Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube **Light Green top tubes (Li-heparin) or Lavender top tubes (EDTA) are also acceptable** GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	60-208 pmol/L	2015-01-05	The test for 1,25 di-OH vitamin D is not 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. Appropriate Indications for 1,25 di-OH Vitamin D Testing: RENAL FAILURE RENAL TUBULOPATHY SARCOIDOSIS UNEXPLAINED HIGH PARATHYROID HORMONE LEVEL PEDIATRIC ENDOCRINOLOGY CONCERN (E.g. vitamin D-dep (more...)

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 yrs: Red 0.5pk. 2-10 yrs 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 H. Pylori Breath Test **test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener**)						
17 Alpha Hydroxy Progesterone (see 17-Hydroxyprogesterone, Serum)						
17 Beta Estradiol (see Estradiol, Plasma/Serum)						
17-Hydroxy Progesterone (see 17-Hydroxyprogesterone, Serum)						

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	**Adult:** 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red top Vacutainer tube **Avoid blood collection tubes with separator gels (Gold top Vacutainer tubes)** Light Green (Li-Heparin) or Lavender (EDTA) top tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Referred out Monday - Friday	<14 days: <4.9 nmol/L 14 days - <1 year: <3.5 nmol/L 1 - <12 years: <1.2 nmol/L 12 - <14 years: <2.1 nmol/L 14 - <16 years: <4.3 nmol/L 16 - <19 years: <4.0 nmol/L **Male:** ≥19 years: <6.0 nmol/L **Female:** Follicular phase: <5.6 nmol/L Midcycle: <6.8 nmol/L Luteal phase: <8.6 nmol/L Post-menopausal: <1.4 nmol/L	2017-11-07	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
17-Ketogenic Steroids, Urine ****TEST NO LONGER AVAILABLE 02/23/15****	Core	24 Hour Urine GENERAL LABORATORY REQUISITION	As required	Male, 10 years - Adult: 30.0-70.0 µmol/d Female, 10 years - Adult: 14.0-55.0 µmol/d Children: <5 years: <14.0 µmol/d 5-10 years: <30.0 µmol/d	2004-06-17	Referred out Tuesday - Thursday Primarily reflects production of cortisol, cortisone, 17 OH-progesterone and preganametriol. Gives an overall assessment of glucocorticoid production. Increased in Cushing's syndrome but urinary free cortisol is preferred test.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
17-Ketosteroids, Urine ****TEST NO LONGER AVAILABLE 02/23/15****	Core	24 Hour Urine GENERAL LABORATORY REQUISITION	As required	10 years-Adult, Male: 42-70 µmol/d 10 years-Adult, Female: 17-52 µmol/d Children: <5 years: <7.0 µmol/d 5-9 years: <21.0 µmol/d	2004-06-17	Referred out Tuesday - Thursday Reflects Androsterone, Dehydroepiandrosterone and Androstenedione production from adrenal cortex (adrenal androgens). Increased in adrenal carcinoma, Cushing's syndrome and adrenal hyperplasia associated with hirsutism. Decreased in Addison's disease, panhypopituitarism and myxedema.
17-OH Progesterone (see 17-Hydroxyprogesterone, Serum)						
21-Hydroxylase Antibodies (see Anti-21-Hydroxylase Antibodies, Serum)						
24 hour Urine Porphyrin (see Porphyrins, 24-Hour Urine)						
25 OH Vitamin D (see 25-Hydroxy Vitamin D, Serum)						
25 Vitamin D (see 25-Hydroxy Vitamin D, Serum)						

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	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube Light Green top tubes (Li-heparin) or Lavendar top tubes (EDTA) are not acceptable GENERAL LABORATORY REQUISITION	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	It is common for Canadians to have 25-OH vitamin D levels that are considered insufficient. **Choosing Wisely** 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. Appropriate Indications for 25-OH Vitamin D Testing: **METABOLIC BONE DISORDER** (E.g. osteoporosis, (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
3-methoxytyramine (see Metanephrines, Urine)						
3-methyoxtyramine (see Metanephrines, Plasma)						
5-HIAA (see 5-Hydroxyindole Acetic Acid, Urine)						
5-HT (see Serotonin, Serum)						
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 Serotonin, Serum)						
7-Dehydrocholesterol	Core	4.5 mL Light Green top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred as required	**Normal:**<5 µ mol/L **Indeterminate:** 5-20 µmol/L **Indicative of Smith-Lemli-Opitz Syndrome:**>20 µ mol/L	2006-09-06	Referred out Monday-Thursday

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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 **unused** 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: **Random Urine:** TMESSU (Essential Panel) TMTOXU (Toxic Panel) TMU (Essential and Toxic Panel) **24 Hour Urine:** TEESSU24 (Essential Panel) TETOXU24 (Toxic Panel) TEU24 (Essential and Toxic Panel)
β-CTX (see C-Telopeptide, Plasma)						

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 Alpha 1-Antitrypsin Phenotype, Serum)						
A2M (see Alpha2-Macroglobulin, Serum)						
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 Anticardiolipin)						
ACADM (see Medium Chain Acyl CoA Dehydrogenase Deficiency(MCAD))						
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 REGIONAL CYTOGENETICS REQUISITION	As required	600-935 pmol/hr/mg protein	2009-10-01	
ACCP (see Anti Cyclic Citrullinated Peptide, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
ACE (see Angiotensin Converting Enzyme, CSF, Angiotensin Converting Enzyme, Serum)						
Acetaminophen Tylenol Tempra Paracetamol	Core UH & VH	4.5 mL Green top Vacutainer **Pediatric:** 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 (artifactually 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	6 mL Green (Sodium or Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: 2 x 0.5 mL Green top2-10 yrs: 3 mL Green top GENERAL LABORATORY REQUSITION	As required	Acetoacetate: 0.02-0.08 mmol/L Beta-hydroxybutyrate: 0.06-0.17 mmol/L	2008-06-10	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). 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). 2. Mix and spin in cold centrifuge. 3. Aliquot supernatant into clean transport tube. 4. Re-spin in cold centrifuge and remove supernatant into another clean transport tube. (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Acetone (see Alcohol Fractionation (by Gas Liquid Chromatography))						
Acetylcholine Receptor Antibodies (see Anti-Acetylcholine Receptor Antibodies, Serum)						
aCGH (see Microarray, Prenatal Microarray)						
ACHR (see Anti-Acetylcholine Receptor Antibodies, Serum)						
ACHR Variant (see Muscle Specific Tyrosine Kinase Antibodies)						
AchRAb (see Anti-Acetylcholine Receptor Antibodies, Serum)						
Acid fast Bacilli Culture (AFB) (see Mycobacterium Culture)						
Acid Lipase Lysosomal Acid Lipase Wolman's Disease CESD (Cholesterol Ester Storage Disease)	Biochemical Genetics	Dried Blood Spot GENERAL LABORATORY REQUISITION	As required	80-230 pmol/hr/dried blood dot punch	2009-10-01	
Acid Maltase (see Alpha-Glucosidase, Dried Blood Spot, Alpha-Glucosidase, Fibroblasts)						
Acid Mucopolysaccharide (see Mucopolysaccharide Screen,Urine)						
ACRAB (see Anti-Acetylcholine Receptor Antibodies, Serum)						
ACTH (see Adrenocorticotropic Hormone, Plasma)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
ACTH Stimulation Test, Plasma/Serum Cosyntropin Test	Core	FOR ACTH TESTING: Adult: 4 mL Lavender top (EDTA) Vacutainer tube **Pediatric:** 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. FOR CORTISOL TESTING: Adult: 4.5 mL Light Green top (Li-Heparin) Vacutainer tube	For cortisol testing, as required. For ACTH testing, Tuesday afternoons. (more...)	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	Biotin may interfere with the cortisol and ACTH tests. 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. Oral contraceptives, pregnancy, or estrogen therapy cause elevated plasma cortisol levels due to an increase in binding proteins. Patients suffering from 21-hydroxylase deficiency exhibit elevated 21-deoxycortisol levels and this can cause falsely elevated cortisol results. FOR ACTH TESTING: Use a refriger (more...)

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 HLA Workup Living Donor Additional or Final)						
ADH (see Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum)						
ADNA (see Anti double stranded DNA, IgG)						
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	**Note: Test approved for Endocrinologists. For all other requests, please page the Biochemist on-call.** LTC Staff: Collect sample, manually label and send to SRA to order
Adrenalin (see Catecholamines, Urine)						
Adrenaline (see Catecholamines, Plasma (Norepinephrine, Epinephrine))						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Adrenocorticotropic Hormone, Plasma ACTH	Core	**Adult:** 4 mL Lavender top (EDTA) Vacutainer tube **Pediatric:** 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. GENERAL LABORATORY REQUISITION	Tuesday afternoons	7 - 10 am: 1.6 - 13.9 pmol/L	2009-02-12	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. 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.
AFP (see Alpha Fetoprotein (Non-Pregnancy), Fluid, Alpha Fetoprotein (Non-Pregnancy), Plasma/Serum)						
AGA1 (see Anti GA1 IgM, Serum)						
AGAD (see Anti Glutamic Acid Decarboxylase)						
AGU (see Aspartylglucosaminidase, Leukocyte/Fibroblasts)						
AILD-relevant antinuclear antibodies (ANA2) (see Autoimmune Liver Disease (AILD) Profile)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
ALA (see Porphyrin Precursors (Random and 24 hour urine))						
Alanine Aminotransferase,Plasma ALT	Core	4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 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.
Albumin, Plasma	Core	4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 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	**Adult:** 1.0 mL of CSF and a 5 mL Gold or 6 ml Red top Vacutainer 0-2 years: 0.5 mL Gold or Red Microtainer 2-10 years: 3 mL Gold or Red Vacutainer tube GENERAL LABORATORY REQUISITION	Daily	<350 mg/L	2010-01-11	
Albumin/Creatinine Ratio (see Microalbumin,Urine)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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	Toxic Levels: Methanol: >6 mmol/L Isopropanol: >7 mmol/L Acetone: >6.9 mmol/L Ethanol: >33 mmol/L	2010-01-26	CRITICAL VALUE to be phoned to Nurse or Physician immediately: all positive results. Alcohol fractionations are performed when requested. Methanol, Isopropanol, and Acetone are identified and quantitated by Gas Liquid Chromatography. Routine Ethanol is quantified by an enzymatic assay. Ethanol quantitation by Gas Liquid Chromatography is available with Biochemist approval. **For SRA staff when a sample is received at UH:** UH SRA: Please call VH SRA when a sample is received. (more...)

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Aldosterone, Plasma	Endocrinology	**Adult:**4 mL Lavender top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Lavender top (EDTA) Microtainers 2-10 years: 3 mL Lavender top (EDTA) Vacutainer tube Red, Gold, Light Green (Li-Heparin), or Lavender (EDTA) top tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Child: 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 Adult: 7 - 10 am upright: ≤ 1118 pmol/L 7 - 10 am supine: ≤ 712 pmol/L	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.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alkaline Phosphatase Fractionation (see Alkaline Phosphatase Isoenzymes, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alkaline Phosphatase Isoenzymes, Serum Alkaline Phosphatase Fractionation ALP Isoenzymes	Clinical Immunology	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	ALP Isoenzyme Fraction Reference Interval (U/L)AgeLiver 1BoneLiver 2Intestinal≤14 days≤77≤248≤17≤3515 days-<1 year≤145≤469≤33≤661-<10 years≤104≤335≤23≤4710-<13 years≤129≤417≤29≤58 Male 13-<15 years≤145≤468≤33≤66Male 15-<17 years≤103≤331≤23≤46Male 17-<19 years≤46≤149≤10≤21Male ≥19 years≤92≤97≤12≤18Female 13-<15 years≤79≤254≤18≤36 Female 15-<17 years≤36≤117≤8≤16Fema (more...)	2010-01-11	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. 1. The reference values of the individual isoenzymes vary with age, sex, hormonal state (pregnancy, menopause, puberty) and medications. 2. In children, ALP is increased due to predominant bone isoenzymes. 3. Intestinal isoenzymes are absent in about 60% of normal subjects 4. Our method (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alkaline Phosphatase, Plasma	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: Green 0.5 mL pk. 2-10 yrs:2 mL Green top GENERAL LABORATORY REQUISITION	As required	**Male & Female Children:** ≤14 days: 83-248 U/L 15 days-1 year: 122-469 U/L 1-10 years: 142-335 U/L 10-13 years: 129-417 U/L Male: 13-15 years: 116-468 U/L 15-17 years: 82-331 U/L 17-19 years: 55-149 U/L >19 years: 40-130 U/L Female: 13 years-15 years: 57-254 U/L 15-17 years: 50-117 U/L 17-19 years: 45-87 U/L (more...)	2008-11-15	Hemolysis is an interfering substance with this methodology. 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

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

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	FECES: 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. SERUM: Adult: 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 ye (more...)	Referred out Monday-Thursday	Clearance: ≤27 mL/24 hours Fecal alpha1-antitrypsin: ≤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	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red Vacutainer top GENERAL LABORATORY REQUISITION	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	**This test is available exclusively to LHSC/SJHC physicians.** 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 ≤1.50 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 >1.50 g/L, the sample will not be referred out for phenotyping/proteotyping without bio (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha 1-Antitrypsin Proteotype (see Alpha 1-Antitrypsin Phenotype, Serum)						
Alpha 1-Antitrypsin, Serum/Plasma Alpha Protease Inhibitor	Clinical Immunology	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	0.90-2.00 g/L	2010-01-11	Patients with homozygous deficiency of alpha 1-antitrypsin usually have levels less than 0.6 g/L. Levels rise in acute phase reaction.
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	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha Fetoprotein (Non-Pregnancy), Plasma/Serum Alphafetoprotein AFP	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	> 5 years: ≤ 7 g/L 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.	2017-04-03	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. Used as a tumour marker for non-seminomatous germ cell tumours and hepatocellular carcinoma. Not recommended for cancer screening in the general population. Levels can also be increased in other diseases such as acute viral hepatitis, chronic active hepatitis, and liver cirrhosis. Alpha fetoprotein is increased in pregnancy and is a part of prenatal maternal seru (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha Protease Inhibitor (see Alpha 1-Antitrypsin, Serum/Plasma)						
Alpha-1 Antitrypsin Clearance (see Alpha 1-Antitrypsin Clearance, Feces and Serum)						
Alpha-1 Antitrypsin Phenotype (see Alpha 1-Antitrypsin Phenotype, Serum)						
Alpha-1-Antitrypsin Clearance (see Alpha 1-Antitrypsin Clearance, Feces and Serum)						
Alpha-1-Antitrypsin Phenotype (see Alpha 1-Antitrypsin Phenotype, Serum)						
Alpha-Fucosidase, Leukocyte/Plasma/Fibroblasts Fucosidosis	Biochemical Genetics	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) **3.** Fibroblasts **1. & 2.** GENERAL LABORATORY REQUISITION **3.** REGIONAL CYTOGENETICS 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 GENERAL LABORATORY 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	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 GENERAL LABORATORY REQUISITION	As required	78-342 nmol/hr/3mm disc	2008-06-10	
Alpha-Glucosidase, Fibroblasts GSDII Pompe Disease Acid Maltase	Biochemical Genetics	Fibroblasts REGIONAL CYTOGENETICS REQUISITION	As required	5.3-8.5 nmol/hr/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha-Iduronidase, Leukocyte/Plasma/Fibroblasts MPSI Hurler Syndrome Scheie Syndrome	Biochemical Genetics	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) **3.** Fibroblasts **1. & 2.** GENERAL LABORATORY REQUISITION **3.** REGIONAL CYTOGENETICS REQUISITION	As required	Leukocyte: 5.5-15.3 nmol/hr/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha-Mannosidase, Leukocyte/Plasma/Fibroblasts	Biochemical Genetics	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) **3.** Fibroblasts **1. & 2.** GENERAL LABORATORY REQUISITION **3.** REGIONAL CYTOGENETICS 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	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) **3.** Fibroblasts **1. & 2.** GENERAL LABORATORY REQUISITION **3.** REGIONAL CYTOGENETICS REQUISITION	As required	Leukocyte: 0.55-1.10 deltaA410/hr/mg protein Fibroblast: 1.83-2.67 deltaA410/hr/mg protein	2008-06-10	
Alpha-N-Acetylglucosaminidase, Plasma MPSIIIB Sanfilippo B Syndrome	Biochemical Genetics	6 mL Dark Green (Sodium Heparinized) top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	0.11-0.25 nmol/hr/ mL plasma	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Alpha-N-Acteylneuraminidase, Fibroblasts Sialidase	Biochemical Genetics	Fibroblasts REGIONAL CYTOGENETICS REQUISITION	As required	11.9-20.1 nmol/hr/mg protein	2008-06-10	
Alpha-Tocopherol (see Vitamin E, Serum/Plasma)						
Alpha1 Antitrypsin Clearance (see Alpha 1-Antitrypsin Clearance, Feces and Serum)						
Alpha1 Antitrypsin Phenotype (see Alpha 1-Antitrypsin Phenotype, Serum)						
Alpha2-Macroglobulin, Serum A2M	Core	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 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	
Alphafetoprotein (see Alpha Fetoprotein (Non-Pregnancy), Fluid, Alpha Fetoprotein (Non-Pregnancy), Plasma/Serum)						
Alphafetoprotein (Pregnancy) (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
ALT (see Alanine Aminotransferase,Plasma)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0-0.63 µmol/L µmol/mol creatinineAgeFemaleMale0-110-75.00-71.612-190-45.70-44.420-290-51.60-39.430-390-62.40-46.040-490-74.10-48.550-590-87.50-55.860-690-86.30-58.370-790-90.00-63.0≥800-110.50-71.6 24 Hour Urine: 0-0.93 µmol/d Conventional Units: 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	**Adult:** 6 mL Red top Vacutainer tube Blood collection tubes with separator gels are not acceptable for this test. GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Therapeutic Range: For traditional (conventional) dosing method in adults: Pre-dose (trough): <8 mg/L Half-hour post-dose (peak): 20-30 mg/L For urinary tract infection (peak): 15-30 mg/L **For extended interval (once daily) dosing method in adults:** Pre-dose (trough): <1.0 mg/L 8-12 h post dose (peak): Use nomogram for interpretation	2007-10-18	
Amikin (see Amikacin, Serum)						

