specific Antigen, Plasma/Serum</u> )						
PSAG (see <u>Protein S Antigen (Free)</u> )						
Pseudo-cholinesterase (see <u>Cholinesterase Phenotype (includes Cholinesterase, Total Activity)</u> )						
Pseudoephedrine, Urine Qualitative Sudafed	Toxicology/Special Chemistry	Minimum 10 mL random urine collected in a sterile container GENERAL LABORATORY REQUISITION	Monday-Friday: 0800-1600		2011-06-14	
PT (see <u>INR</u> )						
Pterin Analysis, Urine BH4/NB Ratio Neopterin/Biopterin Ratio, Urine PKU-Pterin Deficient	Biochemical Genetics	Random urine BIOCHEMICAL GENETICS LAB REQUISITION	Batched approximately every three weeks	Neopterin: >1.0 mmol/mol creatinine  Biopterin: >0.6 mmol/mol creatinine  Neopterin/Biopterin Ratio: 0.2-3.0 Ratio  Tetrahydrobiopterin: 52-86%	2008-06-10	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
PTH (see <u>Parathyroid Hormone, Plasma</u> )						
PTH FNA (see <u>Parathyroid Hormone, Fine Needle Aspirate</u> )						
PTH-RP (see <u>Parathyroid Hormone-Related Peptide, Plasma</u> )						
PTHrP (see <u>Parathyroid Hormone-Related Peptide, Plasma</u> )						
PTT (see <u>Partial Thromboplastin Time (Activated)- PTT</u> )						
Purkinje Cell Cytoplasmic Antibody Type Tr (see <u>Anti Tr, Serum</u> )						
PY Test (see <u>H. Pylori Breath Test</u> <b>test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener</b> )						
Pyridoxal Phosphate (see <u>Vitamin B6</u> )						
Pyridoxal-5-Phosphate (see <u>Vitamin B6</u> )						
Pyruvate Kinase Deficiency Assay <b>TEST NO LONGER AVAILABLE</b> PKA	Test not available (Various)				2004-08-06	
Pyruvate, CSF Lactate:Pyruvate Ratio	Biochemical Genetics	Cerebrospinal Fluid (CSF) BIOCHEMICAL GENETICS LAB REQUISITION	As required	Pyruvate, CSF: 0.06-0.22 mmol/L  Lactate, CSF: 0.62-2.10 mmol/L	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Pyruvate, Whole Blood Lactate: Pyruvate Ratio	Biochemical Genetics	6 mL Green (Sodium or Lithium Heparinized) top Vacutainer tube  <b>Pediatric:</b> 0-2 yrs: 2 x 0.5 mL Green top 2-10 yrs: 3 mL Green top BIOCHEMICAL GENETICS LAB REQUISITION	As required	Pyruvate: 0.06-0.22 mmol/L  Lactate: 0.62-2.10 mmol/L  Lactate-Pyruvate Ratio: ≤ 20.00	2008-06-10	
Q fever Serology Coxiella burnetti Serology	Microbiology (VH)	5 mL Gold top or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to the Public Health Laboratory.		2010-09-13	Q Fever has an incubation period of approximately 2 to 3 weeks.  Positive antibody results should be correlated with clinical findings.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
QF-PCR Rapid Aneuploidy Detection	Cytogenetics (VH)	Amniotic Fluid CVS Fetal blood / Cord Blood Skin Fetal Tissue Products of Conception CYTOGENETI CS REQUISITION (must include patient's name, address, Ontario Health Insurance Number, PIN (if applicable), originating location, Dr's full name and address, and pertinent clinical information.	Batched as required	See final report	2016-03-22	The Cytogenetics Lab is staffed from 0700- 1700 (Monday-Friday), Ext. 78974 (office),or 77022(lab) or 75714(Sr. Tech)  For additional information please refer to the Molecular Diagnostics Laboratory  N/A See final report
Quantitative Cytomegalovirus (see <u>CMV PCR</u> )						
Quantitative Epstein Barr Virus (see <u>EBV PCR</u> )						
Quantitative RNA (see <u>Hepatitis C RNA - Quantitative</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Quinidine Biquin	Core	6 mL Red top Vacutainer tube  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	6.0-15.0 µmol/L		
R&M (see <u>Urinalysis</u> )						
RA (see <u>Rheumatoid Factor, Plasma</u> )						
Rabies Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory.		2010-09-28	
Random Glucose (see <u>Glucose, Plasma</u> )						
Random Stool Fat (see <u>Stool for Fat</u> )						
Rapamycin (see <u>Sirolimus, Whole Blood</u> )						
Rapid Aneuploidy Detection (see <u>QF-PCR</u> )						
RAST Test (see <u>Allergen Specific IgE, Serum</u> )						
RBC Folate (see <u>Folate, Red Blood Cells</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
RD (see <u>Non-Syndromic Recessive Deafness</u> )						
Reducing Substances,Urine or Stool - Qualitative	Core	Urine or Stool GENERAL LABORATORY REQUISITION	Referred out as required	Negative	2011-02-23	Ascorbic acid in large quantities may cause false positive results.  For the qualitative detection of reducing substances in urine including: glucose (diabetes mellitus), lactose (late pregnancy and lactation), galactose (galactosemia), pentose (essential pentosuria) and ribose (muscular dystrophy).
Relative viscosity, Serum (see <u>Serum Viscosity</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Renal Biopsy Kidney Biopsy	Pathology - UH	Tissue Powerchart: eOrder choosing appropriate specimen See Identification of clinical specimens	<p>When booking a Renal Biopsy contact:</p> <p><b>Victoria Hospital</b> Monday to Friday from 0800-1600 Call 519-685-8500 x 32956 or email Pathology@lhsc.on.ca stating Physician, location, date and time of biopsy. A confirmation email will be sent.</p> <p><b>University Hospital</b> Monday to Friday from 0800-1600 Page: 15718</p> <p><b>After Hours and weekends:</b> Contact (more...)</p>	See report	2009-03-23	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Renin Mass (see <u>Renin, Plasma</u> )						
Renin, Plasma Direct Renin Renin Mass	Endocrinology	<p><b>Adult:</b>4 mL Lavender top (EDTA) Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Lavender top (EDTA) Microtainers 2-10 years: 3 mL Lavender top (EDTA) Vacutainer tube</p> <p>Red, Gold, Light Green (Li-Heparin), or Lavender (EDTA) top tubes are <b>NOT</b> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	Monday-Friday 0800-1600	Age 20 60 <u>years:</u> supine: 1.7 23.9 ng/L standing: 2.6 27.7 ng/L		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Respiratory and Exfoliative samples for Cytology Sputum Post-Bronch Sputum Bronchial: Washings & Brushings	Cytopathology-UH	<b>Non-Gynaecologica I: Respiratory</b>  Orange top routine specimen container containing 30 mL Cytolyt solution/specimen material. CYTOPATHOLOGY REQUISITION-NON-GYNAECOLOGICAL AREA	Weekdays		2005-08-01	Cytopathology Laboratory Room A3-242 UH (519) 685-8500 x 36391/36392  Clinical history is an important component for diagnostic interpretation. The specimen is Thinprep processed so the total specimen volume should not exceed one orange top specimen container with Cytolyt included.