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 GENERAL LABORATORY REQUISITION	As required	See report	2008-06-10	
Amino Acids, CSF	Biochemical Genetics	Cerebrospinal fluid (CSF)	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	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 GENERAL LABORATORY REQUISITION	As required	See report	2008-06-10	
Aminoglycoside (see Amikacin, Serum)						
Aminoglycosides (see Gentamicin,Serum/Plasma, Tobramycin,Serum/Plasma)						
Aminolevulinic Acid (see Porphyrin Precursors (Random and 24 hour urine))						
Aminophylline (see Theophylline, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Amiodarone/Desethylamiodarone,Serum	Toxicology/Special Chemistry	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Amiodarone 2.30 -3.90 µmol/L Desethylamiodarone 2.30-3.90 µmol/L	1998-09-18	
Amitriptyline (metabolite) (see Nortriptyline, Serum/Plasma)						
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. **Toxic:** Amitriptyline + Nortriptyline: Greater than 1800 nmol/L

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ammonia,Plasma	Core (VH)	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 years: 2 mL Lavender top (must be venous draw) 2-10 years: 3 mL Lavender top (must be venous draw). **NICU ONLY** Micropick specimens are acceptable Use the CBC Microtainer tube, put on ice and deliver to Core Laboratory immediately. GENERAL LABORATORY REQUISITION	As required	Male: 15-55 µmol/L Female: 11-48 µmol/L	2008-11-15	Hemolyzed samples are not acceptable as lysed red blood cells may elevate ammonia concentration. Lipemia may also cause interference. >149 µmo/L Therapeutic concentration of Cefoxitin, Acetaminophen (paracetamol), Ibuprofen, Sulfasalazine and Temozolomide interfere with the assay and lead to falsely result. Elevated in Reye's syndrome, congenital urea cycle disorders and severe liver disease. Poor correlation with hepatic encephalopathy. Often used in the workup of neonatal coma. **SRA VH:** Centrifuge (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Amniotic Fluid Chromosome Analysis QF-PCR Microarray	Cytogenetics (VH)	20 mL of amniotic fluid for QF-PCR, Microarray (if required) and back up culture (additional sample if external testing required) 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 name and address, test requested, speci (more...)	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 Prenatal diagnostic test performed at approximately 16-18 weeks gestation. Must prearrange with Cytogenetics Lab.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Amoebic Serology	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 Amphetamine Screen,Urine)						
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 **Pediatric:** 0-2 yrs: 0.5 mL Green pk. 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	As required	**Adult:** 28-100 U/L **Pediatric:** 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 Anti Nuclear Antibody)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anaerobic Culture	Microbiology (VH)	Aspirates of abscesses, lesions or sinus, biopsies/tissues, body fluids. MICROBIOLOGY REQUISITION	Daily		2008-04-02	Specimens which contain normal anaerobic flora or those likely to be contaminated with anaerobic flora will not be processed. For example, sputum, faeces, vaginal, and mouth specimens are not acceptable. Samples sent on swabs are inferior to actual fluids or tissues. See Blood Culture - Aerobic/Anaerobic
Anafranil (see Clomipramine **and** Desmethylclomipramine, Serum/Plasma)						

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 **Pediatric:** 0-2 years: Red 1.0 pk. 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Wednesday and Friday For STAT samples: 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	**Adult:** 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 2 x 0.5 mL Red top Microtainers Plasma (heparin) is also acceptable GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Male: 0 <14 days: 0.0 2.5 nmol/L 14 days <1 year: 0.1 2.1 nmol/L 1 <6 years: 0.1 0.6 nmol/L 6 <10 years: 0.2 0.9 nmol/L 10 <12 years: 0.0 2.5 nmol/L 12 <15 years: 0.5 2.0 nmol/L 15 <19 years: 0.9 3.6 nmol/L 19 <31 years: 1.8 7.7 nmol/L 31 <51 years: 1.4 6.6 nmol/L 51 <89 years: 1.8 7.7 nmol/L Female: 0 <14 days: 0.0 2.5 nmol/L 14 days <1 year: 0.1 2.1 nmol/L 1 <6 years: 0.1 0.6 nmol/L 6 <10 y (more...)	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	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	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 Anti-AT1R)						
ANNA-3 (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti adrenal antibodies (see Adrenal Antibodies, Serum)						
Anti AQP4 antibody (see Neuromyelitis Spectrum Profile)						
Anti Asialo GM1 (GA1) (see Anti GA1 IgM, Serum)						
Anti cardiolipin Antibodies\ (see Anticardiolipin)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti CENP A (see Systemic Sclerosis Profile)						
Anti CENP B (see Systemic Sclerosis Profile)						
Anti Cyclic Citrullinated Peptide (see Anti Cyclic Citrullinated Peptide, Serum)						
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 **Pediatric:** 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 Gliadin (DGP) Antibodies)						
Anti DNA (see Anti double stranded DNA, IgG)						
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 **Pediatric:** 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 Anti double stranded DNA, IgG)						
Anti EJ (see Myositis Antibodies Profile)						
Anti ENA Identification, Serum--SEE ANA	Clinical Immunology				2010-01-11	
Anti ENA Screen, Serum--SEE ANA						
Anti Fibrillarin (see Systemic Sclerosis Profile)						

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 **Pediatric:** 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	**This test is available exclusively to SJH/LHSC physicians.** For more information, please contact: Senior Technologist Immunology Lab (519) 685-8500 ext. 35541 Associated with chronic motor neuropathy syndromes.
Anti GAD, Serum (see Anti Glutamic Acid Decarboxylase)						

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	**Adult:** 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: Red 0.5 mL Microtainer 2-10 years: 3 mL Red top tube EDTA, Heparin or Citrate plasma are also acceptable GENERAL LABORATORY REQUISITION	Batch analysis	Negative	2019-11-27	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 Antibodies AgainstIg ClassAssociated NeuropathiesGM1, GD1a, GD1b and GT1bIgMMultifocal motor neuropathy (MMN)GM2 and GM3IgM, IgGMultifocal motor neuropathy (MMN)GM3, GD1a and GT1bIgMGuillain-Barre syndrome (GBS)GM1, GM2, GD1b and GQ1bIgM, IgGGuillain-Barre syndrome (GBS)GM2, GD1a and GD1bIgMChronic inflammatory demyelinating (more...)

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

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. **Pediatric:** 0-2 years: Red 0.5 pk. 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Routine: Wednesdays and Fridays For STAT samples: 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 AGAD Anti-GAD65 Anti GAD, Serum Glutamic Acid Decarboxylase-65 Antibodies	Clinical Immunology	**Adult:** 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 2 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Batch analysis	<5.0 IU/mL	2010-06-01	This test is useful as an aid in the diagnosis of Type 1 diabetes mellitus. For the evaluation of Stiff-Person Syndrome please order Autoimmune Encephalitis Panel that includes this test. This anti-GAD65 ELISA test is useful in the diagnosis of Type 1 diabetes mellitus, as well as neurological autoimmunity (when anti-GAD65 is present in serum in high concentration or is present in CSF). When ordering anti-GAD65 for suspected neurological autoimmunity please refer to the Comprehensive Autoimmune Encephalitis P (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti GM1 IgG (see Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GM1 IgM (see Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GM1, IgM serum IgM antibodies to Ganglioside Monosialic Acid IgM antibodies to AGM1	Clinical Immunology	6 mL Red top Vacutainer tube **Pediatric:** 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 Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GM2 IgM (see Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GM3 IgG (see Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GM3 IgM (see Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GQ1b IgG (see Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GQ1b IgM (see Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GT1b IgG (see Anti Gangliosides Profile IgG and IgM, Serum)						
Anti GT1b IgM (see Anti Gangliosides Profile IgG and IgM, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti HAV IgG (see Hepatitis A Antibody IgG)						
anti HAV IgM (see Hepatitis A Antibody IgM)						
Anti HBc (IgG + IgM) (see Hepatitis B Core Antibody)						
Anti HCV (see Hepatitis C Antibody)						

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 **as well as** EDTA, heparin or citrate plasma **Pediatric:** 0-2 yrs: Red 1.0 pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Batch Analysis	Negative: ≤ 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 Insulin Antibodies, Serum)						
Anti Intrinsic Factor (see Intrinsic Factor Antibodies, Serum)						
Anti Islet Cell Antibodies, Serum Islet Cell Antibodies Pancreatic Antibodies	Core (all campuses)	5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Daily	Negative		
Anti JO1 (see Myositis Antibodies Profile)						
Anti Ku (see Myositis Antibodies Profile, Systemic Sclerosis Profile)						
Anti Liver/Kidney Microsome Antibody (Anti LKM) (see Autoimmune Liver Disease (AILD) Profile)						
Anti MAG, Serum (see Myelin-Associated Glycoprotein IgM, Serum)						

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

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 **Pediatric:** 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 Myositis Antibodies Profile)						
Anti OJ (see Myositis Antibodies Profile)						
Anti Parietal Cell Antibody Parietal Antibodies	Core (all campuses)	5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: Red 0.5pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Daily	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 Systemic Sclerosis Profile)						
Anti Phospholipid Antibodies (see Anticardiolipin)						
Anti PL-12 (see Myositis Antibodies Profile)						
Anti PL-7 (see Myositis Antibodies Profile)						
Anti Platelet Antibodies (see Platelet Antibodies)						
Anti PM-Scl 100 (see Myositis Antibodies Profile)						
Anti PM-Scl 75 (see Myositis Antibodies Profile)						
Anti PM-Scl100 (see Systemic Sclerosis Profile)						
Anti PM-Scl75 (see Systemic Sclerosis Profile)						
Anti Ro-52 (see Myositis Antibodies Profile, Systemic Sclerosis Profile)						
Anti RP11 (see Systemic Sclerosis Profile)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti RP155 (see Systemic Sclerosis Profile)						
Anti SAE1 (see Myositis Antibodies Profile)						
Anti Scl-70 (see Systemic Sclerosis Profile)						
Anti Skin Antibodies (see Pemphigus/Pemphygoid Antibodies)						
Anti Smooth Muscle Antibody (ASMA) (see Autoimmune Liver Disease (AILD) Profile)						
Anti SRP (see Myositis Antibodies Profile)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Streptolysin O Screen ASO Screen and Titre	Virology Laboratory	5 mL Gold or 6 mL Red top Vacutainer tube VIROLOGY REQUISITION	Testing is performed daily, Monday-Friday	A detectable level of 200 IU/mL ASO antibodies is usually regarded as the normal upper limit since less than 15-20% of healthy individuals demonstrate titres greater than 200 IU/mL when their sera are assayed. In most newborns the titre is initially greater than that of the mother due to maternally acquired IgG but the levels fall sharply during the first weeks of life. Normal ASO levels for preschool children (more...)	2006-11-16	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti Th/To (see Systemic Sclerosis Profile)						

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 **Pediatric:** 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** GENERAL LABORATORY REQUISITION	Weekly	**0 - 5 days:** 0.39-0.87 U/mL **5 days - 1 month:** 0.41-0.93 U/mL **1 month - 3 months:** 0.48-1.08 U/mL **3 months - 6 months:** 0.73-1.21 U/mL **6 months - 1 year:** 0.84-1.24 U/mL **1 year - 5 years:** 0.82-1.39 U/mL **5 years - 10 years:** 0.90-1.31 U/mL **10 years - 16 years:** 0.77-1.32 U/mL **16 years - Adult:** 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 Myositis Antibodies Profile)						
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	This test is available exclusively to LHSC/SJHC physicians. For more information, please contact: Senior Technologist Immunology Lab, LHSC (519)-685-8500 ext. 35541 The presence of ant-Tr is usually associated with paraneoplastic cerebellar degeneration and Hodgkins disease.
Anti VGCC (see Voltage Gated Calcium Channel Antibodies)						
Anti Xa Assay (see Heparin Assay)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-21-Hydroxylase Antibodies, Serum 21-Hydroxylase Antibodies	Core	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 2-10 years: 3 mL Red top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	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	**Adult:** 1-2 x 5 mL Gold top Vacutainer tubes **Pediatric:** 2-10 years: 1-3 x 3.5 mL Gold top Vacutainer tubes UBC Neuro-Immunology Laboratory Requisition must be completed by neurologist or ophthalmologist	Referred out Monday	Absent	2017-11-07	Associated with Myasthenia Gravis. 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...)

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

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	This test will include pre-transplant and post transplant samples to differentiate between pre-tx and de novo antibody. It is common to hold off testing until several samples are available for testing (maximum is 14 days). 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.
Anti-CASPR2 (see Autoimmune Encephalitis Panel, Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-CV2 (anti-CRMP5) (see Paraneoplastic Antibody Panel)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-CV2 (CRMP5) (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-DPPX (see Autoimmune Encephalitis Panel, Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-GA1 IgM (see Anti GA1 IgM, Serum)						
Anti-GABARB1/B2 (see Autoimmune Encephalitis Panel, Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-GAD65 (see Anti Glutamic Acid Decarboxylase, Autoimmune Encephalitis Panel, Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel)						
Anti-GFAP (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-GRAF (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-Histones (see Anti Histone Group,Serum)						
Anti-Hu (ANNA-1) (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel)						
Anti-IgLON5 (see Autoimmune Encephalitis Panel)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-IgLON5 Antibody, Serum/CSF	Clinical Immunology	**Adult:** 5 mL Gold or 6 mL Red top Vacutainer tube EDTA, heparin or citrated plasma are also acceptable. **Pediatric:** 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top Vacutainer tube CSF: 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. Associated disease: parasomnia, tauopathy
Anti-ITPR1 (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-KLHL11 (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-LGI1 (see Autoimmune Encephalitis Panel, Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Ma2/Ta (PNMA2) (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel)						
Anti-MAG, IgM (see Myelin-Associated Glycoprotein IgM, Serum)						
Anti-mGluR1 (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-Microsomal Antibodies (see Anti-Thyroid Peroxidase Antibodies, Serum/Plasma)						
Anti-Neurochondrin (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-NIF (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-NMDAR (see Autoimmune Encephalitis Panel, Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-PDE10A (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-PLA2R (see Phospholipase A2 Receptor (PLA2R) Antibodies)						
Anti-recoverin (see Paraneoplastic Antibody Panel)						
Anti-Recoverin (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-Ri (ANNA-2) (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel)						
Anti-SOX1 (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Thyroglobulin Antibodies, Serum/Plasma Thyroid Antibodies	Core	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Lavender top (EDTA) tubes are also acceptable Light Green top (Li-Heparin) tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	≤ 115 IU/mL	2009-02-12	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. Measurement of anti-thyroglobulin antibodies is automatically performed with each serum thyroglobulin test order. Thyroglobulin concentrations > 2000 g/L may lead to falsely elevated anti-thyroglobulin antibody results. The presence of anti-thyroglobulin antibodies may cause falsely low thyroglobulin measurements.

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	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Light Green top (Li-Heparin) tubes are also acceptable Lavender top (EDTA) tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	≤ 34 IU/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. Falsely elevated results may be obtained in patients being treated with Itraconazole.

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	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	Elevated: > 1.8 IU/L	2017-12-12	
Anti-Thyroperoxidase Antibodies (see Anti-Thyroid Peroxidase Antibodies, Serum/Plasma)						

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	**Adult:** 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube Gold, Light Green (Li-Heparin), or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Negative: <8.0 AU/mL Positive: ≥8.0 AU/mL	2009-02-12	
Anti-Titin (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-titin (see Paraneoplastic Antibody Panel)						
Anti-TPO Antibodies (see Anti-Thyroid Peroxidase Antibodies, Serum/Plasma)						
Anti-Tr (DNER) (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel)						
Anti-TSH receptor antibodies (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Anti-Yo (PCA-1 or Purkinje cell antibody-1) (see Paraneoplastic Antibody Panel)						
Anti-Yo (PCA-1) (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Anti-zic4 (see Paraneoplastic Antibody Panel)						
Anti-Zic4 (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
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 ABO Titre, Prenatal Titre)						

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)	**Adult:** Four 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes **Pediatric:** 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** GENERAL LABORATORY REQUISITION	Weekly	Negative	2006-06-01	**Testing includes:** 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 Carbamazepine,Serum/Plasma-Total, Ethosuximide,Serum, Phenobarbital,Serum/Plasma, Phenytoin,Serum/Plasma-Total, Primidone, Serum)						
Antidiuretic hormone (see Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum)						
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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units 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 Conventional Units 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 Anti Thrombin)						
Apo B (see Apo Lipoprotein B)						
Apo Lipoprotein A1	Core	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out weekdays Monday-Friday	Male: 1.10-2.05 g/L Female: 1.25-2.15 g/L	2006-04-03	
Apo Lipoprotein B Apo B ApoB	Core	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out weekdays Monday-Friday	Male: 0.55-1.40 g/L Female: 0.55-1.25 g/L	2006-04-03	
Apo Lipoprotein E Genotype APOE	Test not available (Various)			See Report		
ApoB (see Apo Lipoprotein B)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
APOE (see Apo Lipoprotein E Genotype)						
Apt Test	Blood Transfusion	-Cord Blood -Vaginal Blood BLOOD TRANSFUSION REQUISITION or Electronic order	Monday-Sunday	See report		
APTT (see Partial Thromboplastin Time (Activated)- PTT)						
Arava (see Leflunomide)						
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 Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum)						
Array CGH (see Microarray)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Array CGH (see Prenatal Microarray)						
Array comparative genomic hybridization (see Microarray)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Arsenic - Inorganic,Urine	Trace Elements	24 hour urine collected in an **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: 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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: 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:
Arthropods (see Ova and Parasites-Ticks/Arthropods)						
Aryl Sulfatase A, Leukocyte/Fibroblasts /Urine Metachromatic Leukodystrophy MLD	Biochemical Genetics	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2..** Fibroblasts **3.** 5-10 mL of first a.m. urine **1. & 3.** GENERAL LABORATORY REQUISITION **2.** REGIONAL CYTOGENETICS 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-Larny Syndrome	Biochemical Genetics	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** Fibroblasts **1.** GENERAL LABORATORY REQUISITION **2.** REGIONAL CYTOGENETICS REQUISITION	As required		2008-06-10	
Aryl Sulfatase E, Fibroblasts Chondrodysplasia Punctata (X-Linked Recessive)	Biochemical Genetics	Fibroblasts REGIONAL CYTOGENETICS REQUISITION	As required		2008-06-10	
ASA (see Salicylate,Serum)						
Ascorbic Acid (see Vitamin C)						
ASGM1 (see Anti GA1 IgM, Serum)						
ASO Screen and Titre (see Anti Streptolysin O Screen)						
Asparaginase Activity (see L-Asparaginase)						

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 **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985)< 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	As required	Male: <40 U/L Female: <32 U/L	2008-11-15	
Aspartylglucosaminidase, Leukocyte/Fibroblasts AGU	Biochemical Genetics	2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer Fibroblasts **1.** GENERAL LABORATORY REQUISITION **2.** REGIONAL CYTOGENETICS REQUISITION	As required	See report issued by lab	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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	
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 **Pediatric:** 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 Aspergillus fumigatus IgG Antibodies)						
Aspiration Biopsy (see Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
AST (see Aspartate Aminotransferase,Plasma)						
AT (see Anti Thrombin)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ataxia Telangiectasia, Breakage Study Chromosome Analysis, Breakage Study, Ataxia Telangiectasia Breakage Study, Ataxia Telangiectasia	Cytogenetics (VH)	4-6 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. **Note:** 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...)	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 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.

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Autoimmune Encephalitis Panel Anti-NMDAR Anti-LGI1 Anti-CASPR2 Anti-AMPAR1/R2 Anti-GABARB1/B2 Anti-DPPX Anti-GAD65 Anti-IgLON5 Encephalitis	Clinical Immunology	**Adult:** 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube. EDTA, heparin or citrate plasma are also acceptable. **Pediatric:** 0-2 years: Red 0.5 Microtainer 2-10 years: 2 mL Red top CSF will also be accepted. For anti-NMDAR and GABAB antibodies, sensitivity in CSF is higher than in serum. CLINICAL IMMUNOLOGY REQUISITION	Batch analysis		2019-02-26	This test is available to neurologists at LHSC/SJHC and accepted from referred in locations. A screening test and on its own does not confirm the diagnosis of autoimmune encephalitis 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. Positive result is indication of antibody-mediated encephalitis.

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	Serum (preferred) from a 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube **Pediatric:** 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	Batch Analysis	Negative	2018-06-11	ANA2 will only screen and report for AILD-related ANA patterns (Multiple Nuclear Dot, Nuclear Membrane and F-Actin). To screen for other ANA patterns, the regular ANA is tested together with AILDP testing initially. Repeat testing: For adults ANA repeat testing will not be done; AILDP can be repeated every 6 months. For children AILDP/ANA testing can be repeated every 3 months. The following IFA patterns are reported: AMA ASMA Anti LKM Multiple Nuclear dots Nuclear membrane (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Autoimmune Myositis Panel (see Myositis Antibodies Profile)						
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 Nortriptyline, Serum/Plasma)						
AVP (see Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum)						
Rush Requests for Surgical Pathology Specimens	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
Surgical Pathology Specimens, Biopsies and Resections	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 B-Cell Lymphoma)						
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 Parvovirus Serology (Human))						
B2 Microglobulin (see $Beta_2$ Microglobulin, Urine, $Beta_2$Microglobulin, Plasma)						
B_2 Microglobulin (see $Beta_2$Microglobulin, Plasma)						

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. **Pediatric:** 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 Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor)						
Bands (see Differential Leukocyte Count (Peripheral Blood))						
Banking (see DNA/RNA Banking)						
Barb Screen (see Barbiturate Screen,Urine)						

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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: 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 Disease	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 Differential Leukocyte Count (Peripheral Blood))						
Batten Disease (see Tripeptidyl Peptidase 1, Dried Blood Spot/Fibroblast)						
BCR/ABL (see Chronic Myelogenous Leukemia, by Karyotype/FISH, Chronic Myelogenous Leukemia, by PCR)						
Be (see Beryllium,Urine)						
Benadryl (see Diphenhydramine, Urine Qualitative)						
Bence Jones Protein (see Immunofixation Electrophoresis, Urine)						
Bence Jones Protein Screen (see Protein Electrophoresis, Urine)						
Benzo Screen (see Benzodiazepines,Urine)						
Benzodiazepines,Urine Benzo 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
Beryllium,Urine Be	Trace Elements	24 hour urine collected in an **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: 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 Beta-2 Transferrin)						
Beta Carotene (see Carotene,Serum)						
Beta Crosslaps (see C-Telopeptide, Plasma)						
Beta hCG (see Chorionic Gonadotropin (Quantitative), Plasma/Serum, Chorionic Gonadotropin, Fluid)						
Beta Hydroxybutyrate, Plasma/Serum BHB Ketones	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red or Gold top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	≤0.30 mmol/L	2020-03-30	
Beta Transferrin (see Beta-2 Transferrin)						

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	**Collect 500 L nasal or ear fluid into a clean specimen container. Also need to collect blood as follows:** Adult: 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are **NOT** acceptable GENE (more...)	Monday - Friday 0800-1600	Negative	2012-04-12	Based on consultation with Dr. Rotenberg, it has been decided to limit the collection frequency to ≥ 4 weeks for repeat testing. If beta-2 transferrin testing is ordered and it has been ≤ 30 days since the collection date of the last sample run, the test will be cancelled. **Both fluid and serum are required for testing. Failure to collect a serum specimen may result in an inconclusive result.**

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Beta-Galactocerebrosidase, Leukocyte/Fibroblasts Krabbe Disease	Biochemical Genetics	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** Fibroblasts **1.** GENERAL LABORATORY REQUISITION **2.** REGIONAL CYTOGENETICS 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	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) **3.** Fibroblasts **1. & 2.** GENERAL LABORATORY REQUISITION **3.** REGIONAL CYTOGENETICS 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	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** Fibroblasts **1.** GENERAL LABORATORY REQUISITION **2.** REGIONAL CYTOGENETICS 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/Fibroblasts MPSVII Sly Syndrome	Biochemical Genetics	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) **3.** Fibroblasts **1. & 2.** GENERAL LABORATORY REQUISITION **3.** REGIONAL CYTOGENETICS 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	**1.** 2 x 6 mL Dark Green (Sodium Heparinized) top Vacutainer **2.** 4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred specimen type) **3.** Fibroblasts **1. & 2.** GENERAL LABORATORY REQUISITION **3.** REGIONAL CYTOGENETICS REQUISITION	As required	Leukocyte: **A%:** 62-77% **A:** 99-311 nmol/hr/mg protein **A+B:** 962-1711 nmol/hr/mg protein Plasma **A%:** 62-76% **A:** 22-58 nmol/hr/mL plasma **A+B:** 715-1516 nmol/hr/mL plasma Fibroblast: **A:** 390-750 nmol/hr/mg protein **A+B:** 8160-11500 nmol/hr/mg protein	2008-06-10	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
$Beta_2$ 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	$Beta_2$ 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
$Beta_2$Microglobulin, Plasma B_2 Microglobulin B2 Microglobulin	Core	**Adult:** 4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube GENERAL LABORATORY REQUISITION	Daily	0.80-2.20 mg/L	2009-12-01	Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes. Increased in B-cell malignancies and glomerular dysfunction; also non-specifically increased in inflammatory diseases and some malignancies
BH4/NB Ratio (see Pterin Analysis, Urine)						
BHB (see Beta Hydroxybutyrate, Plasma/Serum)						
Bile Acids,Serum Bile Acids: Total	Core	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Batch testing - Twice per week (Tuesday & Friday)	0.0-10.0 umol/L (fasting sample)	2011-01-20	
Bile Acids: Total (see Bile Acids,Serum)						
Bileduct Brush/Wash (see Gastrointestinal/Hepatobiliary Specimens for Cytology)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Bilirubin- Direct Direct Conjugated	Core	4.5 mL Green top Vacutainer **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) GENERAL LABORATORY REQUISITION	As required	0.0-5.13 µmol/L	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Bilirubin-Total	Core UH & VH	4.5 mL Green top Vacutainer **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) GENERAL LABORATORY REQUISITION	As required	< 1 day: 24.0-149.0 µmol/L > 1 day-2 days: 58.0-197.0 µ mol/L > 2 days-5 days: 26.0-205.0 µ mol/L > 5 days: 3.4-17.1 µmol/L	2008-11-15	Hemolyzed and lipemic plasma may interfere with this test methodology. **INFANTS ONLY**- Total Bilirubin: >250 µmol/L Urine bilirubin is positive when serum direct bilirubin is elevated. Please note that in rare cases of gammopathy, in particular type IgM (Waldenstrom's macroglobulinemia) may show a significant positive bias for total bilirubin. It is recommended that bilirubin results should always be assessed in conjunction with the patient's medical history, clinical examination and other findings.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Biotinidase, Plasma	Biochemical Genetics	6 mL Green (Sodium or Lithium Heparinized) top Vacutainer tube **Pediatric:** 0-2 yrs: 2 x 0.5 mL Green top 2-10 yrs: 3 mL Green top GENERAL LABORATORY REQUISITION	As required	6-12 umol/min/L plasma	2008-06-10	
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	SI Units: 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 Conventional Units: 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 Polyoma Virus)						
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 MICROBIOLOGY 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 MICROBIOLOGY 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	**Age Range Arterial/CapillaryVenouspH** birth-1 day7.29 - 7.457.32 - 7.42 2 days-adult7.35 - 7.457.32 - 7.42 **pCO2**birth - 2 days27 - 4038 - 502 days - adult35 - 4538 - 50**pO2**birth - 2 days54 - 9530 - 502 days - adult83 - 10830 - 50**Base Excess (BE)**(all)(-2) - 3(-2) - 3**O2 saturation, calculated** (all)N/AN/A	2016-05-04	**Critical LowCritical HighpH**7.207.60**pCO2** 2060**pO2 (arterial only)**40 Venous pCO2 >45 is suggestive of arterial pCO2 >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	**Age Range Arterial/CapillaryVenouspH** birth-1 day7.29 - 7.457.32 - 7.42 2 days-adult7.35 - 7.457.32 - 7.42 **pCO2**birth - 2 days27 - 4038 - 502 days - adult35 - 4538 - 50**pO2**birth - 2 days54 - 9530 - 502 days - adult83 - 10830 - 50**Base Excess (BE)**(all)(-2) - 3(-2) - 3**O2 saturation, calculated** (all)N/AN/A **Sodium, Na** (all)135-145135-145**Potassium, K**(all)3.5-53.5-5 **Chloride, Cl** (all)98-10798-107**Total CO2 (Bicarb (more...)**	2016-05-04	**Critical LowCritical HighpH**7.207.60**pCO2** 2060**pO2 (arterial only)**40**Na**120160**K** 3.06.0**Glucose**3.030.0 **Lactate (ED only)**4.0 Venous pCO2 >45 is suggestive of arterial pCO2 >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_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 yrs: Lavender 0.5 pk. 2-10 yrs: 2 mL Lavender top GENERAL LABORATORY REQUISITION	As required	No blood parasites seen	2006-06-01	
Blood Urea (see Urea,Plasma)						
Blood/Body Fluid Exposure: Exposed individual (see Needle Stick Injury - Victim)						
Blood/Body Fluid Exposure: Source patient (see Needle Stick Injury - Source)						
Body Fluid Analysis (other than CSF) (see Cell Count and Differential, Fluid (other than CSF))						

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 Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
Bone Loss Marker (see N-Telopeptide,Urine **no longer available- see C-Telopeptide**)						
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_2 or K_3 EDTA GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	Normal marrow elements	2006-06-01	
Bone Marrow Smears (see Bone Marrow Aspirate Examination)						
BoneMarrow/StemCell Donor initial HLA Typing (see HLA BoneMarrow/StemCell Histocompatibility-Donor)						
BoneMarrow/StemCell Recipient Antibody Workup (see HLA Antibody BM/SC Recipient Workup)						
BoneMarrow/StemCell recipient initial HLA Typing (see HLA BoneMarrow/StemCell Histocompatibility-Recipient)						

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) **or** 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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: (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
Borrelia burgdorferi (see Lyme Disease Antibody)						
Botulism (Botulism Toxin) Stool Culture for Botulism	Microbiology (VH)	Stool Implicated food Serum-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	2010-09-13	For more information please visit: Public Health Agency of Canada's website then click on "Botulism". 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		Patient is outside CCO criteria for funded testing N/A 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

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		Patient must meet CCO criteria for funding of test. N/A 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)
Breakage Study, Ataxia Telangiectasia (see Ataxia Telangiectasia, Breakage Study)						
Breakage Study, Fanconi Anemia (see Fanconi Anemia, Breakage Study)						
Breast (see Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						

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 Respiratory and Exfoliative samples for Cytology)						
Bronchoalveolar lavage (BAL) for LLM -Oil Red O (see LIPID LADEN MACROPHAGE INDEX for OIL RED O- Respiratory and Exfoliative Samples for Cytology)						
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	Adequate clinical history is required. Please record clinical symptoms, exposure, travel history and onset date on the Public Health Requisition.
Butabarbital,Serum Butisol	Core	2 x 5 mL Gold top Vacutainer tube Avoid gel-separator tubes GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Therapeutic: 5 - 24 µmol/L	2005-07-01	
Butisol (see Butabarbital,Serum)						
C Peptide (see C-Peptide, Plasma/Serum)						
C-ANCA / Anti-PR3 (anti-proteinase antibody) (see ANCA)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C-Peptide, Plasma/Serum C Peptide	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	370-1470 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. Increased with excess secretion of endogenous insulin. Can be used to diagnose self-induced insulin hypoglycemia.