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Respiratory Culture	Microbiology (VH)	Sputum Tracheal Aspirates (includes Tracheostomy and Endotracheal Aspiration) Bronchial lavage or washings- (minimum of 15 mL required for testing) Protected bronchial brushes Throat swab from Cystic Fibrosis patient MICROBIOLOGY REQUISITION	Daily		2009-03-26	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Respiratory Virus Panel (RPCR) Influenza Virus Flu Screen	Virology Laboratory	Nasopharyngeal Aspirate Nasopharyngeal Swab Bronchial Alveolar Lavage (BAL) VIROLOGY REQUISITION	From November 16 to April 12, specimens will be processed for Influenza A, Influenza B, RSV, and SARS CoV-2 (COVID-19) 7 days a week. No further testing will be performed on specimens from ER or outpatients unless requested by the clinician.  Specimens from adult patients admitted to ICU, all BAL and all pediatric patient samples (inpatient and ICU) that are negative for Influenza A, Influenza B, RSV, will be tested f (more...)	See report	2010-08-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Reticulocyte Absolute Reticulocyte Count	Core	<p><b>Adult:</b> 4 mL K<sub>2</sub> EDTA (Lavender) Vacutainer tube</p> <p><b>Pediatric Venous:</b> 2 mL Paeds K2 EDTA (Lavender) Vacutainer</p> <p><b>Pediatric (Capillary):</b> 0.5 mL MAP K<sub>2</sub> EDTA (Lavender) Microtube 0.5 mL K<sub>2</sub> EDTA (Lavender) Microtube</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	10-100 x 10 <sup>9</sup> /L	2006-11-14	Reflection of erythropoietic activity.
Reticulocyte Count (see <u>Reticulocyte Absolute</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Rett Syndrome MECP2	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		<p>For more information click on:</p> <p>Molecular Diagnostic Laboratory N/A</p> <p>Rett syndrome, represents one of the leading causes of mental retardation and developmental regression in girls. The majority of cases of sporadic Rett syndrome are caused by mutations in the gene encoding methyl-CpG-binding protein 2 (MeCP2). The MeCP2 protein binds methylated DNA and appears to regulate gene expression and chromatin structure. Genotype/phenotype analysis reveals that the phenotypic spectrum of MeCP2 mutations in humans is broader than i (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
RF (see <u>Rheumatoid Factor, Plasma</u> )						
Rheumatoid Factor, Plasma RF RA	Core	<b>Adult:</b> 4.5 mL Green (Lithium Heparin) top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	Daily	<14 IU/mL	2010-01-11	Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes.
Rickettsia Serology Rocky Mountain Spotted Fever Murine Typhus	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory		2010-09-13	
Ringworm (see <u>Fungus Culture-Dermatophytes</u> )						
Risperidol (see <u>Risperidone, Serum/Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Risperidone, Serum/Plasma Risperidol	Toxicology/Special Chemistry	6 mL Red top Vacutainer tube or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Once a week	<b>Risperidone:</b> 19-49 nmol/L  <b>9-Hydroxyrisperidone:</b> 19-211 nmol/L	2006-05-19	
Ritalin™ (see <u>Methylphenidate, Urine</u> )						
Rituximab Monitoring	Flow Cytometry (VH)	Peripheral blood collected in K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube Referred-In Samples: FLOW CYTOMETRY 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.	See report	2006-06-01	
Rivotril (see <u>Clonazepam, Serum</u> )						
Rocky Mountain Spotted Fever (see <u>Rickettsia Serology</u> )						
Rohypnol (see <u>Flunitrazepam, Urine Qualitative</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Routine (see <u>Urinalysis</u> )						
Routine and Microscopic (see <u>Urinalysis</u> )						
Rubella Serology - RUB IgG/IgM	Virology Laboratory	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory	See report	2006-07-01	
Rubeola Virus Serology (see <u>Measles Serology - Measles IgG/IgM</u> )						
Rythmol (see <u>Propafenone, Serum/Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Salicylate, Serum Salicylic Acid ASA	Core UH & VH	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.  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Analgesic/Antipyretic: 0.2-0.7 mmol/L Antiinflammatory: 1.1-2.2 mmol/L Toxic: >2.3 mmol/L	2008-11-15	
Salicylic Acid (see <u>Salicylate, Serum</u> )						
Salivary Cortisol (see <u>Cortisol, Saliva</u> )						
Salivary Gland (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
Sandhoff Disease (see <u>Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts</u> )						
Sanfilippo A Syndrome (see <u>Heparin Sulfamidase, Fibroblasts</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sanfilippo B Syndrome (see <u>Alpha-N-Acetylglucosaminidase, Plasma</u> )						
Sanfilippo C Syndrome (see <u>AcCoA: Alpha-Glucosamine Acetyltransferase, Fibroblasts</u> )						
Sarcoptes scabiei	Microbiology (VH)	Skin scrapings PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily  The specimen will be referred out Monday - Friday to the Public Health Lab.	See report	2007-02-27	
Scheie Syndrome (see <u>Alpha-Iduronidase, Leukocyte/Fibroblasts</u> )						
Scheue Syndrome (see <u>Alpha-Iduronidase, Plasma</u> )						
Schindler Disease (see <u>Alpha-N-Acetylgalactosaminidase, Leukocyte/Plasma/Fibroblasts</u> )						
Schistosoma (see <u>Ova and Parasites-Blood and Tissue</u> )						
Schistosomiasis Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily		2010-09-28	Adequate clinical and epidemiological information must accompany specimen.  Clearly indicate on label and requisition "SCHISTOSOMIASIS SEROLOGY". Must be ordered by the Lab.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Screen for Factor V Leiden Mutation FVL	Molecular Diagnostics	4 mL Lavender (EDTA) top Vacutainer tubes  <b>Pediatric:</b> 0-2 years: <b>Contact Lab at Ext. 58140 for number of tubes required prior to sampling</b> GENERAL LABORATORY REQUISITION	Bi-weekly	Negative	2006-06-01	
Se (see <u>Selenium, Whole Blood</u> )						
Sed Rate (see <u>Erythrocyte Sedimentation Rate</u> )						
Sedimentation Rate (see <u>Erythrocyte Sedimentation Rate</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Selenium, 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): 2.9-4.6 µmol/L  Conventional Units: 227-365 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
Selenium,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):  0-12 months:0.72 - 1.21 µmol/L 1-5 years:1.22-1.82 µmol/L 6- 9 years:1.28-2.04 µmol/L ≥10 years:1.33-2.03 µmol/L  Conventional Units:  0-12 months:56.9-95.6 µg/L 1- 5 years:96.4-143.8 µg/L 6-9 years:100.8-161.4 µg/L ≥10 years:105.3-160.4 µg/L  Concentration of Selenium is much hi (more...)	2010-02-01	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
Selenium,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0.25-1.14 µmol/L µmol/mol creatinineAgeFe maleMale0-1129-13629-12912-1918-8318-8020-2921-9316-7130-3925-11318-8340-4930-13419-8850-5935-15822-10160-6935-15623-10670-7936-16325-114≥8044-20029-129  24 Hour Urine: 0.38-1.65 µmol/d  <u>Conventional Units:</u>  Random Urine: 20.0-90.0 µg/L (more...)		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Selenium, Whole Blood Se	Trace Elements	BD Royal Blue K2-EDTA Vacutainer. Reference #368381 TRACE ELEMENTS REQUISITION	Batched Analysis	SI Units (Reported on Patient Chart): 2.0-3.3 µmol/L  Conventional Units: 160-261 µg/L	2012-02-02	Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Seminal Analysis (Post Vasectomy ONLY )	Core	Semen GENERAL LABORATORY REQUISITION	As required	No spermatozoa should be detected in at least two samples taken two to four weeks apart.	2006-12-27	
Serotonin, 24-Hour Urine 5-Hydroxytryptamine 5-HT	Toxicology/Special Chemistry	24-hour urine GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	≤1193 nmol/day  Please note change in methodology and reference interval as of October 22, 2021.	2009-02-12	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Serotonin, Serum 5-Hydroxytryptamine 5-HT	Toxicology/Special Chemistry	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 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 <b>NOT</b> acceptable GENERAL LABORATORY REQUISITION</p>	Monday - Friday 0800-1600	<p>≤1306 nmol/L</p> <p>Please note change in methodology and reference interval as of October 22, 2021.</p>	2009-02-12	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sertraline, Serum/Plasma Zoloft	Core	5 mL Gold top Vacutainer tube or 6 mL Dark Green (Sodium Heparin) top Vacutainer tube  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	0-980 nmol/L		
Serum Free Light Chains (see <u>Free Light Chains, Serum/Plasma</u> )						
Serum Protein Electrophoresis (see <u>Protein Electrophoresis, Serum</u> )						
Serum Viscosity Relative viscosity, Serum	Core	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	1.4-2.0	2006-06-01	
Sex Determination (see <u>Sexing (for medical indications)</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sex Hormone Binding Globulin, Plasma/Serum SHBG	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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 or Gold top tubes are also acceptable</p> <p>Lavender top (EDTA) tubes are <b>NOT</b> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	<p><u>Male:</u> 20 49 years: 18.3 54.1 nmol/L ≥ 50 years: 20.6 76.7 nmol/L</p> <p><u>Female:</u> 20 49 years: 32.4 128.0 nmol/L ≥ 50 years: 27.1 128.0 nmol/L</p> <p><b>FREE ANDROGEN INDEX:</b></p> <p><u>Male:</u> 20 49 years: 35.0 92.6 % ≥ 50 years: 24.3 72.1 %</p> <p><u>Female:</u> 20 49 years: 0.3 5.6 % ≥ 50 years: 0.2 3.6 %</p>	2018-03-06	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
<p>Sexing (for medical indications) Sex Determination Y-marker</p>	<p>Molecular Diagnostics</p>	<p>Whole blood-1 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION</p>	<p>As Required Monday - Friday 0800 - 1600 h</p>	<p>See report</p>		<p>For more information click on: MOLECULAR DIAGNOSTIC LABORATORY N/A This test will be available for <u>medical indications only</u>, usually to aid in linkage analysis or to clarify prenatal diagnosis and <u>must</u> be referred from the Genetics Clinic.</p> <p>The tooth enamel gene, amelogenin, is encoded on the short arm of the X chromosome<sup>1</sup>. The Y chromosome, however, bears an amelogenin-like sequence which is shorter by 177bp than that on the X chromosome. Knowing this, it is possible to determine tissue sex status, by PCR amplification f (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
SHBG (see <u>Sex Hormone Binding Globulin, Plasma/Serum</u> )						
Sialidase (see <u>Alpha-N-Acetylneuraminidase, Fibroblasts</u> )						
Sickle Cell Screen	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Lavender top Microtainer 2-10 years: 2 mL Lavender top tube GENERAL LABORATORY REQUISITION	As required	Negative		The NOVA CENTURY SCIENTIFIC kit is a qualitative test and does not distinguish between sickle cell disease and sickle cell trait.  The test is positive in sickle cell disease and sickle cell trait. <b>All</b> positives should be further evaluated by Hemoglobin Electrophoresis.
Silver, 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): 0.0-1.4 nmol/L  Conventional Units: 0.00-0.15 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
Silver, Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-0.46 nmol/L nmol/mol creatinineAgeFe maleMale0-110- 55.20-52.712- 190-33.60- 32.620-290- 38.00-29.030- 390-45.90- 33.840-490- 54.50-35.750- 590-64.40- 41.060-690- 63.50-42.970- 790-66.20-46.4≥ 800-81.30-52.7  24 Hour Urine: 0-0.61 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-0.050 µg/L ng/g (more...)	2003-09-17	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
Silver, 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): 0.0-3.2 nmol/L  Conventional Units: 0.00-0.34 µg/L		Reference Ranges are based on Non- Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Sinequan (see <u>Doxepin + Desmethyldoxepin, Serum/Plasma</u> )						
Sirolimus, Whole Blood Rapamycin	Toxicology/Special Chemistry	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 yrs: 0.5 mL Lavender 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION	Tested daily: specimens received in Core lab after 10:00am will be processed the next working day.	No established reference range. Concentrations are measured in ug/L	2011-09-07	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Skin / Fetal Tissue Chromosome Analysis QF-PCR Microarray	Cytogenetics (VH)	2-3 mm <sup>2</sup> skin in a sterile container with Hank's Balanced Salt Solution (HBSS) 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.  GENOMIC MICROARRAY REQUISITION	As required	See final report		The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab).  For additional information please refer to the Cytogenetics Webpage. See final report  Collect sample as aseptically as possible and send to the laboratory within 24 hours.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Skin Antibodies (see <u>Pemphigus/Pemphigoid Antibodies</u> )						
Sly Syndrome (see <u>Beta-Glucuronidase, Leukocyte/Plasma/Fibroblasts</u> )						
Sodium (see <u>Electrolytes,Plasma</u> )						
Sodium (fluid) (see <u>Electrolytes,Fluid</u> )						
Sodium (urine) (see <u>Electrolytes,Urine</u> )						
Sodium, 24-Hour Urine	Core	24 Hour urine collection GENERAL LABORATORY REQUISITION	Weekdays	40-217 mmol/d		
Sodium,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	N/A	2010-05-17	
Sodium,Urine-Random	Core	Random urine GENERAL LABORATORY REQUISITION	As required	40-200 mmol/L		
Soft Tissue (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
Somatomedin C (see <u>Insulin-Like Growth Factor, Serum</u> )						
Somophyllin (see <u>Theophylline, Serum</u> )						
SPE (see <u>Protein Electrophoresis, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Specific Gravity, Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report	2010-05-17	
Sphingomyelinase, Fibroblast Niemann-Pick Disease Type A and Type B	Biochemical Genetics	Fibroblast Culture BIOCHEMICAL GENETICS LAB REQUISITION	As required	56-113 nmol/hr/mg protein	2008-06-10	
Sputum (see <u>Respiratory and Exfoliative samples</u> for Cytology)						
St. Louis Encephalitis (see <u>Arbovirus Flavivirus Serology/PCR</u> )						
Sterility Culture	Microbiology/Epi demiology	For products and specimens <b>not</b> requiring a U.S.P. sterility test. MICROBIOLOG Y REQUISITION	Daily			
Sterility Culture U.S.P.	Microbiology/Epi demiology	See Collection Information MICROBIOLOG Y REQUISITION	Daily but testing of an initial product must be arranged with Epidemiology at ext. 57412.			
Steroid Cell Antibodies (see <u>Adrenal Antibodies, Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sterol Profile, Serum/Plasma 7-Dehydrocholesterol	Core	4.5 mL Light Green top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred as required	<p><b>STEROL PROFILE REFERENCE INTERVAL CLINICAL INDICATION</b></p> <p><b>Analyteumol/L (elevation)</b></p> <p>7-dehydrocholesterol(0.3 - 2.2)SLOS8-dehydrocholesterol(0.2 - 3.7)SLOScholestanol(0.0 - 8.6)CTXdesmosterol(0.5 - 6.7)desmosterol(0.0 - 0.7)Antley-Bixler syndrome-11athosterol(0.0 - 0.0)lathosterol(1.7 - 34.7)sitosterolemia</p> <p><b>Notes:</b> Cholestanol is 5<math>\alpha</math>-cholestan-3<math>\beta</math>-ol. (more...)</p>	2006-09-06	Referred out Monday-Thursday