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 GENERAL LABORATORY REQUISITION	Daily - as required Also available on a STAT basis for Emergency Department patients only.	<5 mg/L	2008-11-15	
C-Telo (see C-Telopeptide, Plasma)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C-Telopeptide, Plasma Beta Crosslaps β-CTX C-Telo	Core	**Adult:** 4 mL Lavender top (EDTA) Vacutainer tube **Pediatric:** 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 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...)	Thursday afternoons	Male: 30 - 50 years: ≤ 584 ng/L 50 - 70 years: ≤ 704 ng/L > 70 years: ≤ 854 ng/L Female: Pre-menopausal: ≤ 573 ng/L Post-Menopausal: 104 - 1008 ng/L	2015-04-15	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. Increased levels of C-telopeptide occur in osteoporosis, Pagets disease, primary hyperparathyroidism, renal insufficiency, and bone metastases.

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

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	**This test is available exclusively to LHSC/SJH physicians.** For more information, please contact: Senior Technologist Immunology Lab 519-685-8500 ext. 35541 This test evaluates the functional activity of C1 inhibitor protein utilizing a chromogenic based method. 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C1 Inactivator (see C1 Inhibitor Protein, Serum/Plasma)						
C1 Inhibitor function (see C1 Esterase Inhibitor, Function)						
C1 Inhibitor Protein, Serum/Plasma C1 Esterase Inhibitor C1 Inactivator	Clinical Immunology	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	0.21 - 0.38 g/L	2010-03-12	This is a quantitative assay; it does not assess the function of C1 inhibitor. 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.
C1INF (see C1 Esterase Inhibitor, Function)						
C1q (see C1qrs, Serum)						
C1qrs components (see C1qrs, Serum)						
C1qrs levels (see C1qrs, Serum)						

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	**Both plasma and serum are required** 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) **Pediatric:** 0-2 yrs: Red 0.5pk. and Purple 0.5pk 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.	C1q level: 83-125 mg/L C1r level: 61-162 % of STD C1s level: 59-297 % of STD	2010-01-11	**This test is available exclusively to SJHC/LHSC physicians.** C1QRS is a group test that includes C1q, C1r, and C1s. Also order TCOM (CH50). 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". The group test C1qrs includes C1q, C1r, C1s protein quantitation. It does not evaluate function. This test does NOT include C1 est (more...)

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C5, Serum C5 complement component level C5 Level C5L	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) **Pediatric:** 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION	Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required.	55-113 mg/L	2010-01-11	**This test is available exclusively to SJHC/LHSC physicians.** 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
C5L (see C5, Serum)						
C6 complement component level (see C6, Serum)						
C6 Level (see C6, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C6, Serum C6 complement component level C6 Level C6L	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) **Pediatric:** 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION	Referred out monthly. Total complement CH50 is performed as a screen to determine if the component assay is required.	28-69 mg/L	2010-01-11	**This test is available exclusively to SJHC/LHSC physicians.** 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 classical pathway function. (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C6L (see C6, Serum)						
C7 complement component level (see C7,Serum)						
C7 Level (see C7,Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C7,Serum C7 complement component level C7 Level C7L	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) **Pediatric:** 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION	Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required.	35.3-96.5 mg/L	2010-01-11	**This test is available exclusively to SJHC/LHSC physicians.** 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 classical pathway function. (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C7L (see C7,Serum)						
C8 complement component level (see C8, Serum)						
C8 Level (see C8, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C8, Serum C8 complement component level C8 Level C8L	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) **Pediatric:** 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION	Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required.	49-106 mg/L	2010-01-11	**This test is available exclusively to SJHC/LHSC physicians.** 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 C8, Serum)						
C9 complement component level (see C9, Serum)						
C9 Level (see C9, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
C9, Serum C9 complement component level C9 Level C9L	Clinical Immunology	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube and a 5 mL Lavender top (EDTA plasma) **Pediatric:** 0-2 yrs: Red 0.5pk. and Purple 0.5 pk. 2-10 yrs: 2 mL Red and Purple top GENERAL LABORATORY REQUISITION	Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required.	33-95 mg/L	2010-01-11	**This test is available exclusively to SJHC/LHSC physicians.** 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
C9L (see C9, Serum)						
C14 Breath test (see H. Pylori Breath Test **test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener**)						
CA 153 (see CA15-3, Serum)						
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	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	≤ 35 U/mL	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. 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
CA15-3 (see CA15-3, Serum)						
CA15-3, Serum CA 153 CA15-3 CA153	Endocrinology	**Adult:** 5 mL Gold top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	≤30 kU/L	2020-07-20	
CA153 (see CA15-3, Serum)						
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	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	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:9388399) is a cause of stroke and vascular dementia. It is a condition of mid-adulthood that can result from mutations in the Notch 3 gene on chromosome 19. These mutations can be identified by direct sequence analysis of the Notch3 coding sequence (PMID:16009764). The CADASIL screen offered in this laboratory involves analysis of the (more...)

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cadmium,Urine	Trace Elements	24 hour urine collected in an **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: 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 25-Hydroxy Vitamin D, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Calcitonin, Fine Needle Aspirate Thyrocalcitonin	Endocrinology	Two samples: The first is uncontaminated Plasma-Lyte and serves as a blank. The second is 1 mL of Plasma-Lyte that has been used to rinse the biopsy needle as described below. GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	There is no reference interval available for this specimen type. Interpretation should be made based on comparison with the Plasma-Lyte control and cytology results.	2017-09-18	The limit of quantitation of the assay is 3 ng/L. If a blank result of > 3 ng/L were to be obtained, a technical investigation would be performed prior to reporting of result. 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. 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.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Calcitonin, Serum Thyrocalcitonin	Endocrinology	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 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 **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	Males: ≤ 12 ng/L Females: ≤ 5 ng/L	2017-09-18	
Calcitriol (see 1,25-Dihydroxy Vitamin D, Serum/Plasma)						
Calcium, 24-Hour Urine	Core	24 Hour urine GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	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	SI Units: 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 Conventional Units: 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	Monday - Friday 0800 - 1600 h		2008-11-16	

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Calcium-Total,Plasma	Core	4.5 mL Light Green top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5 mL Green pk. 2-10 yrs 2 mL Green top GENERAL LABORATORY REQUISITION	As required	Children: 0-10 days: 1.89-2.59 mmol/L 11 days-2 years: 2.24-2.74 mmol/L 2 years-Adult: 2.15-2.55 mmol/L	2008-11-15	If Gadolinium-containing contrast media for MRI has been administered wait 48 hours before blood collection. **Calcium:**<1.5 or >3.3 mmol/L (Report Albumin, if available) About 45% of calcium is albumin bound. Depressed albumin levels are the most common cause of low total calcium values. Suggested approximate correction factor: add 0.25 mmol/L to calcium value for each 10 g/L that albumin falls below 40 g/L.
Calculi, Renal Stones	Toxicology/Special Chemistry	Calculi or Fragments GENERAL LABORATORY REQUISITION.	Monday - Friday 0800-1600	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Calprotectin, Stool Fecal Calprotectin	Core	10 mL - 50 mL stool - collected in screw capped clean container GENERAL LABORATORY REQUISITION	Referred out Monday - Thursday	**Adult:** 18 years and over: Normal <50 mg/kg **Pediatric:** 1 month - <6 months: Normal <538 mg/kg 6 months - <3 years: Normal <214 mg/kg 3 years - <4 years: Normal <75 mg/kg 4 years - 17 years: Normal <50 mg/kg	2016-06-27	
Candida (see Fungus Culture-Systemic or Subcutaneous)						
Cannabinoids (see Cannabinoids Screen,Urine)						
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 **Pediatric:** 0-2 yrs: Green 0.6pk. 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	As required Other times by prior arrangement.	17 - 51 µmol/L	2009-09-14	CRITICAL VALUE to be phoned to Nurse or Physician immediately **Toxic:**>64 µmol/L
Carbapenemase Producing Enterobacteriaceae Screen CPE Screen	Microbiology	Rectal Swab Feces MICROBIOLOGY REQUISITION	Daily Specimens received after 2 pm will not be processed until the next day		2019-02-20	
Carbon Monoxide (see Co oximetry)						
Carboxyhemoglobin (see Co oximetry)						
Carcinoembryonic Antigen (see CEA, Fluid, CEA, Plasma/Serum)						
Carnitine (Free) - Quantitative, Urine	Biochemical Genetics	Random Urine GENERAL LABORATORY REQUISITION	As required	0-500 umol/g creatinine	2010-11-26	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Carnitine (Free) and Acyl Carnitine - Quantitative, Plasma	Biochemical Genetics	6 mL Green (Sodium or Lithium Heparinized) top Vacutainer tube **Pediatric:** 0-2 yrs: 2 x 0.5 mL Green top 2-10 yrs: 3 mL Green top GENERAL LABORATORY 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	
Carotene,Serum Beta Carotene	Core (all campuses)	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	0.19-1.58 µmol/L		
Cat Scratch Disease (see Bartonella Serology)						

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Catecholamines, Urine Epinephrine Norepinephrine Dopamine Adrenalin Noradrenalin	Core	24-hour urine GENERAL LABORATORY REQUISITION	Referred out Monday - Friday	**Epinephrine (nmol/day):** < 1 year: 0-14 1-2 years: 0-19 2-4 years: 0-33 4-10 years: 1-55 10-15 years: 3-109 ≥ 15 years: ≤ 99 **Norepinephrine (nmol/day):** < 1 year: 0-59 1-2 years: 6-100 2-4 years: 24-171 4-7 years: 47-266 7-10 years: 77-384 10-15 years: 89-473 ≥ 15 years: ≤ 499 **Dopamine (nmol/day):** < 1 year: 0-555 1-2 years: 69-914 (more...)	2017-07-04	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Catheter Tip Culture (see Vascular Tip Culture)						
CBC (see Complete Blood Count)						
CCOMPG (see Complement Components)						
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 Clostridioides (Clostridium) difficile toxin)						
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	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	20 - 40 years: non-smokers (past/never smokers): ≤ 3.8 g/L smokers (current): ≤ 5.5 g/L all subjects: ≤ 4.7 g/L 40 - 69 years: non-smokers (past/never smokers): ≤ 5.0 g/L smokers (current): ≤ 6.5 g/L all subjects: ≤ 5.2 g/L	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. Useful in monitoring patients with colorectal, bronchogenic, and breast carcinoma. Not recommended for cancer screening in the general population.

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cells for Dispatch Cell Storage Cells for DNA Isolation/Banking Cells for Metabolic Studies	Cytogenetics (VH)	Amniotic Fluid: 15 mL-20 mL of amniotic fluid in two sterile containers (see Comments). CVS: At least 20-25 mg chorionic villi collected in a sterile container, containing Hank's balanced salt solution (HBSS) (see Comments). Skin and POCs: Skin (0.5-1cm2), amnion (0.1-5cm2), cord (1cm3), or chorionic villi. Ship in a sterile container, containing Hank's (more...)	As required	See final report	2011-05-11	Contact the Cytogenetics Lab for aliquots of Hanks balanced salt solution for skin and POC samples. The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab). 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cells for DNA Isolation/Banking (see Cells for Dispatch)						
Cells for Metabolic Studies (see Cells for Dispatch)						
Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukoencephalopathy. (see CADASIL)						
Ceruloplasmin, Plasma	Core	**Adult:** 4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube GENERAL LABORATORY REQUISITION	Daily	0.16-0.45 g/L Female 0.15-0.30 g/L Male	2010-01-11	Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes. 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
CESD (Cholesterol Ester Storage Disease) (see Acid Lipase)						
CF (see Cystic Fibrosis)						
CF8 (see Chromogenic factor VIII assay)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
CH50 (see Complement Total, Serum)						
Charcot Marie Tooth Disease CMT Charcot Marie Tooth Neuropathy	Molecular Diagnostics	Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION	Monday-Friday 0800-1600 h	See report	2010-06-16	For more information click on:
For more information click on:						
For more information click on:						
		PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred weekdays to Public Health Laboratory		2006-07-01	

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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	Monday - Friday 0800 - 1600 h	170-250 mmol/d		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. Useful in diagnosing disorders of acid-base and water balance. Monitoring compliance with a low salt diet. Urine chloride excretion approximates the dietary intake. An increase in urine chloride may result from water deficient dehydration, diabetic acidosis, Addison's disease and salt-losing renal disease. Decreased urine levels are seen in congestive heart failure, severe diaphoresis a (more...)

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cholesterol-HDL,Plasma High Density Lipoprotein Cholesterol	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5 mL Green pk. 2-10 yrs: 3 mL Green top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	* See interpretation of lipid profile.	2008-11-15	
Cholesterol-LDL (see Cholesterol-LDL,Plasma)						
Cholesterol-LDL,Plasma Low Density Lipoprotein Cholesterol Cholesterol-LDL LDL	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Green Microtainer 2-10 years: 3 mL Green top tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	* Target levels are dependent on 10 year risk of developing coronary artery disease. See interpretation of lipid profile.	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cholesterol-Total,Plasma	Core	4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Green pk. 2-10 years: 3 mL Green top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	See Interpretive comments	2008-11-15	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cholinesterase Phenotype (includes Cholinesterase, Total Activity) CHOLINP Pseudo-cholinesterase Dibucaine Number	Core	6 mL Red top Vacutainer tube or 5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Total: 620-1370 U/L	2010-01-11	To investigate prolonged apnaea following suxamethonium administration during surgery. To screen patients at risk of suxamethonium sensitivity (eg. first degree relatives of a known atypical phenotype). To investigate acute or chronic occupational exposure to organophospates. Interpretation is provided with the laboratory report Plasma not accepted for analysis. If patient had surgery, collect specimen at least 24 h post-surgery.
CHOLINP (see Cholinesterase Phenotype (includes Cholinesterase, Total Activity))						
Chondrodysplasia Punctata (X-Linked Recessive) (see Aryl Sulfatase E, Fibroblasts)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Chorionic Gonadotropin (Quantitative), Plasma/Serum hCG Beta hCG	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	Adult male: < 2 IU/L Non-pregnant pre-menopausal female: < 5 IU/L Post-menopausal female: ≤ 7 IU/L	2009-06-04	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. Assay detects intact hCG, nicked forms of hCG, the beta-core fragment, and the free beta-subunit of hCG. May be used for the early detection and monitoring of pregnancy or as a tumour marker for ovarian, placental, testicular, or other tumours.
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
Chorionic Villi Sampling (CVS) Chromosome Analysis QF-PCR Prenatal Microarray	Cytogenetics (VH)	~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) 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...)	As required	See final report		Contact the Cytogenetics Lab for aliquots of RPMI medium. 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 Prenatal diagnostic test performed at ~9-12 weeks gestation Must prearrange with Cytogenetics Lab.

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

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Chromium,Urine	Trace Elements	24 hour urine collected in **new** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: 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)	2 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes **Pediatric:** 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** GENERAL LABORATORY REQUISITION	Routine/Stat as required	0 Min - 5 Days: 0.50-1.78 U/mL 5 Days - 1 Month: 0.50-1.54 U/mL 1 Month - 3 Months: 0.50-1.57 U/mL 3 Months - 6 Months: 0.50-1.25 U/mL 6 Months - Adult: 0.50-2.00 U/mL	2013-02-01	Please direct any questions or concerns to: Hematology Scientist 519-685-8500 x 55402 Pager 17716 All test requests, regardless of whether the patient is an adult or pediatric, **must be authorized by a Hematologist. Contact by Paging Adult or Pediatric Hematologist on call through the switchboard.** It is the responsibility of the Hematologist or Pediatrician to communicate their decision to the HATLAB. Blue (Sodium Citrate) top tubes sho (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Chromogranin A, Plasma	Endocrinology	**Adult:** 4 mL Lavender top (EDTA) Vacutainer tube **Pediatric:** 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. GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	≤ 76 ng/mL	2018-08-20	Chromogranin A levels may be elevated in patients treated with proton pump inhibitors. Patients should refrain from taking proton pump inhibitors for at least one week prior to sample collection.
Chromosome Analysis (see Amniotic Fluid, Chorionic Villi Sampling (CVS), Products of Conception, Skin / Fetal Tissue)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Chromosome Analysis, Blood Chromosomes Karyotype Banding G-Banding Prophase Banding High Resolution Banding	Cytogenetics (VH)	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. Newborn babies: 1-2 mL of blood aseptically collected into blood chromosome media (see comments). Cord Blood: May be collected in either (more...)	As required	See final report		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. The Cytogenetics Laboratory is staffed from 0700-1700 (Monday-Friday), Ext. 78974, or 75714 (lab). For additional information please refer to the Molecular Diagnostics Laboratory. See final report See requisition for common clinical indicators. (more...)

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)	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 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 antico (more...)	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 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.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Chromosome Analysis, Breakage Study, Ataxia Telangiectasia (see Ataxia Telangiectasia, Breakage Study)						
Chromosome Analysis, Breakage Study, Fanconi Anemia (see Fanconi Anemia, Breakage Study)						

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		Solution for Specimen Collection: 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. The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab). For additional information please refer to the Molecular Diagnostics Laboratory. See final report Collect sampl (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Chromosomes (see Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor)						
Chronic Granulomatous Screening Investigation Neutrophil Oxidative Burst Index (NOBI)	Flow Cytometry	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Lavender pk. 2-10 years: 3 mL Lavender top Referred-In Samples: FLOW CYTOMETRY REQUISITION	Monday to Thursday only 0800-1300 Do not send samples on Fridays. Prior to STAT holidays, routine specimens must be received in the Flow Cytometry Laboratory at Victoria Hospital by 1300.	Neutrophils demonstrate normal oxidative burst following stimulation by PMA, not suggestive of a diagnosis of CGD	2009-10-23	

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Chronic Myelogenous Leukemia, by PCR CML BCR/ABL Philadelphia Chromosome	Molecular Diagnostics	Bone marrow or 2 x 4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube MOLECULAR DIAGNOSTICS REQUISITION	As Required Monday - Friday 0800 - 1630 h	See report	2010-01-13	Retesting of samples received less than 3 months after initial testing need to be approved by the Laboratory Director. 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
CIC (see Immune Complexes)						
Circulating immune complexes (see Immune Complexes)						

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	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. Our ISO-15189 accredited laboratory offers circulating tumor cell (CTC) analysis using the FDA- and Health Canada-approved CellSearch System (Menarini Silicon Biosystems, Inc). The CellSearch is intended for clinical use in the enumer (more...)

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 Creutzfeldt-Jakob Disease (CJD) Protein Assay)						
CK Total (see Creatine Kinase - CK,Plasma)						
CLN2 Peptidase (see Tripeptidyl Peptidase 1, Dried Blood Spot/Fibroblast)						

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

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

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Clozapine,Serum/Plasma Clozaril	Toxicology/Special Chemistry	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube GENERAL LABORATORY REQUISITION	Routine	Minimum effective concentration is 1070 nmol/L	2009-06-04	Alert value is 3100 nmol/L Norclozapine, metabolite: not active.
Clozaril (see Clozapine,Serum/Plasma)						
CML (see Chronic Myelogenous Leukemia, by Karyotype/FISH, Chronic Myelogenous Leukemia, by PCR)						
CMT (see Charcot Marie Tooth Disease)						
CMV IgM/IgG (see Cytomegalovirus Serology)						

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
CO2 (see Electrolytes,Plasma)						

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

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

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cobalt,Urine	Trace Elements	24 hour urine collected in **new** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: 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 Cocaine Screen,Urine)						
Cocaine Screen,Urine Cocaine	Core UH & VH	Urine,Random GENERAL LABORATORY REQUISITION	As required	Negative	2008-11-15	
Coccidioides Culture (see Fungus Culture-Dimorphic)						
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 Co oximetry)						

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Combined Cervical/Endocervical Smear (see Gynaecological Conventional Smear for Cytology)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Complement C3, Plasma C3c	Core	**Adult:** 4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube GENERAL LABORATORY REQUISITION	Daily	0.90-1.80 g/L	2009-02-27	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. 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Complement C2 quantitation (see C2,Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Complement C4, Plasma C4	Core	**Adult:** 4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube GENERAL LABORATORY REQUISITION	Daily	0.10-0.40 g/L	2009-02-27	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. 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, glomerulonep (more...)

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	**Age 10-Adult:** 6 mL Red top Vacutainer tube **and** 5 mL Lavender top (K_3EDTA) tube Require 2 x 1 mL aliquots each of serum and plasma for send out **Pediatric:** 0-2 yrs: 2 x 0.5 Red micropick and 2 x 0.5 Lavender micropick Require 2 x 0.5 mL aliquots each of serum and plasma for send out 2-10 yrs: 2 x 4 mL Red top and 2 x 4 mL Lavender top Require 2 x 1 mL ali (more...)	Referred out monthly. Total complement CH50 is performed as a screen to determine the component assay is required.	C1q 83 to 125 mg/L C1r 61 to 162 % of standard C1s 59 to 297 % of standard C5 55 to 113 mg/L C6 28 to 69 mg/L C7 35.3 to 96.5 mg/L C8 49 to 106 mg/L C9 33 to 95 mg/L	2010-01-11	**This test is available exclusively to SJHC/LHSC physicians.** CCOMPG is a group test that includes C1qrs, C5, C6, C7, C8, C9. The components can be ordered individually. 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." Group test tha (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Complement components group test: C1qrs, C5, C6, C7, C8, C9 (see Complement Components)						
Complement Total, Serum CH50 TCOM Total Complement Function Assay	Clinical Immunology	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 2 x 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 **NOT** acceptable GENERAL LABORATORY REQUISITION	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	**Adult:** 4 mL K_2 EDTA (Lavender) Vacutainer tube **Pediatric Venous:** 2 mL Paeds K2 EDTA (Lavender) Vacutainer **Pediatric (Capillary):** 0.5 mL MAP K_2 EDTA (Lavender) Microtube 0.5 mL K_2 EDTA (Lavender) Microtube GENERAL LABORATORY REQUISITION	As required	Normal Ranges adopted through concensus by the three London teaching hospitals. **Leukocyte Count (LKC):** >18 years: 4.0-10.0 x 109/L 11-18 years: 4.0-10.0 x 109/L 3-10 years: 5.0-12.0 x 109/L 1 month-2 years: 5.0-15.0 x 109/L < 1 month: 5.0-34.0 x 109/L **Erythrocyte Count (ERC):** Males: >18 years: 4.50-6.50 x 1012/L 11-18 years: 4.20-5.60 x 1012/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: Autoimmune Encephalitis Antibodies Anti-NMDAR Anti-LGI1 Anti-CASPR2 Anti-AMPAR1/R2 Anti-GABARB1/B2 Anti-DPPX Paraneoplastic Antibodies 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 Other Antibody (more...)	Clinical Immunology	**Adult:** 5 mL Gold or 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red Microtainer 2-10 years: 2 mL Red top Vacutainer tube CSF sample: Suggest CSF be submitted with serum for testing. CLINICAL IMMUNOLOGY REQUISITION	Batch analysis	Negative	2019-02-26	This test is available to neurologists at LHSC/SJHC and accepted from referred in locations. A single autoantibody test is not diagnostic and should not be used to determine course of treatment. The test result must be evaluated with consideration of clinical presentation, patient history and other laboratory tests. **Antibodies against Associated Neurological DisordersFrequently Associated Tumors** NMDARAnti-NMDAR encephalitisOvarian teratoma, testicular teratomaLGI1Limbic encephalitisThyroid carcinoma, small cell lung cancer, ki (more...)

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Copper, Erythrocytes	Trace Elements	Reference number 368381 - HMMS# 11073 - 6mL K2-EDTA Royal Blue Vacutainer tube TRACE ELEMENTS REQUISITION	Batched analysis	SI Units (Reported on Patient Chart): 0-12 years: 10.3-17.5 µmol/L ≥13 years: 9.7-14.6 µmol/L Conventional Units: 0-12 years: 654-1114 µg/L ≥13 years: 616-929 µgl/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/L4-6 months:3.9-17.3 µmol/L 7-12 months:7.9-20.5 µmol/L1-5 years:12.6-23.6 µmol/L6-9 years:13.2-21.4 µmol/LMale 10-13 years:12.6-19.0 µ mol/LFemale 10-13 years:12.9-18.9 µmol/L Male ≥14 years:11.2-20.6 µmol/LFemale ≥ 14 years:13.5-36.5 µmol/L Conventional Units:0-3 months:89-457 µ g/L4-6 months:248-1099 µg/L7-12 (more...)	2010-07-05	Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Copper,Urine	Trace Elements	24 hour urine collected in **new** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: 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 Conventional Units: Random Urine: 2.3-12.0 µg/L (more...)		Reference Ranges are based on Non-Occupationally exposed population. Find Interpretive Comment and Clinical Information here:

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

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cortisol Level Post-Dexamethasone, Plasma/Serum	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	≤ 50 nmol/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. This test is used to measure cortisol level following a dexamethasone suppression test.
Cortisol, 24-Hour Urine	Core	24-hour urine GENERAL LABORATORY REQUISITION	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	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	6 10 am: 133 537 nmol/L 4 8 pm: 68 327 nmol/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. Oral contraceptives, pregnancy, or estrogen therapy cause elevated plasma cortisol levels due to an increase in binding proteins. Prednisolone, 6-α-methylprednisolone, or prednisone treatment may cause falsely elevated cortisol results. During metyrapon tests, 11-deoxycortisol levels are elevated. Falsely elevated cortisol values may be determined due to cross reactivit (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cortisol, Saliva Salivary Cortisol	Core	Saliva GENERAL LABORATORY REQUISITION	Tuesday afternoons	6 - 10 am collection: < 24.1 nmol/L 4 - 8 pm collection: < 9.7 nmol/L 11:30 pm - 12:30 am collection: < 11.3 nmol/L	2015-11-02	
Cosyntropin Test (see ACTH Stimulation Test, Plasma/Serum)						
Coxiella burnetti Serology (see Q fever Serology)						
CPE Screen (see Carbapenemase Producing Enterobacteriaceae Screen)						
CPK Total (see Creatine Kinase - CK,Plasma)						

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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 Trace Elements Creatinine, Urine)						
Creatinine,Fluid	Core	5 mL Fluid GENERAL LABORATORY REQUISITION	As required	See report	2008-11-16	
Creatinine,Plasma	Core	4.5 mL Green top Vacutainer **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 3 mL Green top 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	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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 Trace Elements Creatinine, Urine)						
Creutzfeldt-Jakob Disease (see Creutzfeldt-Jakob Disease (CJD) Protein Assay)						
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 C-Reactive Protein)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cryocrit, Serum	Clinical Immunology	2 x 6 mL Red (no gels or serum separator) top Vacutainer tubes GENERAL LABORATORY REQUISITION Order CRYO	As required	0 2% When there is no Cryoglobulin present, the cryocrit is not performed.	2010-01-11	If the cryo develops as a gel rather than flocculation, the crit may be technically impossible to perform. A preliminary report after 48 hours will be generated in Powerchart followed by a final report within 10 days. The final report will include a calculated cryocrit and a characterization identifying the type of cryoglobulin present. NOTE: The cryocrit will be used to monitor positive patients as the characterization will only be processed once. The specimen tubes must remain at 37°C (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cryofibrinogen	Clinical Immunology	4 x 2.7 mL Light Blue (Sodium Citrate) Vacutainer tubes **and** 2 x 6 mL Red top Vacutainer tubes GENERAL LABORATORY REQUISITION	Daily	Negative.	2010-01-11	If the cryoglobulin/cryofibrinogen develops as a gel rather than flocculation, the crit may be technically impossible to perform. Cryofibrinogen refers to cold-precipitable complexes of fibrin, fibrinogen and fibronectin. These may occur: (i) when blood drawing is slow allowing thrombin generation ex vivo, (ii) in any condition in which increased levels of fibrin occur (iii) in certain dysfibrinogenemias. Cryoglobulins may be found in serum and plasma but cryofibrinogen is only found in plas (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cryofibrinogen Crit	Clinical Immunology	4 x 2.7 mL Light Blue (Sodium Citrate) Vacutainer tubes **and** 2 x 6 mL Red top Vacutainer tubes GENERAL LABORATORY REQUISITION	As required	0-2% When there is no cryofibrinogen present, the crit is not performed.	2010-01-11	Characterization is performed on serum only- positive cryofibrinogen plasma will not be characterized. The crit is the calculated relative percentage volume of cryofibrinogen to total sample volume. The crit is performed on all positive cryofibrinogen samples with adequate specimen volumes. The crit may not be calculated on samples with inadequate sample volume. The specimen tubes must remain at 37°C until the plasma and serum have been separated.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cryoglobulin Characterization,Serum	Clinical Immunology	2 x 6 mL Red (no gels or serum separator) top Vacutainer tubes GENERAL LABORATORY REQUISITION Order Cryoglobulin. The characterization is part of the evaluation	As indicated	See report	2010-01-11	Characterization will only be processed once per patient. The cryocrit will be used to monitor positive results. Identifies the cryoglobulin type: Monoclonal (Type I) or Mixed (Type II or Type III). The specimen tubes must remain at 37°C until the serum has been separated.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cryoglobulin,Serum	Clinical Immunology	2 x 6 mL Red (no gels or serum separator) top Vacutainer tubes GENERAL LABORATORY REQUISITION - Order CRYO	Monday-Friday during regular work hours. No weekends or holidays.	Negative	2010-01-11	If the cryo develops as a gel rather than flocculation, the crit may be technically impossible to perform. A preliminary report after 48 hours will be generated in Powerchart followed by a final report within 10 days. The final report will include a calculated cryocrit and a characterization identifying the type of cryoglobulin present. NOTE: The cryocrit will be used to monitor positive patients as the characterization will only be processed once. The specimen tubes must remain a (more...)