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Stomach Brush/Wash (see <u>Gastrointestinal/Hepatobiliary Specimens for Cytology</u> )						
Stones (see <u>Calculi, Renal</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Stool Culture Faeces Culture	Microbiology (VH)	Stool Colostomy or Ileostomy contents MICROBIOLOG Y REQUISITION	Daily		2009-12-11	<p>1. <b>Adults:</b>            The Lab routinely screens for Campylobacter jejuni/coli, E.coli 0157:H7, Salmonella and Shigella.  <u>Note:</u> if Yersinia is suspected, please indicate when ordering.</p> <p>2. <b>Children:</b>            The Lab routinely screens for Campylobacter jejuni/coli, E.coli 0157:H7, Salmonella, Shigella and Yersinia.</p> <p>If other pathogens are suspected due to patient history or travel etc., please discuss with the Microbiologist on-call and notify the laboratory in advance.</p> <p>Some test may be referred out to (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Stool Culture for Botulism (see <u>Botulism (Botulism Toxin)</u> )						
Stool for Fat Random Stool Fat	Core	Random stool GENERAL LABORATORY REQUISITION	Referred out as required Monday - Thursday	GDML changed the stool for fat report format effective May 21, 2013. The method changed from semi- qualitative to qualitative with a revised NORMAL reference range.  A comment noting the change was added to the reports.	2007-09-18	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Strongyloides Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily		2010-09-28	<p>Adequate clinical and epidemiological information must accompany the specimen.</p> <p>Clearly indicate on label and requisition "STRONGYLOIDES SEROLOGY". Must be ordered by the Lab.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Strontium,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0.34-1.82 µmol/L µmol/mol creatinineAgeFe maleMale0-1139-21739-20712-1925-13224-12820-2928-15021-11430-3934-18125-13340-4940-21526-14050-5948-25330-16160-6947-25032-16970-7949-26134-182≥ 8060-32039-207  24 Hour Urine: 0.46-2.62 µmol/d  <u>Conventional Units:</u>  Random Urine: 30-160 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
Sudafed (see <u>Pseudoephedrine, Urine Qualitative</u> )						
Sulfatides, Urine Metachromatic Leukodystrophy MLD	Core	Random urine GENERAL LABORATORY REQUISITION	As required	See report	2008-06-10	
Sulfite Oxidase Deficiency (see <u>Sulfocysteine, Urine</u> )						
Sulfocyanate (see <u>Thiocyanate, Serum/Plasma</u> )						
Sulfocysteine, Urine Sulfite Oxidase Deficiency Molybdenum Cofactor Deficiency	Biochemical Genetics	Random urine BIOCHEMICAL GENETICS LAB REQUISITION	As required	0-50 umol/mmol creatinine	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sulfur, Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 4.4-18.7 mmol/L mmol/mol creatinineAgeFe maleMale0- 110.50-2.230.50- 2.1312-190.32- 1.360.31-1.3220- 290.36-1.530.27- 1.1730-390.43- 1.850.32-1.3740- 490.51-2.200.34- 1.4450-590.61- 2.600.39-1.6660- 690.60-2.560.40- 1.7370-790.62- 2.670.44-1.87≥ 800.77-3.280.50- 2.13  24 Hour Urine: 7.8-25.0 mmol/d  <u>Conventional</u> <u>Units:</u>  Random Urine: (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
Surmontil (see <u>Trimipramine, Serum/Plasma</u> )						
Sweat Chloride (see <u>Chloride, Sweat</u> )						
Syphilis (see <u>Syphilis Antibody Screen</u> )						
Syphilis Antibody Screen Syphilis	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory.		2010-09-28	
Syphilis VDRL (CSF Only)	Microbiology	CSF PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory.		2018-07-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Systemic Sclerosis Profile Anti Scl-70 Anti CENP A Anti CENP B Anti RP11 Anti RP155 Anti Fibrillarin Anti NOR90 Anti Th/To Anti PM-Scl100 Anti PM-Scl75 Anti Ku Anti PDGFR Anti Ro-52	Clinical Immunology	<b>Adult:</b> 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube as well as EDTA, Heparin or Citrate plasma  <b>Pediatric:</b> 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Batch analysis	Negative	2019-12-12	<b>This test is available exclusively to Rheumatologists and Respirologists at LHSC/SJHC and accepted from referred in locations.</b>  Immunoblot results will be reported as either negative or positive for specific antibodies as the following: (+) Borderline 1+ Weak Positive 2+ Positive 3+ Strong Positive
T-Cell Lymphoma TCRG Gene clonality assay	Molecular Diagnostics	EDTA blood/bone marrow MOLECULAR DIAGNOSTIC REQUISITION	As required, Monday to Friday 0800-1600h	See report		
T. vulgaris (see <u>Farmers Lung IgG Antibodies, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tacrolimus FK506 Prograf	Toxicology/Special Chemistry	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  <b>Pediatric:</b> 0-2 yrs: 0.5 mL Lavender 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION	Samples are tested Monday-Saturday. Specimens received in the Core lab 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 at: (519) 685-8500 x 64664 option 3.  Thoroughly mix the blood sample after procurement.
Taenia solium Serology (see <u>Cysticercosis Serology</u> )						
Tau Protein (see <u>Beta-2 Transferrin</u> )						
Tay-Sachs Disease (see <u>Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts</u> )						
TB Culture (see <u>Mycobacterium Culture</u> )						
TBG (see <u>Thyroxine Binding Globulin, Serum</u> )						
TBII (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						
TCOM (see <u>Complement Total, Serum</u> )						
TCRG Gene clonality assay (see <u>T-Cell Lymphoma</u> )						
Tegretol (see <u>Carbamazepine, Serum/Plasma-Total</u> )						
Telo peptide-N (see <u>N-Telo peptide, Urine</u> <b>no longer available- see C-Telo peptide</b> )						
Tempra (see <u>Acetaminophen</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Teriflunomide (see <u>Leflunomide</u> )						
Testicular Biopsy	Pathology	Tissue biopsy Powerchart: eOrder choosing appropriate specimen. See Identification of Clinical Specimens	Refer to Collection Information	See report	2019-04-09	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Testosterone (Total), Plasma/Serum	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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><u>Male:</u> Tanner stage 1: ≤ 0.4 nmol/L Tanner stage 2: ≤ 15.0 nmol/L Tanner stage 3: 2.3 - 27.0 nmol/L Tanner stage 4: 6.2 - 26.5 nmol/L Tanner stage 5: 6.5 - 30.6 nmol/L 20 - 49 years: 8.6 - 29.0 nmol/L ≥ 50 years: 6.7 - 25.7 nmol/L</p> <p><u>Female:</u> Tanner stage 1: ≤ 0.4 nmol/L Tanner stage 2: ≤ 0.4 nmol/L Tanner stage 3: ≤ 0.8 nmol/L Tanner stage 4: ≤ 0.9 nmol/L Tanner stage 5: ≤ 1.3 nmol/L 20 - 49 years: ≤ 1.7 nmol/L ≥ 50 years: ≤ 1.4 (more...)</p>	2018-03-06	<p>Nandrolone (19-nortestosterone) interferes with this assay.</p> <p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>In isolated cases, elevated testosterone levels can be seen in samples from female patients with end stage renal disease (ESRD).</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tetanus Serology	Microbiology	5 mL Gold top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory.		2017-10-02	Testing is available through the Public Health Laboratory only for the rare event of an adverse reaction to the Tetanus vaccine or the possibility of humoral immunodeficiency.
Tg (see <u>Thyroglobulin, Serum/Plasma</u> )						
Thallium, 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): 0.00-0.13 nmol/L  Conventional Units: 0.000-0.026 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
Thallium,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-1.96 nmol/L nmol/mol creatinineAgeFe maleMale0-110-2330-22212-190-1420-13820-290-1600-12230-390-1940-14340-490-2300-15150-590-2720-17360-690-2680-18170-790-2800-196≥800-3430-222  24 Hour Urine: 0-2.94 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-0.400 µg/L ng/g creatinineAgeFe maleMale0-110-4210-40 (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
Thallium, 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): 0.00-0.19 nmol/L  Conventional Units: 0.000-0.039 µg/L		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Theo-Dur (see <u>Theophylline, Serum</u> )						
Theophylline, Serum Aminophylline Theo-Dur Somophyllin Elixophyllin Xanthine	Core	<b>Adult:</b> 6 mL Red top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red top Vacutainer tube  GENERAL LABORATORY REQUISITION	Referred out Monday Thursday	55 - 110 mol/L	2010-08-31	Bronchodilator drug used in treatment of reversible bronchoconstriction. Aminophylline is a salt of theophylline (80-85% by weight of this salt is theophylline).  <b>Toxic: &gt;110 mol/L</b> Critical Value to be phoned to nurse or physician immediately
Thermoactinomyces vulgaris (see <u>Farmers Lung IgG Antibodies, Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thiamine Diphosphate (see <u>Vitamin B1, Whole Blood</u> )						
Thiamine Pyrophosphate (Whole Blood) (see <u>Vitamin B1, Whole Blood</u> )						
Thiocyanate, Serum/PI asma Sulfocyanate Nitroprusside	Core	6 mL Red top Vacutainer tube or 4 mL Lavender EDTA Vacutainer tube  <b>Avoid gel- separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Therapeutic: Less than 0.5 mmol/L  Toxic: Greater than 1.7 mmol/L	1998-09-01	
Thiopurine Methyltransferase: Genotype TPMT Genotype	Core	4 mL Lavender EDTA Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Results interpreted on report	2015-08-25	
Thiopurine Methyltransferase: Phenotype TPMT Phenotype	Core	4 mL Lavender EDTA Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday- Thursday	Low Activity: < 10 nmol/Hbh Intermediate: 10 - 40 nmol/Hbh Normal Activity: > 40 nmol/Hbh	2015-08-25	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thioridazine and Metabolite, Serum/Plasma Mellaril	Core	5 mL Gold top Vacutainer tube  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Thioridazine steady-state serum concentration during chronic oral administration of 400 mg daily: 140 - 2600 ng/mL  Therapeutic steady-state concentrations may overlap levels associated with toxicity.  Mesoridazine therapeutic range: 100 - 1400 ng/mL		Thioridazine is a phenothiazine for treating psychosis. Monitoring its level is important to optimize therapy, to avoid toxicity, and to assure compliance. <b>Toxic:</b> Greater than 27 µmol/L