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cryptosporidium Ova and Parasites	Microbiology (VH)	Faeces MICROBIOLOGY REQUISITION For full work up: PUBLIC HEALTH LABORATORY TEST REQUISITION	Daily		2010-09-13	
Crystal Analysis, Synovial Fluid Crystals (Joint Fluid)	Core	Synovial fluid collected in K_2 or K_3 EDTA Note: Specimens anticoagulated with heparin and oxalate are **not** acceptable for crystal analysis. GENERAL LABORATORY REQUISITION	As required Available STAT- 24 hours/day, 7 days/week	No crystals seen	2006-12-27	
Crystals (Joint Fluid) (see Crystal Analysis, Synovial Fluid)						

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 Albumin,CSF)						
CSF Analysis (see Cell Count and Differential,CSF)						
CSF Culture	Microbiology (VH)	Cerebrospinal fluid obtained by lumbar puncture, shunt or drain MICROBIOLOGY REQUISITION	Daily		2008-06-05	
CSF IgG (see Immunoglobulin G,CSF)						

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Cyanide	Core	4 mL Lavender or Royal Blue top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	< 5 µmol/L	2005-07-01	Referred out Monday - Thursday Clearly write "CYANIDE" on the tube labels and requisition.
Cyanocobalamin (see Vitamin B12, Plasma/Serum)						
Cyclosporine CYA Neoral	Toxicology/Special Chemistry	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Lavender Microtainer 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION	Samples are tested Monday-Saturday. Specimens received in the Core Laboratory after 10:00am will be processed the next working day.	No established reference range. Concentrations are measured in ng/mL.	2009-02-27	Call the Toxicology/Special Chemistry Laboratory for more information: (519) 685-8500 x 64664 option #3.

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

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

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

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

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 **Pediatric:** 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	**Inpatient** D-Dimer requests will not be performed routinely. These requests must be authorized by a Hematologist. During regular working hours 0900-1700 contact Dr. M. Kovacs (pager 15182). After 1700 contact the on call Hematologist (pager 12222). All other D-Dimer requests will be processed including Emergency departments, Outpatient Clinics, private Physician's Office and referring Institutions. Caution: D-Dimer: when used in patients with a low clinical probab (more...)

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 Direct Antiglobulin Test)						
Deceased Donor HLA Typing and Deceased Donor Crossmatch (see HLA Workup Deceased Donor)						
Dehydroepiandrosterone Sulfate (see DHEA Sulfate, Plasma/Serum)						
Demenhydrinate (see Diphenhydramine, Urine Qualitative)						
Dengue Fever (see Arbovirus Flavivirus Serology/PCR)						
Depakene (see Valproic Acid,Serum/Plasma-Total, Valproic Acid-Free,Serum)						
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 **Avoid gel-separator tubes** 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	**Toxic:** Greater than 1800 nmol/L Desipramine is also the metabolite of Imipramine, and is measured routinely when Imipramine is prescribed.
Desmethylclomipramine (metabolite) (see Clomipramine **and** Desmethylclomipramine, Serum/Plasma)						
Desyrel (see Trazodone)						
Dextroamphetamine (see Amphetamine Screen,Urine)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
DHEA Sulfate, Plasma/Serum Dehydroepiandrosterone Sulfate DHEAS	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Child: < 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 Male: 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...)	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. Rheumatoid factor > 80 IU/mL may cause interference with this assay.

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

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	**Adult:** 4 mL K_2 EDTA (Lavender) Vacutainer tube **Pediatric Venous:** 2 mL Paeds K2 EDTA (Lavender) Vacutainer **Pediatric (Capillary):** 0.5 mL MAP K_2 EDTA (Lavender) Microtube 0.5 mL K_2 EDTA (Lavender) Microtube GENERAL LABORATORY REQUISITION	As required	Lymphocytes: 18 yrs.: 1.0-4.0 x 109/L 10-17 yrs.: 1.5-4.0 x 109/L 2-9 yrs.: 2.0-8.0 x 109/L 1-23 months: 4.0-10.5 x 109/L Newborn-30 days: 2.0-17.0 x 109/L Monocytes: >18 yrs.: 0.2-0.8 x 109/L 10-17 yrs.: 0.2-0.8 x 109/L 2-9 yrs.: 0.2-0.8 x 109/L 1-23 months: 0.2-1.5 x 109/L Newborn-30 days: 0.2-3.1 x 109/L Neutrophils: >18 years: (more...)	2007-07-18	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Digoxin Lanoxin	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5pk. Green top 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	Weekdays-other times by prior arrangement.	Therapeutic Serum/Plasma: Therapeutic range: 1.0 to 2.6 nmol/L Congestive heart failure: 0.6 to 1.0 nmol/L	2008-11-15	CRITICAL VALUE to be phoned to Nurse or Physician immediately: **Toxic:** Serum/Plasma >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.
Dihydropteridine Reductase, Dried Blood Spot PKU-DHPR Deficient	Biochemical Genetics	Filter Paper with 6 mL Green (Sodium Heparinized) top Vacutainer GENERAL LABORATORY 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	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 years: 2 x 0.5 mL Red or Gold top Microtainers 2-10 years: 3 mL Red top Vacutainer tube Light Green top (Li-Heparin) or Lavender top (EDTA) tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Male: < 8 years: ≤ 632 pmol/L 8 18 years: ≤ 3367 pmol/L adult: 860 3406 pmol/L Female: < 8 years: ≤ 632 pmol/L 8 18 years: ≤ 1916 pmol/L premenopausal adult: 83 1266 pmol/L postmenopausal: 34 623 pmol/L	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 Demenhydrinate 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 Bilirubin- Direct)						
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 Renin, Plasma)						
Disseminated Intravascular Coagulation Screen DIC Screen	Core	4 mL Lavender (K_3EDTA) 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		For more information click on: Molecular Diagnostic Laboratory. N/A 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. RNA is routine (more...)

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

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	**Done by special request only.** This test will be performed only after consultation and approval by a Medical Microbiologist. Referred weekdays to the Public Health Laboratory.			
E1 (see Estrone, Serum/Plasma)						
E2 (see Estradiol, Plasma/Serum)						
Ear Culture	Microbiology (VH)	Ear, ear drainage fluid, Tympanocentesis fluid MICROBIOLOGY REQUISITION	Daily		2012-03-28	
Eastern Encephalitis (see Arbovirus Flavivirus Serology/PCR)						
EBV EA/NA (see Epstein Barr: Early Antibody/Nuclear Antibody)						
EBV IgM/IgG (see Epstein Barr Virus Serology)						

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 Ova and Parasites-Blood and Tissue)						
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 Amphetamine Screen,Urine)						
Effusion Washing (see Fluids for Cytology)						
eFTS (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
EGFR ctDNA ctDNA EGFR	Molecular Diagnostics	Plasma MOLECULAR DIAGNOSTICS REQUISITION	As required	See report	2019-06-03	

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		Patient must meet CCO criteria for funded testing N/A 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Elastase 1 (see Fecal Elastase)						
Elavil (see Amitriptyline,Serum/Plasma)						
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 **Pediatric:** 0-2 yrs: 0.5 mL Green micropick tube. 2-10 yrs: 2 mL Green top 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_2: 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_2: 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 Theophylline, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
EMA (see Antiendomysial Antibodies)						
Encephalitis (see Autoimmune Encephalitis Panel)						
Endocervical Smear (see Gynaecological Conventional Smear for Cytology)						
Endomyocardial biopsy (see Heart Biopsy)						
Enhanced First Trimester Screen (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
Enterovirus PCR - ENVPCR	Virology Laboratory	**CSF** **Fluids** - pericardial, pleural peritoneal **Swabs** - throat, rectal, mouth **Tissue** - lymph nodes, brain VIROLOGY LABORATORY REQUISITION	Samples are tested three times weekly on Monday, Wednesday and Friday.	See report	2011-10-31	
Environmental Culture	Microbiology/Epidemiology	Swab, fluid & solid material MICROBIOLOGY REQUISITION	Daily Turn-around-time varies with the organisms in question.			
Eosinophils (see Differential Leukocyte Count (Peripheral Blood))						
Epinephrine (see Catecholamines, Plasma (Norepinephrine, Epinephrine), Catecholamines, Urine)						
Epival (see Valproic Acid,Serum/Plasma-Total)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
EPO (see Erythropoietin,Serum/Plasma)						
Epstein Barr Virus PCR (Viral Load) (see EBV PCR)						
Epstein Barr Virus Serology Infectious Mononucleosis EBV IgM/IgG	Core (UH)	5 mL Gold or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Daily Monday-Friday		2006-07-01	A single serum sample will yield significant results for establishing previous exposure.
Epstein Barr: Early Antibody/Nuclear Antibody EBV EA/NA	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	2010-09-13	Specimens received for EBV Serology will be tested for: EBV Viral Capsid Antigen IgG (VCA IgG) EBV Early Antigen IgG (EA) EBV Nuclear Antigen IgG (EBNA)
ERAS (see KRAS)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Erythrocyte Sedimentation Rate ESR Sed Rate Sedimentation Rate	Core	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-10 yrs: 3.0 mL Lavender top GENERAL LABORATORY REQUISITION	As required	Male: 0-10 mm/h Female: 0-20 mm/h	2008-04-07	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Erythropoietin,Serum/ Plasma EPO	Core	5 mL Gold top Vacutainer tube **Pediatric:** 0-10 years: 2 mL Gold top Light Green (Li-heparin) top tubes are also acceptable. GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Male: <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 Female: <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 Gastrointestinal/Hepatobiliary Specimens for Cytology)						
ESR (see Erythrocyte Sedimentation Rate)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Estimated Glomerular Filtration Rate (eGFR)	Core			For patients under 18 years of age eGFRs are reported as: eGFR calculation is not available for patients under 18 years of age. eGFR: < 15 mL/min/1.73 m2 Consistent with **kidney failure** eGFR: 15-29 mL/min/1.73 m2 Consistent with **severe chronic kidney disease** eGFR: 30-44 mL/min/1.73 m2 **Moderate to severe decreased kidney function** is consistent with chronic (more...)	2016-01-04	eGFR is calculated using the CKD-EPI 2009 equation. Multiply eGFR by 1.159 for patients of African descent. 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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Estradiol, Plasma/Serum 17 Beta Estradiol E2 Major Estrogen	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	Male >18 years: ≤159 pmol/L **Female:** Follicular phase: 114 - 332 pmol/L Early follicular phase: ≤231 pmol/L Intermediate follicular phase: 96 294 pmol/L Late follicular phase: 182 858 pmol/L Ovulatory phase: 222 1959 pmol/L Luteal phase: 222 854 pmol/L Early luteal phase: 188 658 pmol/L Interme (more...)	2015-06-01	Biotin, fulvestrant (Faslodex), and steroid drugs 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. 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. In males, estradiol can be used to evaluate feminizing syndromes.

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	**Male:** 105-275 pmol/L 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 Ethyl Glucuronide)						
Ethanol (see Alcohol Fractionation (by Gas Liquid Chromatography))						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ethanol,Serum/Plasma Ethyl Alcohol	Core (VH)	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5pk. Green top 2-10 yrs: 2 mL Green top 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. 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	**Therapeutic:** 280-710 µmol/L	2008-02-05	Referred out Monday - Thursday **Critical:**>1060 µmol/L
Ethyl Alcohol (see Ethanol,Serum/Plasma)						

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	See report	2019-05-15	Testing is available to Liver Transplant patients and requires Biochemist Approval Negative <100 g/8.8 mmol Cre Indeterminate 100-200 g/8.8 mmol Cre Positive >200 g/8.8 mmol Cre Bacterial contamination of the specimen should be prevented by collecting or transferring in sterile and air-tight containers. Store and send cold or frozen.
Ethylene Glycol (see Glycol Screen)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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 - **EYEC** Scrapings - **TISC** Fluids - **FLDS**
F8 (see Coagulation Factor Assays)						
F9 (see Coagulation Factor Assays)						
Fabry's Disease (see Alpha-Galactosidase, Leukocyte, Alpha-Galactosidase, Plasma)						
Factor Assays (II, V, VII, VIII, IX, X, XI, XII) (see Coagulation Factor Assays)						
Factor IX (see Coagulation Factor Assays)						
Factor IX Inhibitor (see Coagulation Factor Inhibitor Assays (Usually VIII and IX))						
Factor V (see Thrombophilia (associated with Factor V deficiency))						
Factor VIII (see Coagulation Factor Assays)						
Factor VIII Inhibitor (see Coagulation Factor Inhibitor Assays (Usually VIII and IX))						
Faeces Culture (see Stool Culture)						
FAI (see Free Androgen Index, Plasma/Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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		For more information click on: Molecular Diagnostic Laboratory 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.

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:1 0876191, 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 Thrombophilia (associated with Factor V deficiency))						
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 Familial Amyloidotic Polyneuropathy-TTR)						
Farmer's Lung (see Farmers Lung IgG Antibodies, Serum)						
Farmers Lung (see Farmers Lung IgG Antibodies, Serum)						

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	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 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 Farmers Lung IgG Antibodies, Serum)						
Fasting Glucose (see Glucose, Plasma)						
Fat Pad for Amyloid (see Abdominal Fat Pad FNAB for Amyloid Detection)						
Fecal Calprotectin (see Calprotectin, Stool)						

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. References: (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Fecal Occult Blood- **Available for Pediatrics Only**	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 Hemoglobinopathy Screen)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Ferritin, Plasma/Serum	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	Male: 0 <1 month: 150.0 973.0 g/L1 1 <6 months: 8.5 580.0 0 g/L1 6 months <1 year: 14.0 101.1 g/L1 1 <3 years: 6.0 70.0 g/L2 3 <6 years: 12.0 71.0 g/L2 6 <10 years: 15.0 81.0 g/L2 10 <15 years: 14.0 101.0 g/L1 15 <20 years: 20.9 173.0 g/L1 20 <60 years: 30.0 400.0 g/L3 Female: 0 <1 month: 150.0 973.0 g/L1 1 <6 months: 8.5 580.0 0 g/L1 6 months <1 year: 1 (more...)	2008-11-15	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
Fetal Fibronectin fFN	Core	Cervicovaginal swab using the Adeza Biomedical specimen collection kit GENERAL LABORATORY REQUISITION	As required	Negative or Positive	2007-01-18	Patients with suspected or known placental abruption, placenta previa, or moderate or gross vaginal bleeding should not be tested. Positive during second and third trimesters suggests twofold to fourfold higher risk for preterm delivery. 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. Assay interference from the following components has not been ruled out: douches, white blood cells, red blood cells, bacteria, and bilirubin. (more...

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_2 or K_3 EDTA Lavender top Vacutainer tube from the post-partum mother **or** In cases of fetal trauma: Peripheral blood collected in a 4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube from the ante-partum mother. BLOOD TRANSFUSION LABORATORY REQUISITION	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 Fetal Fibronectin)						
Fibrinogen	Core UH & VH	2.7 mL Blue (3.2% Sodium Citrate) Vacutainer tube **Pediatric:** 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	1.7-4.2 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 **on ice** to University Hospital for a fibrinogen level. ≤0.5 g/L Decreased level indicates increased consumption, decreased production or dysfunctional fibrinogen.
Filaria Screen (see Blood Parasite Screen)						
Final Kidney Living donor Crossmatch (see HLA Workup Living Donor Additional or Final)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
FISH Studies Fluorescent In Situ Hybridization	Cytogenetics (VH)	Blood: 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 Bone Marrow: 1-2 mL of bone marrow in a 3 mL Sodium Heparin Vacutainer (dark green top tube) or Lymph Node/Tumor: 2-3 mm2 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 Solution for Specimen Collection: 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 Tacrolimus)						
Flu Screen (see Respiratory Virus Panel (RPCR))						
Fluid Culture (see Body Fluid Culture (excluding blood, CSF, urine))						
Fluids for Cytology Effusion Washing Pleural, Peritoneal, Pericardial, CSF, Ocular	Cytopathology-UH	Body Fluid 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
Flunitrazepam, Urine Qualitative Rohypnol	Toxicology/Special Chemistry	Minimum 10 mL urine collected in a sterile container GENERAL LABORATORY REQUISTION	Monday-Friday: 0800-1600		2011-06-14	
Fluorescent In Situ Hybridization (see FISH Studies)						
Fluoxetine,Serum/Plasma Prozac Norfluoxetine	Core	6 mL Red top Vacutainer tube or 4.5 mL Lavender top tube **Pediatric:** 0-2 years: 2 mL Red top **Avoid gel-separator tubes** GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	**Fluoxetine:** 160-1600 nmol/L Norfluoxetine: 170-1700 nmol/L	2007-08-28	
FMTC (see Familial Medullary Thyroid Carcinoma)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Folate, Red Blood Cells RBC Folate	Core	**Adult:** 4 mL Lavender top (K_2- EDTA) Vacutainer tubes **Pediatric:** 0-2 years: 0.5 mL Lavender top (K_2-EDTA) Microtainer 2-10 years: 3 mL Lavender top (K_2-EDTA) Vacutainer tubes GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	>1475 nmol/L	2017-06-15	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. Freeze whole blood.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Follicle Stimulating Hormone, Plasma/Serum FSH	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	Male: 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: < 1.9 IU/L 5 - 10 years: < 2.3 IU/L Adult: 1.5 - 12.4 IU/L Female: 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: ≤ (μορε...)	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 Bone Marrow Aspirate Examination)						
fPSA (see Free Prostate Specific Antigen, Plasma/Serum)						
Fractionated metanephrines (see Metanephrines, Plasma, Metanephrines, Urine)						
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: http://www.lhsc.on.ca/lab/cytogen 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	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red or Gold top tubes are also acceptable Lavender top (EDTA) tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Male: 20 49 years: 35.0 92.6 % ≥ 50 years: 24.3 72.1 % Female: 20 49 years: 0.3 5.6 % ≥ 50 years: 0.2 3.6 %	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. 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: FAI = total testosterone (nmol/L)/SHBG (nmol/L) expressed as a percentage. (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free Dilantin (see Phenytoin,Serum-Free)						
Free Fatty Acids (see Non-esterified fatty acids)						
Free Kappa Light Chains (see Free Light Chains, Serum/Plasma)						
Free Lambda Light Chains (see Free Light Chains, Serum/Plasma)						
Free Light Chains, Serum/Plasma Free Kappa Light Chains Free Lambda Light Chains Serum Free Light Chains	Clinical Immunology	**Adult:** 5 mL Gold top Vacutainer tube Red, Light Green (Li-Heparin), or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	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	**Note:** 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 Phenytoin,Serum-Free)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free Prostate Specific Antigen, Plasma/Serum fPSA PSA F Free PSA	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	Free PSA (g/L): no reference range available Free PSA ratio: The probability of prostate cancer (PC) is inversely related to the ratio. Exact cut-offs appear to vary with patient age, the presence of benign prostate hypertrophy, and the analytical method (Laboratory Practice Guidelines of the Ontario Society of Clinical Chemists, October 2002).	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.
Free Protoporphyrin (see Porphyrins, Serum/Plasma)						
Free PSA (see Free Prostate Specific Antigen, Plasma/Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free T3, Plasma/Serum Free Triiodothyronine FT3	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	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 > 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	2018-03-06	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. The TSH cut-offs are: 2 <6 years: <0.70 or >5.97 mIU/L (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free T4, Plasma/Serum Free Thyroxine FT4	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	0 - 6 days: 11 - 32 pmol/L 6 days - 3 months: 12 - 28 pmol/L 3 - 12 months: 12 - 26 pmol/L 1 - 6 years: 12 - 23 pmol/L 6 - 11 years: 13 - 22 pmol/L 11 - 20 years: 13 - 21 pmol/L > 20 years: 12 - 22 pmol/L First Trimester of Pregnancy: 12 - 20 pmol/L Second Trimester of Pregnancy: 10 - 17 pmol/L Third Trimester of Pregnancy: 8 - 16 pmol/L	2018-03-06	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. The TSH cut-offs are: 2 <6 years: <0.70 or >5.97 mIU/L (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Free Testosterone (see Free Androgen Index, Plasma/Serum)						
Free Thyroxine (see Free T4, Plasma/Serum)						
Free Triiodothyronine (see Free T3, Plasma/Serum)						
Freeze Blood (see HLA Freeze PBL, HLA Workup Living Donor Pre-op)						
Frozen Section (see Intra-operative consultation)						
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 Follicle Stimulating Hormone, Plasma/Serum)						
FT3 (see Free T3, Plasma/Serum)						
FT4 (see Free T4, Plasma/Serum)						
Fucosidosis (see Alpha-Fucosidase, Leukocyte/Plasma/Fibroblasts)						
Fungus Culture-Dermatophytes Ringworm Tinea	Microbiology (VH)	Hair Nails Skin MICROBIOLOGY REQUISTION	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
Fungus Culture-Systemic or Subcutaneous Candida Monilia Yeast	Microbiology (VH)	-Blood -CSF -Body fluids such as peritoneal, pleural, synovial or fluid Material from abscess, drainage, exudate or pus -Respiratory samples such as sputum, tracheal aspirate or bronchoscopy samples -Swabs from ears, eyes, mouth, throat, vagina -Tissue or biopsy samples	Weekdays (more...)		2008-02-07	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
FVL (see Screen for Factor V Leiden Mutation)						
G-6-PD Assay (see Glucose-6-Phosphate Dehydrogenase Assay)						
G-Banding (see Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor)						
G6PD Assay (see Glucose-6-Phosphate Dehydrogenase Assay)						
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 µmol/L	2006-06-01	Alert value is 140.0 µmol/L. Minimum effective concentration is 12.0 µmol/L. A desirable clinical outcome may be expected between 70.0-120.0 µmol/L. Toxicity may occur with increasing frequency above 146.0 µmol/L.
GALACTOM (Serum) (see Galactomannan Aspergillus Antigen, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Galactomannan Aspergillus Antigen, Fluid - **TESTING IS SUSPENDED** GALTCTOMF (BAL Fluid)	Clinical Immunology	Bronchoalveolar lavage (BAL) fluid GENERAL LABORATORY REQUISITION	Batched twice weekly Monday/Tuesday and Wednesday/Thursdays routinely **Note:** 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	**Test limited to Infectious disease, Hematologists, Respirologists and Microbiologists** NOTE: Outside clients must have pre-authorization by the LHSC microbiologist before sending. Piperacillin/Tazobactam have been associated with false positive results, if deemed a false positive result please contact the microbiologist. Refer to template associated with the report. 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.

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/Thursdays routinely **NOTE:** Samples to be in lab no later than noonMonday and Wednesday.	Index: <0.5 Non-Reactive	2013-11-25	**Test limited to Infectious disease, Hematologists, Respirologists, Microbiologists** NOTE: Outside clients must have pre-authorization by the LHSC microbiologist before sending. Piperacillin/Tazobactam have been associated with false positive results, if deemed a false positive result please contact the microbiologist. Refer to template associated with the report. Send samples to the lab **unopened**. It is imperative that samples have minimal exposure to air before testing. Store (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Galactose-1-Phosphate and Galactose, Erythrocytes Galactosemia	Biochemical Genetics	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric** 0-2 yrs: 3 x 0.5 mL Lavender top 2-10 yrs: 3 mL Lavender top	As required	Galactose-1-Phosphate: 0-50 ug/g Hb Galactose: <5 ug/g Hb	2010-11-26	
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. GENERAL LABORATORY REQUISITION	As required		2010-11-26	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Galactose-6-Sulfatase, Fibroblast MPSIVA Morquio A Disease	Biochemical Genetics	Fibroblast Culture REGIONAL CYTOGENETICS REQUISITION	As required	95-360 nmol/mg protein/17 hr.	2008-06-10	
Galactosemia (see Galactose-1-Phosphate and Galactose, Erythrocytes)						
Galactosemia Screen (see Galactose-1-Phosphate Uridyltransferase-Qualitative, Dried Blood Spot)						
GALTCTOMF (BAL Fluid) (see Galactomannan Aspergillus Antigen, Fluid - **TESTING IS SUSPENDED**)						
Gamma Glutamyl Transferase,Plasma GGT GGTP	Core	4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 yrs:Green top Microtainer (BD 365985) 2-10 yrs. 3 mL Green top 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: <31 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.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gamma-Hydroxybutyrate, Urine-Qualitative Test GHB	Toxicology/Special Chemistry	Random urine GENERAL LABORATORY REQUISTION	Monday - Friday 0800-1600	Negative	2008-06-06	
GAP (see Electrolytes,Plasma)						
Garamycin (see Gentamicin,Serum/Plasma)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Gastrin, Serum	Core	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 2-10 years: 3 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Friday	< 100 ng/L	2017-11-07	Main use is to diagnose Zollinger-Ellison syndrome (gastrinoma). Elevated levels also occur with pernicious anemia, atrophic gastritis, previous vagotomy, renal failure, or use of acid suppressing drugs such as histamine H_2-receptor antagonists or proton pump inhibitors. **Please note: Testing method changed November 7, 2017.** Allow blood to clot at room temperature and separate WITHIN 30 minutes by centrifugation. Transfer serum to a labelled tube, cap tightly, and freeze.

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 Beta-Glucocerebrosidase, Leukocyte/Fibroblasts)						
Gaucher Disease Monitoring (see Chitotriosidase, Plasma)						
GBS Screen (see Group B Streptococcus Screen)						
GC Culture (see Neisseria gonorrhoeae Culture)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Genomic Microarray (see Prenatal Microarray)						
Gentamicin,Serum/Plasma Garamycin Aminoglycosides	Core (VH)	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	Daily	Therapeutic Range: **Trough (Pre Dose):** < = 1.4 mg/L **Peak (Post Dose):** 6-10 mg/L	2010-07-12	
Gestational Glucose Tolerance Test (see Glucose Tolerance Test)						
GGT (see Gamma Glutamyl Transferase,Plasma)						
GGTP (see Gamma Glutamyl Transferase,Plasma)						
GHB (see Gamma-Hydroxybutyrate, Urine-Qualitative Test)						

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 Anti Glomerular Basement Membrane, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Glucagon, Plasma	Core	**Adult:** 4 mL Lavender top Vacutainer tube **Pediatric:** 0-2 years: 2-3 x 0.5 mL Lavender top Microtainers 2-10 years: 3 mL Lavender top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	< 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 >14 days: < or =80 pg/mL (range based on 95% confidence limits)	2014-07-14	
Glucose Tolerance Test GTT Gestational Glucose Tolerance Test	Core	4.5 mL Green top Vacutainer tube 4.5 mL grey top tube **Pediatric:** 0-2 years: 0.6 mL Green pk. 2-10 years: 3 mL Green top 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 tube **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 3 mL Green top GENERAL LABORATORY REQUISITION	As required	**Random** < 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_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5 mL Lavender pk. 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	8.3-17.0 IU/g Hb	2008-11-15	
Glutamic Acid Decarboxylase-65 Antibodies (see Anti Glutamic Acid Decarboxylase)						
Glutethimide,Serum Doriden	Core	5 mL Gold top Vacutainer tube **Avoid gel-separator tubes** 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 Glycoslylated Hemoglobin Hemoglobin A1c HbA1c	Core	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5 mL Lavender pk. 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600h	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	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". **Screening and Diagnosis of Type 2 Diabetes** **HbA1c Result (%) Dysglycemia Category**<5.5Non-diabetic5.5-5.9At Risk6.0-6.4Prediabetes>or=6.5 Diabetes **Therapeutic Targets Adults Results (%) Targets**Less than or = 6.5Adults with (more...)

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. **Pediatric:** 0-2 yrs: Red 0.5pk. 2-10 yrs: 2 mL Red top 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 **For SRA staff when a sample is received at UH:** 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 Glycol Screen)						
Glycoslylated Hemoglobin (see Glycated Hemoglobin)						
GM2 Gangliosidosis (see Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts)						
GMI Gangliosidosis (see Beta-Galactosidase, Leukocyte/Plasma/Fibroblasts)						
Gonorrhoeae culture (see Neisseria gonorrhoeae Culture)						
Gravol (see Diphenhydramine, Urine Qualitative)						
Group and Screen (used for Blood Grouping, Antibody Screen and Crossmatching)	Blood Transfusion	**Pediatric <4 months:** 1 mL Lavender (EDTA)**Infants >4 months and <3 years:** 2 mL Lavender (EDTA) top **Children >3 years and Adults:** 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 Group B Streptococcus Screen)						

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 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	**Adult:** 4.5 mL Light Green (Li-Heparin) top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Male: 0 10 years: ≤ 6.3 g/L* 11 17 years: ≤ 10.8 g/L* 21 77 years: ≤ 2.5 g/L* Female: 0 10 years: ≤ 7.8 g/L* 11 17 years: ≤ 8.1 g/L* 21 77 years: ≤ 9.9 g/L* *Basal levels of growth hormone do not have diagnostic relevance. Stimulation or suppression tests are needed to diagnose a growth hormone-related disorder. Children: ≥ 6 g/L followin (more...)	2017-08-14	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. This assay is affected by pegvisomant (a highly selective growth hormone receptor antagonist). This assay is not suitable for pregnant women due to cross-reactivity with placental growth hormone.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
GSDII (see Alpha-Glucosidase, Dried Blood Spot, Alpha-Glucosidase, Fibroblasts)						
GTT (see Glucose Tolerance Test)						

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 Smeared 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. **Unlabelled slides cannot be processed**

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 Helicobacter Serology)						
H. Pylori Breath Test **test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener** 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 Hemochromatosis HFE gene)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Haldol (see Haloperidol)						
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	**Adult:** 4.5 mL Green (Lithium Heparin) top Vacutainer or 5 mL Gold top Vacutainer tube **Pediatric:** 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	Daily	0-<15 days: 0.00-0.12 g/L 15 days-<1 year: 0.00-2.38 g/L 1-<12 years: 0.00-1.76 g/L 12-<19 years: 0.00-1.93 g/L >19 years: 0.30-2.00 g/L	2010-01-11	Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes. May be decreased in intravascular hemolysis and in hepatocellular damage, haptoglobin is an acute phase protein.
HbA1c (see Glycated Hemoglobin)						
Hbe (see Hepatitis Be Antigen)						
HBe Ag (see Hepatitis Be Antigen)						
HBsAg (see Hepatitis B Surface Antigen)						
HBV Viral Load (see Hepatitis B DNA Viral Load)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
hCG (see Chorionic Gonadotropin (Quantitative), Plasma/Serum, Chorionic Gonadotropin, Fluid)						
HCR (see Hemochromatosis HFE gene)						
HCV (see Hepatitis C Antibody)						
HCV Viral Load - pre-treatment (see Hepatitis C RNA - Quantitative)						
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	
Helicobacter Serology H. pylori	Microbiology (VH)	5 mL Gold or 6 mL Red top Vacutainer tube tube PUBLIC HEALTH LABORATORY TEST REQUISITION	Referred out weekdays to Public Health Laboratory		2009-02-22	
Hematocrit (HCT) (see Complete Blood Count)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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 Complete Blood Count)						
Hemoglobin A1c (see Glycated Hemoglobin)						
Hemoglobin A_2 (see Hemoglobinopathy Screen)						
Hemoglobin Electrophoresis (see Hemoglobinopathy Screen)						
Hemoglobin F (Fetal) (see Hemoglobinopathy Screen)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hemoglobin Gene Sequencing HGS	Clinical Immunology	Peripheral Blood 4 mL K2 or K3 EDTA Lavender top Vacutainer tube 5 mL Red top Vacutainer tube **Pediatric:** 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 Hemoglobinopathy Screen)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hemoglobinopathy Screen Hemoglobin F (Fetal) Hemoglobin A_2 Hemoglobin Electrophoresis Hemoglobin H Ferritin Level	Clinical Immunology	Peripheral Blood 4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube 5 mL Red top Vacutainer tube **Pediatric:** 0-2 years: Lavender 1.0 pk., Red 0.5 pk 2-10 years: 2 mL Lavender top, 2 mL Red top GENERAL LABORATORY REQUISITION	Bi-weekly	**Hb A:** 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 **Hb F:** 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 **Hb A2:** 2.0-3.3 **Hb H:** 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	
Hepadsorb,Plasma	Core	2.7 mL Blue (3.2% Sodium Citrate) Vacutainer tube **Pediatric:** 0-10 yrs: 1.8 mL Blue (3.2% Sodium Citrate) GENERAL LABORATORY REQUISITION	As required	See report		Hepadsorbed APTT's will not be performed on any patients receiving heparin therapy. Done at Laboratory's discretion to confirm heparin contamination in investigation of prolonged APTT. Can be done off an INR/PTT tube.