Throat Culture	Microbiology (VH)	Throat, tonsil MICROBIOLOGY REQUISITION	Daily			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thrombophilia (associated with Factor V deficiency) Factor V Familial Thrombophilia Prothrombin/Factor V Prothrombin	Molecular Diagnostics	1 x 4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube-may be a frozen aliquot. MOLECULAR DIAGNOSTIC REQUISITION	As Required Monday - Friday 0800 - 1600 h	See report		For more information click on: Molecular Diagnostic Laboratory N/A Resistance to activated protein C (APC) is a major cause of familial thrombophilia, and can be corrected by an anticoagulant activity expressed by purified factor V. It has been suggested that a point mutation in the gene coding for factor V is responsible for APC resistance (PMID:7909098, 8208267). This point mutation, (F5:c.1601G>A), occurring towards the 3' end of exon 10 of the factor V gene, is predicted to cause a missense mutation in the APC cleavage site, (F5:p.Arg534Gln) and confers an inc (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thrombophilia (Prothrombin) Prothrombin Gene	Molecular Diagnostics	Whole blood-1 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 At least five genetic defects,(PMID:9299960 ) accounting for approximately 15% of families with inherited thrombophilia, have been established as risk factors for venous thrombosis. There are protein C, protein S, and antithrombin deficiencies, and represent defects in the anticoagulant pathways of blood coagulation. Two other genetic risk factors, resistance to activated protein C associated with the factor V Leiden mutation and increased prothrombin associated with the prothrombin 20210 A allele (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thrombophilia Screen (see <u>Hypercoagulable Screen</u> )						
Thyrocalcitonin (see <u>Calcitonin, Fine Needle Aspirate, Calcitonin, Serum</u> )						
Thyroglobulin, Fine Needle Aspirate	Core	<p>Two samples: The first is uncontaminated Plasma-Lyte and serves as a blank.</p> <p>The second is 1 mL of Plasma-Lyte that has been used to rinse the biopsy needle as described below.</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	≤ 1.0 g/L	2017-07-04	<p>The limit of quantitation of the assay is 0.1 g/L. If a blank result of &gt; 0.1 g/L were to be obtained, a technical investigation would be performed prior to reporting of result.</p> <p>The purpose of the blank fluid is to confirm that the fluid being used to rinse the needle does not have a matrix effect in the assay.</p> <p>An elevated thyroglobulin level in the fine needle aspirate may indicate the presence of metastatic differentiated thyroid cancer.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thyroglobulin, Serum/Plasma Tg	Core	<p><b>Adult:</b> 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Lavender top (EDTA) tubes are also acceptable</p> <p>Light Green top (Li-Heparin) tubes are <b>NOT</b> acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	<p>Thyroidectomized patients: &lt; 0.2 g/L</p> <p>Normal population: 3.5 - 77.0 g/L</p>	2017-07-04	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>In the follow-up of thyroidectomized patients, a concentration &gt; 0.2 g/L is suspicious for local or metastatic disease.</p> <p>In non-thyroidectomized patients, a concentration greater than the reference interval is not diagnostic of cancer.</p> <p>This assay is to be used to monitor patients who have had thyroidectomy for cancer. It is not recommended (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thyroid (see <u>Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology</u> )						
Thyroid Antibodies (see <u>Anti-Thyroglobulin Antibodies, Serum/Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thyroid Stimulating Hormone, Plasma/Serum TSH TSH-3 Thyrotropin	Core	<p><b>Adult:</b> 4.5 mL Green top Vacutainer tube</p> <p><b>Pediatric:</b> 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>0 6 days: 0.70 15.2 mIU/L</p> <p>6 days 3 months: 0.72 11.0 mIU/L</p> <p>3 12 months: 0.73 8.35 mIU/L</p> <p>1 6 years: 0.70 5.97 mIU/L</p> <p>6 11 years: 0.60 4.84 mIU/L</p> <p>11 20 years: 0.51 4.30 mIU/L</p> <p>&gt; 20 years: 0.27 4.20 mIU/L</p>	2008-11-15	<p>TSH should be the initial test to screen for clinically-suspected hypothyroidism or hyperthyroidism. If TSH is below the lower cut-off, FT4 and FT3 testing will be performed reflexively by the laboratory. If TSH is between the lower and upper cut-offs, no FT4 or FT3 testing will be performed reflexively. If TSH is above the upper cut-off, FT4 testing will be performed reflexively by the laboratory. These cut-offs are the TSH reference intervals in children and the optimal cut-offs to predict abnormal FT4 levels in adults.</p> <p>The TSH cut-offs are: 2 &lt;6 years: &lt;0.70 or &gt;5.97 mIU/L (more...)</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thyroid Stimulating Immunoglobulin (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						
Thyrotropin (see <u>Thyroid Stimulating Hormone, Plasma/Serum</u> )						
Thyrotropin Binding Inhibitor Immunoglobulin (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						
Thyrotropin Receptor Antibodies (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						
Thyroxine Binding Globulin, Serum TBG	Core	5 mL Gold top Vacutainer GENERAL LABORATORY REQUISITION	Referred out Monday - Thursday	0-11 months: 315-685 nmol/L 1 year - 9 years: 278-500 nmol/L 10 years and over: 260-575 nmol/L		
TIBC (see <u>Unsaturated Iron Binding Capacity</u> )						
Ticks (see <u>Ova and Parasites-Ticks/Arthropods</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tin, Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 4.2-42.2 nmol/L µmol/mol creatinineAgeFe maleMale0-110.5-5.00.5-4.812-190.3-3.10.3-3.020-290.3-3.50.3-2.630-390.4-4.20.3-3.140-490.5-5.00.3-3.250-590.6-5.90.4-3.760-690.6-5.80.4-3.970-790.6-6.00.4-4.2≥800.7-7.40.5-4.8  24 Hour Urine: 8.4-59.0 nmol/d  <u>Conventional Units:</u>  Random Urine: 0.5-5.0 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
Tinea (see <u>Fungus Culture-Dermatophytes</u> )						
Tip Culture (see <u>Vascular Tip Culture</u> )						
Tissue / Fluid Investigation	Flow Cytometry (VH)	Lymph Node Biopsy Fine Needle Aspirate CSF Body Fluids Referred-In Samples: FLOW CYTOMETRY 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.  For after hours and weekend requests, page the Hematologist on-call at (519) 685-8500 x 14999.		2014-04-21	
Tissue Culture	Microbiology (VH)	Tissue, biopsy MICROBIOLOGY REQUISITION	Daily			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tissue for Immunofluorescence (IF) - Skin, Conjunctival biopsy, Buccal mucosa	Immunopathology	Tissue biopsy PowerChart: E-order choosing appropriate specimen. See Identification of Clinical Specimens.	Tuesday and Thursday	Negative		
Tissue Transglutaminase Antibody (see <a href="#">Anti-Tissue Transglutaminase Antibodies (IgA), Serum/Plasma</a> )						
Titanium, 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): 0.0-23.0 nmol/L  Conventional Units: 0.0-1.1 µg/L		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Titanium, 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): 0.00-7.9 nmol/L  Conventional Units: 0.00-0.38 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
Titanium, 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): 0.0-5.8 nmol/L  Conventional Units: 0.00-0.28 µg/L		Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Titanium, 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): 0.0-20.9 nmol/L.  Conventional Units: 0.0-1.0 µg/L	2008-09-19	Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
TNT - High sensitivity (see <u>High Sensitivity Troponin T</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tobramycin, Serum/Plasma Aminoglycosides	Core (VH)	4.5 mL Green (Lithium Heparin) top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	Daily	<u>Therapeutic Range</u>  <b>Trough (Pre Dose):</b> ≤ 1.4 mg/L <b>Peak (Post Dose):</b> 6-10 mg/L	2010-07-12	
Tofranil (see <u>Imipramine, Serum/Plasma</u> )						
Topamax (see <u>Topiramate, Serum/Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Topiramate, Serum/Plasma Topamax	Toxicology/Special Chemistry	6 mL Red or 6 mL Green or 4 mL Lavender top Vacutainer tube  <b>Pediatric:</b> 2-10 yrs: 2 mL Red or Dark Green top 0-2 yrs: Red 0.5pk. or 0.6 Green pk. GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	15-60 µmol/L	2006-06-01	
Total (conjugated and unconjugated) metanephrines (see <u>Metanephrines, Urine</u> )						
Total Complement Function Assay (see <u>Complement Total, Serum</u> )						
Total Homocysteine (see <u>Homocysteine</u> )						
Total PSA (see <u>Prostate Specific Antigen, Plasma/Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Toxocara Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to the Public Health Laboratory in Toronto.		2010-09-28	Adequate clinical and epidemiological information must accompany the specimen.
Toxoplasma (see <u>Ova and Parasites-Blood and Tissue</u> )						
Toxoplasma Serology - Toxoplasma IgG/IgM	Core (UH)	5 mL Gold or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	24/7	See report  Indeterminate Toxo. IgG results will be forwarded to Public Health for confirmation on weekdays.	2006-07-01	
TPMT Genotype (see <u>Thiopurine Methyltransferase: Genotype</u> )						
TPMT Phenotype (see <u>Thiopurine Methyltransferase: Phenotype</u> )						
TRAb (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Trace Elements Creatinine, Urine Creatinine, Urine- Random for Trace Elements Creute Creatinine Trace Elements	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>Creatinine</u> <u>Reference</u> <u>Ranges used for</u> <u>random urine</u> <u>calculations</u> <u>for Trace</u> <u>Elements</u>  <b>SI Units mmol/L</b>  AgeFemaleRangeMean0-112.0-14.78.412-193.6-25.613.820-291.9-23.112.230-391.2-21.410.140-490.8-18.28.550-591.1-15.37.260-691.2-15.57.370-791.3-15.47.0≥800.9-10.65.7  AgeMaleRangeMean0-113.5-15.08.8 (more...)	2012-06-25	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Trace Elements Magnesium, Urine (see Magnesium for Trace Elements, Urine)						
Transferrin Isoelectric Focussing, Serum/Plasma	Core	5 mL Gold top Vacutainer is preferable or 6 mL Green (Sodium Heparinized) top Vacutainer tube is acceptable GENERAL LABORATORY REQUISITION	Referred out Wednesdays	A descriptive report will be sent	2006-09-06	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Transferrin Saturation UIBC Iron Overload Screen	Core (all campuses)	4.5 mL Light Green (Li Heparin) Vacutainer tube  GENERAL LABORATORY REQUISITION	As required	11.0-56.0%		<p>The test is not valid and may be misleading in patients receiving iron therapy.</p> <p>Useful in the investigation of suspected iron deficiency or iron overload. Serum ferritin is the preferred method for assessing iron stores.</p> <p>Assessment of patients with acute iron poisoning.</p> <p>In cases of iron deficiency, the transferrin saturation is lowered; with iron overload, it is increased.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Transferrin, Plasma TRF	Core	<p><b>Adult:</b> 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><b>Pediatric:</b> 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	2.00-3.60 g/L	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>Transferrin quantitation not to be confused with transferrin saturation. <b>To screen for chronic iron overload diseases, hemochromatosis, please order Transferrin saturation.</b></p>

Transfusion ABC (see [HLA Transfusion Typing](#))

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Transfusion Reaction Investigation	Blood Transfusion	6 mL Pink (EDTA) top Vacutainer or Donor Tag (SJHC) BLOOD TRANSFUSION REQUISITION or Electronic order	Daily Urgent, if indicated	See report		System Code: Determined by Transfusion Reaction Course. Further blood transfusion should not occur until investigation is complete N/A Results will be interpreted by Hematologist or designate.
Transglutaminase Antibody (see <u>Anti-Tissue Transglutaminase Antibodies (IgA), Serum/Plasma</u> )						
Transthyretin (see <u>Prealbumin, Serum</u> )						
Trazodone Desyrel	Core	4 mL Dark Green (Lithium Heparin) top Vacutainer tube  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	2.2 - 4.3 µmol/L	2005-07-01	
TRF (see <u>Transferrin, Plasma</u> )						
Trichinella (see <u>Ova and Parasites-Blood and Tissue</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Trichinella Serology	Microbiology (VH)	Blood-5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to the Public Health Laboratory in Toronto.		2010-09-28	Adequate clinical and epidemiological information must accompany the specimen.  Clearly indicate on label and requisition "TRICHINOSIS SEROLOGY".
Tricyclic Screen Tricyclics, Plasma	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred) or 5 mL Gold top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Negative	2009-06-04	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tricyclics, Plasma (see <u>Tricyclic Screen</u> )						
Triglycerides, Plasma	Core	4.5 mL Green top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top <b>GENERAL LABORATORY REQUISITION</b>	As required	* See interpretation of lipid profile Increased risk of cardiovascular disease at triglycerides level greater than 2.0 mmol/L; increased risk of acute pancreatitis at triglycerides level greater than 10.0 mmol/L (Lancet 2014;384:626-635).	2008-11-15	Cholesterol target levels are dependent upon patient 10-year risk of coronary artery disease (Can J Cardiol 2013;29:151-67).  Dicynone (Etamsylate) at therapeutic concentrations may lead to false low results and Ascorbic acid and calcium dobesilate cause artificially low triglyceride results. Intralipid is directly measured as analyte in this assay and leads to high triglyceride results.  Triglyceride: Suggested optimal plasma triglyceride concentration is <1.50 mmol/L. Triglyceride level >10.00 mmol/L is a risk factor for pancreatitis

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Trimipramine, Serum/ Plasma Surmontil	Core	2 x 6 mL Red top Vacutainer tube or 2 x Lavender top Vacutainer tubes  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	170-1000 nmol/L	2005-07-01	
Tripeptidyl Peptidase 1, Dried Blood Spot/Fibroblast CLN2 Peptidase LINCL Batten Disease	Biochemical Genetics	1. Blood dot on PKU-type card  2. Fibroblast 1. GENERAL LABORATORY REQUISITION  2. BIOCHEMICAL GENETICS LAB REQUISITION	As required	Dried Blood Spot: 2.6-7.8 nmol/24 hr/3 mm disc  Fibroblast: 47-114 nmol/hr/mg protein	2008-06-10	
Triple Marker (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						
Triple Screen (see <u>Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks)</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Triptil (see <u>Protriptyline, Serum</u> <b>TESTING ON HOLD as of 11/09/15</b> )						
Tropheryma whipplei (see <u>Whipple's Disease</u> )						
Troponin T - High sensitivity (see <u>High Sensitivity Troponin T</u> )						
Trypanosoma (see <u>Ova and Parasites-Blood and Tissue</u> )						
Trypanosomiasis Screen (see <u>Blood Parasite Screen</u> )						
Trypsin-like immunoreactivity (see <u>Trypsin/Trypsinogen, Serum</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Trypsin/Trypsinogen, Serum Immunoreactive trypsin Immunoreactive trypsinogen Trypsin-like immunoreactivity	Core	<p><b>Adult:</b> 5 mL Gold Vacutainer tube</p> <p><b>Pediatric:</b> 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 <b>NOT</b> acceptable  <b>GENERAL LABORATORY REQUISITION</b></p>	Referred out Monday - Friday	180.5 885.3 ng/mL	2018-08-07	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tryptase, Serum/Plasma	Core	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube  Plasma is also acceptable. 4.5 mL Green Vacutainer (Li Heparin)  <b>Pediatric:</b> 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	3.8 11.4 g/L	2009-02-27	
TSH (see <u>Thyroid Stimulating Hormone, Plasma/Serum</u> )						
TSH-3 (see <u>Thyroid Stimulating Hormone, Plasma/Serum</u> )						
TSI (see <u>Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum</u> )						
tTGAB (see <u>Anti-Tissue Transglutaminase Antibodies (IgA), Serum/Plasma</u> )						
TTR (see <u>Familial Amyloidotic Polyneuropathy-TTR</u> )						
Tularensis antibody (see <u>Francisella tularensis Serology</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tylenol (see <u>Acetaminophen</u> )						
Anti-HMG-CoA Reductase (HMGCR) (see <u>Comprehensive Myositis Panel, Serum</u> )						
Autoimmune Encephalitis Antibodies (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Basic Myositis Panel (see <u>Comprehensive Myositis Panel, Serum</u> )						
Other Antibody (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
Paraneoplastic Antibodies (see <u>Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</u> )						
UIBC (see <u>Transferrin Saturation, Unsaturated Iron Binding Capacity</u> )						
Umbilical Cord Blood Testing (see <u>Cord Blood Testing</u> )						
Unsaturated Iron Binding Capacity Iron Binding Capacity Saturation UIBC TIBC Iron Overload	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	24.2 - 70.1 mol/L	2008-11-15	UIBC is part of the Iron Overload screen and cannot be ordered as a separate test

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Uranium,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0-0.042 nmol/L  nmol/mol creatinineAgeFe maleMale0-110-5.00-4.812-190-3.00-3.020-290-3.40-2.630-390-4.20-3.140-490-4.90-3.250-590-5.80-3.760-690-5.80-3.970-790-6.00-4.2≥800-7.40-4.8  24 Hour Urine: 0-0.063 nmol/d  <u>Conventional Units:</u>  Random Urine: 0-0.010 µg/L  ng/g creatini (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
Urate, 24-Hour Urine Uric Acid	Core	24 Hour urine GENERAL LABORATORY REQUISITION	Weekdays	1.5-4.5 mmol/d		
Urate, Plasma Uric Acid	Core	4.5 mL Green top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Premature: <32 µmol/L 0-1 month: <311 µmol/L 1 month-1 year: <372 µmol/L 1 year-17 years: <362 µmol/L  Males >18 years: <420 µmol/L  Females >18 years: <340 µmol/L	2008-11-15	
Urate, Urine-Random Uric Acid	Core	Random urine GENERAL LABORATORY REQUISITION	As required	0.00-0.30 mmol/L	2006-03-01	
Urea Cycle Disorder (see <u>Orotic Acid, Urine</u> )						
Urea, 24-Hour Urine	Core	24 Hour urine GENERAL LABORATORY REQUISITION	Weekdays	170-580 mmol/24 hours	2008-11-16	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Urea,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report	2010-05-17	
Urea,Plasma Blood Urea	Core	4.5 mL Green top Vacutainer  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Premature: <2.7 mmol/L 0-5 months: <7.0 mmol/L 6 months-17 years: <8.0 mmol/L 18 years-65 years: <8.3 mmol/L >65 years: <11.9 mmol/L	2008-11-15	
Urea,Urine-Random	Core	Random urine GENERAL LABORATORY REQUISITION	As required	141-494 mmol/L (1st morning void)	2008-11-16	

Ureaplasma/Mycoplasma Culture (see Mycoplasma/Ureaplasma Culture)

Uric Acid (see Urate, 24-Hour Urine, Urate,Plasma, Urate,Urine-Random)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Urinalysis Routine R&M Routine and Microscopic	Core	Random urine GENERAL LABORATORY REQUISITION	As required	Leucocytes, urine: 0 cells/uL Specific Gravity, urine: 1.003-1.029 pH, Urine: 4.5-7.5 Protein, Urine: 0.0-0.2 g/L Glucose, Urine: 0.0-5.5 mmol/L Ketones, Urine: 0.0-0.5 mmol/L Blood, Urine: Negative Nitrite, Urine: Negative	2009-12-21	



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Urinary Fluid for Cytology Urine for Cytology	Cytopathology-UH	<p><b>Non-Gynaecological: Urinary</b></p> <p>Orange top routine specimen container containing 30 mL Cytolyt solution/60 mL body fluid</p> <p>CYTOPATHOLOGY            REQUISITION-NON-GYNAECOLOGICAL AREA</p>	Weekdays		2010-11-25	<p>Close specimen lid tightly to prevent leakage.</p> <p>Cytopathology Laboratory            Room A3-242            UH            (519) 685-8500 x 36391/36392</p> <p>Clinical history is an important component for diagnostic interpretation.            The specimen is Thinprep processed so the total specimen volume should not exceed one orange top specimen container with Cytolyt included.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Urine Culture (Urine C & S)	Microbiology (VH)	Urine <b>OR</b> Urine collected in the O.R.(Cytoscopy , kidney nephrostomy, suprapubic aspirate) MICROBIOLOGY REQUISITION	Daily			In/Out Catheter and O.R. Urines are processed using a 10 L inoculum which is reflected in the colony count.
Urine for Cytology (see <u>Urinary Fluid for Cytology</u> )						
Urine Microalbumin (see <u>Microalbumin,Urine</u> )						
Urine Oxycodone Percocet Percodan Oxycontin	Toxicology/Special Chemistry	Minimum of 10 mL of random urine collected in a sterile container. GENERAL LABORATORY REQUISITION	Monday-Friday: 0800-1600			
Urine Protein Electrophoresis (see <u>Protein Electrophoresis, Urine</u> )						
<u>Uroporphyrin III (see <u>Porphyrin Screen and Quantitation, 24-Hour Urine, Porphyrin Screen and Quantitation, Feces, Porphyrin Screen and Quantitation, Random Urine</u>)</u>						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vaginal Culture	Microbiology (VH)	Vaginal swab Pre-pubescent vaginal swab MICROBIOLOGY Y REQUISITION	Daily			<p>Vaginal swabs are examined microscopically for bacterial vaginosis, Trichomonas and yeast.</p> <p>Specimens from pre-pubescent females will also be processed by culture.</p> <p>When clinical data such as toxic shock syndrome or Listeriosis is indicated, vaginal samples, will be processed by culture.</p> <p>This information must accompany initial orders.</p> <p>If indicated, pre or post partum samples can be screened by culture for Group B Streptococcus. Request Strep (more...)</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vaginal Smear (see <u>Gynaecological Conventional Smear for Cytology</u> )						
Valproic Acid, Serum/Plasma- Total Depakene Depakene Epival	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 0.5 mL Green Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Therapeutic: 350-700 μmol/L	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Valproic Acid-Free, Serum Depakene	Toxicology/Special Chemistry	2 x 5 mL Gold top Vacutainer tube or 2 x 6 mL Red top Vacutainer tube or 6 mL Dark Green (Sodium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	35.0-140.0 $\mu$ mol/L	2008-11-15	
Vanadium, 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): 0.2-1.1 nmol/L  Conventional Units: 0.012-0.054 $\mu$ g/L	2010-04-13	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
Vanadium, 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): 0.6-1.7 nmol/L  Conventional Units: 0.032-0.088 µg/L  Concentration of Vanadium 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
Vanadium,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0.26-2.36 nmol/L  nmol/mol creatinineAgeFe maleMale0-1129-28029-26812-1918-17118-16620-2921-19316-14730-3925-23319-17240-4930-27720-18150-5935-32723-20860-6935-32324-21870-7936-33726-236≥8045-41329-268  24 Hour Urine: 0.39-3.93 nmol/d  <u>Conventional Units:</u>  Random Urine: (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
Vanadium, 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): 0.5-2.1 nmol/L  Conventional Units: 0.026-0.106 µg/L	2008-08-11	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
Vancomycin	Core (VH)	<p>4 mL Lavender top EDTA Vacutainer tube (preferred), <b>separate</b> tube required.</p> <p>5 mL Gold top Vacutainer tube also acceptable.</p> <p><b>Pediatric:</b>  0-2 years: 0.5 mL Lavender EDTA Microtainer  2-10 years: 3 mL Lavender or Red top tube  GENERAL LABORATORY REQUISITION</p>	As required	<p><b>Therapeutic Ranges:</b></p> <p>Trough (Pre-dose): 10-20 mg/L</p> <p>Effective February 4, 2013 paediatric ranges, including the post-dose (peak) range, have been discontinued</p>	2010-02-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vanillylmandelic Acid, Urine VMA	Toxicology/Special Chemistry	24-hour urine or random urine. <b>Random urine testing available for pediatric patients only.</b> GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	<p><b>Random Urine (VMA in mol/mmol creatinine):</b>  0 - 2 years: ≤ 10.7  2 - 4 years: ≤ 6.3  5 - 9 years: ≤ 4.7  10 - 19 years: ≤ 5.0  &gt; 19 years: ≤ 3.5</p> <p><b>24-Hour Urine (VMA in mol/day):</b>  0 - 2 years: ≤ 12.0  2 - 4 years: ≤ 15.0  5 - 9 years: ≤ 18.0  10 - 19 years: ≤ 30.0  &gt; 19 years: ≤ 34.0</p>	2017-07-04	<p>VHHU24 (for 24-hour urine; includes VMA and HVA) or VMAR (for random urine; includes VMA and HVA)</p> <p>Orders for VMA and HVA are coupled so that the levels of both analytes are measured and reported for each sample.</p> <p><b>For STAT requests, please call the toxicology lab at ext. 64664 to make arrangements.</b></p> <p>For 24-hour urine collections, transfer an aliquot of the measured urine to a 5-mL Greiner tube.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Varicella Zoster Serology - VZV IgG/IgM	Virology Laboratory	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Lab	See report	2006-07-01	
Varicella Zoster virus PCR - VZVPCR	Virology Laboratory	CSF Plasma- 5 mL EDTASwabs - lesions, mouth, eye Fluids- amniotic, ocular, vitreous/aqueous Tissue - brain, lymph node VIROLOGY LABORATORY REQUISITION	CSF samples are tested once daily Monday to Friday  Blood and lesions are tested three times a week on Monday, Wednesday and Friday. Tissues and Fluids are sent to Public Health Laboratory for testing.	See report	2011-10-20	
Variegate Porphyria (see <u>Porphyrin Screen, Plasma</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vascular Endothelial Growth Factor, Plasma VEGF	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	31 - 86 pg/mL	2018-04-23	<b>This test should not be ordered more frequently than 4 times per year for patients with POEMS syndrome.</b>
Vascular Tip Culture Tip Culture Catheter Tip Culture PICC tip Culture	Microbiology (VH)	Vascular Catheter Tip: Using sterile technique, cut 5-7 cm off distal ends. MICROBIOLOGY REQUISITION	Daily		2008-07-24	Vascular catheter tips are to be submitted only in cases of catheter-related bloodstream infections. Peripheral blood cultures should be collected at the same time.  Ventricular and epidural tips for culture should be ordered under CSFC.  Pacemaker leads tips for culture should be ordered under TISC.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vasoactive Intestinal Polypeptide VIP	Core	4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	< 75 pg/mL	2008-05-21	

Vasopressin (see Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum)

VEGF (see Vascular Endothelial Growth Factor, Plasma)

Venezuela Encephalitis (see Arbovirus Flavivirus Serology/PCR)

Very Long Chain Fatty Acids (see Long Chain Fatty Acids,Plasma/Serum)

VIP (see Vasoactive Intestinal Polypeptide)

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Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Virus Culture	Virology Laboratory	<p>Specimen should reflect the target organism whenever possible.</p> <p><u>Respiratory Viruses:</u> See RPCR Respiratory Virus Panel</p> <p><u>Herpes Simplex Virus:</u> See HSV PCR</p> <p><u>Varciella zoster viruses:</u> VZVPCR</p> <p><u>Adenovirus:</u> swabs - conjunctiva, rectal, stools</p> <p><u>MUMPS:</u> Swabs-throat, buccal (more...)</p>	Referred out weekdays to Public Health Laboratory	See report	2010-08-09	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Virus Culture (recommended method of testing for Influenza) (see <u>Influenza Virus Serology-Test</u> not available)						
Vitamin A, Serum/Plasma	Toxicology/Special Chemistry	<u>Serum:</u> 6 mL Red top Vacutainer tube  <u>Plasma:</u> 4 mL Lavender or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Once a week	0-<1 year: 0.4-2.3 mol/L 1-<12 years: 0.8-1.9 mol/L 12-<20 years: 1.0-2.6 mol/L 20-<40 years: 1.1-3.1 mol/L 40-<60 years: 1.2-3.5 mol/L ≥60 years: 1.3-3.8 mol/L	2009-07-02	
Vitamin B1, Whole Blood Thiamine Diphosphate Thiamine Pyrophosphate (Whole Blood)	Toxicology/Special Chemistry	4 mL Lavender Vacutainer tube GENERAL LABORATORY REQUISITION		70-180 nmol/L	2017-02-13	Measures the active form of Thiamine, namely Thiamine Diphosphate, and is the recommended test to assess Thiamine status (deficiency).  Protect sample from light and freeze immediately.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vitamin B12, Plasma/Serum Cobalamin Cyanocobalamin	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 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	145 - 569 pmol/L	2015-11-02	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. &gt; 5 mg/day) until at least 8 hours after the last biotin administration.</p> <p>Necessary for normal hematopoiesis and requires intrinsic factor for normal absorption. Decreased in pernicious anemia and malabsorption syndromes.</p>



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vitamin B6 Pyridoxal Phosphate Pyridoxal-5- Phosphate	Toxicology/Special Chemistry	Plasma - 4.5 mL Green (Lithium Heparin) <b>or</b> 4 mL (EDTA) Lavender top Vacutainer tube  Serum is also acceptable GENERAL LABORATORY REQUISITION	Routine	20-96 nmol/L	2009-07-02	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vitamin C Ascorbic Acid	Toxicology/Special Chemistry	4.5 mL Green (Lithium Heparin) top Vacutainer tube  Serum is also acceptable.  <b>Pediatric:</b> 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Routine	≥ 25 µmol/L	2009-07-02	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vitamin E, Serum/Plasma Alpha-Tocopherol	Toxicology/Special Chemistry	<u>Serum:</u>  6 mL Red top Vacutainer tube  <u>Plasma:</u>  4 mL Lavender or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	0-<1 year: 5-50 mol/L 1-<12 years: 13- 32 mol/L 12-<20 years: 12-31 mol/L 20-<40 years: 14-45 mol/L 40-<60 years: 16-58 mol/L ≥60 years: 16- 67 mol/L	2009-07-02	Fat soluble vitamin. Deficiency causes extensive neuropathy in children and may be caused by bowel disease, pancreatic disease, celiac disease and cystic fibrosis.  Protect sample from light and freeze immediately after separation.
VLCFA (see <u>Long Chain Fatty Acids, Plasma/Serum</u> )						
VMA (see <u>Vanillylmandelic Acid, Urine</u> )						
Volatile Screen (see <u>Alcohol Fractionation (by Gas Liquid Chromatography)</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Voltage Gated Calcium Channel Antibodies Anti VGCC	Core	<p><b>Adult:</b> 1-2 x 5 mL Gold top Vacutainer tube</p> <p><b>Pediatric:</b> 2-10 years: 1-3 x 3.5 mL Gold top Vacutainer tube UBC Neuro-Immunology Laboratory Requisition must be completed by neurologist</p>	Referred out Monday	Negative: ≤30 pmol/L Positive: >30 pmol/L	2014-11-17	<p>Associated with Myasthenia Gravis</p> <p><b>This test is available exclusively to neurologists at LHSC/SJHC</b></p> <p>Centrifuge at 4 C, transfer serum to cryovials and store at 4 C.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Von Willebrand F: Multimers Multimer Analysis	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	2 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes  <b>Pediatric:</b>  0-2 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT            lab ext. 52526            for number of            tubes required            prior to            sampling</b> GENERAL LABORATORY REQUISITION	Referred out Monday - Thursdays as required	See report	2006-06-01	
Von Willebrand's Factor (see <a href="#">Von Willebrand's Screen</a> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Von Willebrand's Screen Von Willebrand's Factor	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	2 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes  <b>Pediatric:</b> 0-10 years: 1.8 mL Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling</b> GENERAL LABORATORY REQUISITION	Weekly	FVIII:C: 0.50-2.00 U/mL VWf:Ag: 0.50-2.00 U/mL VWf:Ac: 0.50-2.00 U/mL	2006-06-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Voriconazole	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube  <b>Pediatric:</b> 2 mL Green (Lithium Heparin) top GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Therapeutic: 1.0 - 5.0 mg/L Toxic: > 6.0 mg/L(Trough)	2015-08-25	
West Nile Virus (see <u>Arbovirus Flavivirus Serology/PCR</u> )						
Western Encephalitis (see <u>Arbovirus Flavivirus Serology/PCR</u> )						
Whipple's Disease Tropheryma whipplei	Microbiology (VH)	Tissue biopsy (should be reviewed by a Pathologist prior to submission) <b>Note:</b> CSF and blood are not suitable specimens PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to the Public Health Laboratory	See report	2010-09-28	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
White Blood Cell Differential (see <u>Differential Leukocyte Count (Peripheral Blood)</u> )						
Whooping Cough (see <u>Bordetella pertussis Investigation (PertPCR)</u> )						
Wolman's Disease (see <u>Acid Lipase</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Wound Culture	Microbiology (VH)	<p>Swab specimens of appropriate superficial or deep space specimen types, including abscess, bite, burn, cyst, graft, ulcer, surgical sites.</p> <p>Surgically collected tissue or fluid from an infection are higher quality specimens than swab specimens.</p> <p>Wound, abscess, or ulcer swabs collected from coccyx, sacral, rectal, buttock, perianal, and related sites (including decubitus ulcers) (more...)</p>	Daily			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Xanthine (see <u>Theophylline, Serum</u> )						
Xylocaine (see <u>Lidocaine, Serum/Plasma</u> )						
Y-marker (see <u>Sexing (for medical indications)</u> )						
Yeast (see <u>Fungus Culture-Systemic or Subcutaneous</u> )						
Yellow Fever (see <u>Arbovirus Flavivirus Serology/PCR</u> )						
Yersinia Serology	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory		2010-09-28	
Zarontin (see <u>Ethosuximide, Serum</u> )						
Zika Virus (see <u>Arbovirus Flavivirus Serology/PCR</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Zinc Protoporphyrin, Whole blood ZPP	Trace Elements	Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Monday - Friday 0800 - 1600 h	SI Units (Reported on Patient Chart): Zinc Protoporphyrin 0- 70 µmol/mol haeme suggests Normal or no Lead exposure.  Elevated levels (>70 µmol/mol haeme) indicate Lead exposure.	2010-07-02	Reference Ranges are based on Non- Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Zinc, 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:79-183 µmol/L≥13 years:138-230 µ mol/L  Conventional Units: 0-12 years:5194- 11946 µg/L≥ 13 years:9026- 15061 µg/L		Reference Ranges are based on Non- Occupationally exposed population.  Decreased in hepatic cirrhosis, pernicious anemia, lymphoma and chronic granulocytic leukemia. Used in nutrition monitoring.  Find Interpretive Comment and Clinical Information here:

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Zinc,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):  0-1 month:9.9- 21.4 µmol/L1-12 months:9.9-19.9 µmol/L1-4 years:10.3-18.1µ mol/L5-8 years:11.8-16.4 µmol/LFemale 9- 12 years:12.1- 18.0 µmol/LMale 9-12 years:11.6- 15.4 µmol/L≥13 years:9.4-15.0 µ mol/L  Conventional Units:  0-1 month:647- 1399 µg/L1-12 months:647- 1301 µg/L1-4 years:673-1183 µg/L5-8 (more...)	2010-07-19	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
Zinc,Urine	Trace Elements	24 hour urine collected in an <b>unused</b> 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	<u>SI Units:</u>  Random Urine: 0.9-6.1 µmol/L  µmol/mol creatinineAgeFe maleMale0-11104-729104-69512-1967-44365-43120-2975-50257-38330-3991-60667-44740-49108-72071-47150-59128-85081-54260-69126-83885-56770-79131-87492-612≥80161-1074104-695  24 Hour Urine: 1.5-9.2 µmol/d  <u>Conventional Units:</u> (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
Zinc, 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): 74-122 µmol/L  Conventional Units: 4837-7980 µg/L	2014-11-17	Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Zirconium, 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): 0.0-5.7 nmol/L  Conventional Units: 0.000-0.52 µg/L	2017-04-03	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
Zirconium, 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): 0.00-6.7 nmol/L  Conventional Units: 0.000-0.61 µg/L	2017-04-03	Reference Ranges are based on Non-Occupationally exposed population.  Find Interpretive Comment and Clinical Information here:
Zoloft (see <u>Sertraline, Serum/Plasma</u> )						
ZPP (see <u>Zinc Protoporphyrin, Whole blood</u> )						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Zygoty (for medical indications ONLY)	Molecular Diagnostics	Whole blood-1 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION	As Required Monday - Friday 0800 - 1630 h	See report		<p>This test will be available for <u>medical indications only</u> usually to aid in linkage analysis or to clarify prenatal diagnosis and <u>must</u> be referred from the Genetics Clinic.</p> <p>For more information click on: Molecular Diagnostic Laboratory N/A A series of polymorphic VNTR's are analyzed on two twins and assessed to determine if they are identical.</p>
Zyprexa (see <u>Olanzapine, Urine Qualitative</u> )						