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 **Pediatric:** 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** GENERAL LABORATORY REQUISITION	As authorized, Monday to Friday 0800-1600, unless otherwise requested by a Hematologist.	See report	2009-06-10	Please direct any questions or concerns to: Hematology Scientist 519-685-8500 x 55402 Pager 17716 All test requests, regardless of whether the patient is an adult or pediatric, **must be authorized by a Hematologist** by paging the adult or pediatric Hematologist on call through switchboard. It is the responsibility of the Hematologist or Pediatrician to communicate their decision to the HATLAB. Blue (Sodium Citrate) top tubes sho (more...)

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 REGIONAL CYTOGENETICS REQUISITION	As required	25-75 nmol/mg protein/17 hr.	2008-06-10	
Hepatitis A Antibody IgG Anti HAV IgG Hepatitis Anti HAV IgG	Core (UH)	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	See report	2007-05-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis A Antibody IgM anti HAV IgM Hepatitis anti-HAV IgM	Core (UH)	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	See report	2007-05-01	
Hepatitis Anti HAV IgG (see Hepatitis A Antibody IgG)						
Hepatitis anti-HAV IgM (see Hepatitis A Antibody IgM)						
Hepatitis B Antiviral Resistance - HEPBAR	Microbiology (VH)	5 mL Gold top Vacutainer tube **(A minimum 1 mL of serum)** Please completely fill out this Hepatits 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 CORE Anti HBc (IgG + IgM)	Core (UH)	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	See report	2007-05-01	
Hepatitis B Core IgM Antibody	Core	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 yrs: Gold 0.5pk. 2- 10yrs: 2 mL Gold top PUBLIC HEALTH REQUISITION	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)	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h			
Hepatitis B DNA Viral Load HBV Viral Load	Microbiology (VH)	2 x 5 mL Gold top Vacutainer tube HEPATITIS PCR REQUISITION	Referred out to Toronto Public Health Laboratory		2010-09-28	
Hepatitis B Surface Antibody AUSAB Australian Antibody Immune Status for Hepatitis B	Core (UH)	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	Negative = 0 Indeterminate = 1-10 Immune = >10		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis B Surface Antigen HBsAg HpBsAg	Core (UH)	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	See report	2007-05-01	
Hepatitis Be Antibody	Core (UH)	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION or PUBLIC HEALTH LABORATORY TEST REQUISITION	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)	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	See report	2007-05-01	Tested once per week in UH Core Laboratory. Early indicator of acute Hepatitis B representing the most infectious period. Usually short-lived (3-6 weeks). Persistence of e antigen in the acute stage beyond 10 weeks is indicative of progression to chronic carrier state and probable liver disease.
Hepatitis C Antibody HCV HpCab Anti HCV	Core (UH)	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Monday - Friday 0800 - 1600 h	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		f 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 PCR (see Hepatitis C RNA - Qualitative ****NO LONGER AVAILABLE****)						
Hepatitis C RNA - Qualitative ****NO LONGER AVAILABLE**** Hepatitis C PCR	Core		STAT requests must be pre-arranged with the Medical Microbiologist.			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis C RNA - Quantitative Quantitative RNA HCV Viral Load - pre-treatment PCR Quantitative	Microbiology	Serum: 2 x 5 mL Gold **or** 6 mL Red Vacutainer tubes Plasma is also acceptable Plasma: 2 x 4.5 mL Lavender **or** 6 mL Pink top EDTA tubes HEPATITIS C (HCV) RNA REQUISITION	Referred out to the Toronto Public Health Laboratory		2008-12-22	
Hepatitis D Antibody	Core (UH)	**Adult:**5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	Referred out Monday-Friday	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Hepatitis Donor Transplant Screen Donor Screen	Core (UH)	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 yrs: Gold 0.5pk. 2-10 yrs: 2 mL Gold top GENERAL LABORATORY REQUISITION	As required	See individual tests		Tested only at UH Core Lab. **ALL POSITIVES phoned to Attending physician** Sample will be tested for Hepatitis B surface antigen, Hepatitis B core antibody (total), Hepatitis C antibody, HIV, Cytomegalovirus, RPR (screening test for syphillis), HTLV 1/2 and West Nile Virus.
Hepatitis/HIV testing on **exposed individual** of needle stick injury or exposure to blood/body fluids. (see Needle Stick Injury - Victim)						
Hepatitis/HIV testing on **source** of needlestick injury or blood/body fluid exposure. (see Needle Stick Injury - Source)						
Heptacarboxylic Acid (see Porphyrins, 24-Hour Urine, Porphyrins, Urine, Random)						
Hereditary Cancer - Breast/Ovarian (see Breast Cancer (BRCA1 and BRCA2 Screening))						
Hereditary Colorectal/Gastric Cancer (see Colon Cancer (Proband))						

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 condition1,2. 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_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Lavender pk. 2-10 years: 3 mL Lavender top 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 Heterophile Antibody Screen)						

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_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5 mL Lavender pk. 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION	As required	Negative		
Hexacarbolic Acid (see Porphyrins, 24-Hour Urine, Porphyrins, Urine, Random)						
Hexosaminidase (see Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts)						
HFE (see Hemochromatosis HFE gene)						
hGH (see Growth Hormone, Plasma/Serum)						
HGS (see Hemoglobin Gene Sequencing)						
High Density Lipoprotein Cholesterol (see Cholesterol-HDL,Plasma)						
High Resolution Banding (see Chromosome Analysis, Blood)						
High Risk Obstetric Human Immunodeficiency Virus (see HIV - High Risk Obstetrical/High Risk IV Drug User)						

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)						

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 **Pediatric:** 2-10 yrs: 3 mL green top tube GENERAL LABORATORY REQUISITION	As required	≤ 14 ng/L	2012-02-01	**Please note that the hs-TnT reporting units are ng/L.** 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 https://lhsc.omni-assistant.net/lab/Document/DocumentDownloader.aspx?Df_Guid=e595a48b-3d88-4f5d-97ac-07a64fc0fd22
HIST (see Anti Histone Group,Serum)						

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	Testing restricted to Infectious Diseases (ID) service following a Microbiologist consultation. Positive Below the Limit of Quantification: Results above the cutoff for positivity, but below 0.4 ng/mL fall outside the linear range of the assay. These results are positive, but not accurately quantifiable. Positive: 0.4-19.0 ng/mL Positive Above the Limit of Quantification: Results greater than 19.0 ng/mL fall outside the linear range of the assay. These results are positive, but not accurately quantifiable. Routine

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Histoplasma Culture (see Fungus Culture-Dimorphic)						
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 Heparin Induced Thrombocytopenia)						
HIV - High Risk Obstetrical Patients (see HIV - High Risk Obstetrical/High Risk IV Drug User)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HIV - High Risk Obstetrical/High Risk IV Drug User HIV - High Risk Obstetrical Patients High Risk Obstetric Human Immunodeficiency Virus	Core (UH)	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	As needed		2012-11-13	Tested only at UH Core Lab. **High Risk Obstetrics:** 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. **Note:** This test is only available in the High Risk Obstetrical Powerplan Module

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 **STAT** weekdays to Public Health Laboratory	See report	2010-09-28	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. 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. Document time sample is separated on the requisition.
HIV Antibody (see HIV Serology, Routine - HIV 1 and 2)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HIV PCR	Microbiology	**Adult:** 5 mL Lavender EDTA top Vacutainer tube **Pediatric:** 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 - **Transplant** Human Immunodeficiency Virus	Core (UH)	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	Weekdays		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	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. 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. A specimen with a borderline or reactive result on an HIV screen test will proceed to confirmatory testing according to the HIV testing algorithm. For more information on HIV testing for Transplant pat (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HIV/Hepatitis on **exposed individual** of needle stick injury or exposure to blood/body fluids. (see Needle Stick Injury - Victim)						
HIV/Hepatitis testing on **source** of needlestick injury or blood/body fluid exposure. (see Needle Stick Injury - Source)						
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 paeds) 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 TRANSPLANT LABORATORY REQUISITION	Monday to Friday	cPRAs: 0-100% (HLA Antibody Testing) HLA Typing: see report Autologous Crossmatch: Negative / Borderline / Positive	2020-06-29	Patients that are being assessed for placement on the LHSC Heart 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. 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...)

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	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. 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...)

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/StemCell Histocompatibility-Donor BoneMarrow/StemCell 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. **Paediatric Patients:** <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/StemCell Histocompatibility-Recipient BoneMarrow/StemCell 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. **Paediatric Patients:** <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 HLA Typing Case (ABCD))						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Confirmatory Typing- Donor	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. **Paediatric Patients:** <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	BM/SC transplant workups are coordinated by the Bone Marrow Transplant Coordinator who can be contacted via the LHSC switchboard (519-658-8500) 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. A low resolution HLA Class I typing will be performed. The results must match the original testing.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Confirmatory Typing- Recipient	Transplant	4 x 4 mL Lavender (EDTA) top Vacutainer tubes Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients. **Paediatric Patients:** <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	BM/SC transplant workups are coordinated by the Bone Marrow Transplant Coordinator who can be contacted via the LHSC switchboard (519-658-8500) 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. A low resolution HLA Class I typing will be performed. The results must match the original HLA typing obtained on the previous sample.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Disease Association HLA Pharmacogenomics	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. **Paediatric Patients:** <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	See report	2020-06-29	You will be prompted to indicate the antigen and disease of interest when the HLA Disease Association order is selected. **Antigen/Allele of InterestDisease Comments** A29Birshot/UveitisB27 Ankylosing SpondylitisOrder HLAB27 TestB51BehcetDQ2/DQ8CeliacOrder HLA Celiac InvestigationDQB1*06:02Narcolepsy **Antigen/Allele of InterestDisease Comments** B*57:01Abacavir HypersensitivityB*15:02Carbamazepine Hypersensitivity(Asians)A*31:01Carbamazepine Hypersensitivity/SJS(Caucasians)B*5 (more...)

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	This test should only be ordered when following a patient in a London transplant program. Contact the Transplant Laboratory to discuss other situations. (519-663-3320) Antibodies directed against donor HLA antigens may predict a risk of rejection

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. Donor Requirements: 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 HLA Assessment-Liver Recipient)						
HLA Monthly Serum (see HLA Antibody Screen)						
HLA Pharmacogenomics (see HLA Disease Association)						

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	cPRAs: 0-100% (HLA Antibody Testing) DSA detected or not detected Antibodies with MFI>5000 reported as unacceptable Only strong (unacceptable) will be used to calculate cPRA SUBJECT TO CHANGE Antibodies with 5000>MFI>1000 will be reported as weak/indeterminate. SUBJECT TO CHANGE	2020-06-29	Patients that are being prepared for a Liver Transplant should have this pre-op test ordered prior to transplant. Interpretive CommentsAnti-HLA antibodies indicate sensitization to potential organ donors and some blood products. Antibodies directed against donor HLA antigens may predict a risk of rejection

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	This sample may be used in the prospective/retrospective flow crossmatch and updated SAB testing may be performed. All samples will be archived for possible testing at a later date.	cPRAs: 0-100% (HLA Antibody Testing) DSA detected or not detected	2020-06-29	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 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. 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

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	This sample will be one of the samples used for a flow cytometer crossmatch against a living donor. In addition the sample may be used for cPRA or DSA testing as outlined in the program-specific polices. A positive crossmatch may indicate the presence of anti-donor antibodies. 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

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	2 x 4 mL Lavender (EDTA) top Vacutainer tubes Note: Increase collection volumes if leukocyte count is low, smaller volumes apply for paediatric patients. **Paediatric Patients:** <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			This test is performed in preparation for receiving HLA matched platelets. Results will be faxed upon request.

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. **Paediatric Patients:** <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	Adult Donor blood for a workup involving a kidney or kidney/pancreas transplant (+/- other organs): 10 x 8.5 mL ACD (Solution A) (yellow tops)* 2 x 4 mL Lavender EDTA top Vacutainer tube Adult Donor 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...)	As required		2020-06-29	**Stat T.A.T:** Prospective HLA Typing: 4 to 5 hours from when the technologist is notified and samples are available for testing. 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 A deceased donor situation must be coordinated by TGLN and/or the local Donor Coordinators/Donor Transplant Specialists. TGLN: 1-877-363-8456 Local Donor Coordinators: (more...)

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	Donor Requirements: 14 x 6mL 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	Living Donor Crossmatch: Negative / Borderline / Positive	2020-06-29	Living donor transplant workups are coordinated by the Living Donor Transplant Coordinator who can be contacted via the LHSC switchboard (519-658-8500). 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.

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HLA Workup Living Donor Pre-op Freeze Blood	Transplant	Donor Requirements: 6 x 6mL 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			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
Homocysteine Total Homocysteine	Core (UH)	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Note: Specimens not placed on ice immediately may exhibit a 10-20% increase in concentration.** GENERAL LABORATORY REQUISITION	Thursdays	Male: 5.1 15.4 umol/L Female: 4.4 13.6 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.

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. **Random urine testing available for pediatric patients only.** GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	**Random Urine (mol/mmol creatinine)** 0 - 2 years: ≤ 20.2 2 - 4 years: ≤ 13.6 5 - 9 years: ≤ 9.4 10 - 19 years: ≤ 7.9 > 19 years: ≤ 4.7 **24-hour Urine (mol/day)** 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. **For STAT requests, please call the toxicology lab at ext. 64664 to make arrangements.** For 24-hour urine collections, transfer an aliquot of the measured urine to a 5-mL Greiner tube.
HpBsAg (see Hepatitis B Surface Antigen)						
HpCab (see Hepatitis C Antibody)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HPT (see Haptoglobin, Plasma)						
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	Cytopathology Laboratory UH Room A3-242 UH (519) 685-8500 x 36391/36392 Clinical history is an important component for diagnostic interpretation The specimen is ThinPrep processed and must be collected in specific Gyn collection containers (PreservCyt)
hs-TnT (see High Sensitivity Troponin T)						
hsCRP (see High Sensitivity C-Reactive Protein)						
HSN1 (see Hereditary Sensory Neuropathy)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
HTLV Serology (HTLV 1 / 2) Human T-cell Leukemia/Lymphoma Virus	Microbiology (VH)	5 mL Gold top or 6 mL Red top Vacutainer tube PUBLIC HEALTH HIV SEROLOGY 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 Growth Hormone, Plasma/Serum)						

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 plasma is required) or CSF - Encephalitis cases only (minimum 500uL CSF) **must** be accompanied by one 5 mL Lavender top tube) HHV6 Requisition	Referred out weekly to the National Microbiology Laboratory	See report	2010-09-28	Should you need more information on HHV6 testing, please contact the Viral Exanthemata Lab 204-789-6085 or fax 204-789-5009.
Human Immunodeficiency Virus (see HIV Serology - **Transplant**)						
Human T-cell Leukemia/Lymphoma Virus (see HTLV Serology (HTLV 1 / 2))						
Hunter Syndrome (see Iduronate-2-Sulfate Sulfatase, Leukocytes/Plasma/Fibroblasts)						
Hurler Syndrome (see Alpha-Iduronidase, Leukocyte/Plasma/Fibroblasts)						
HVA (see Homovanillic Acid, Urine)						

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.	**TEST NO LONGER AVAILABLE**		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)	**Adult:** 5 x 2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tubes **and** 2 x 4 mL Lavender (EDTA) top Vacutainer tubes **Pediatric:** 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** **and** one 4 mL Lavender (EDTA) top Vacutainer tube GENERAL LABO (more...)	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 Paramyotonia Congenita Hyperkalemic Periodic Paralysis)						
Hypersensitivity Pneumonitis (see Aspergillus fumigatus IgG Antibodies, Farmers Lung IgG Antibodies, Serum)						
Hypoxanthine-Guanine Phosphoribosyl Transferase, Whole blood Lesch-Nyhan Syndrome	Biochemical Genetics	6 mL Green (Sodium Heparinized) top Vacutainer tube GENERAL LABORATORY 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 Immune Complexes)						

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

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

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 Reference Intervals Based on Tanner Stage: 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. **Note:** Specimens from outside LHSC/SJHC will be accepted.

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
IgG Subclasses, Serum/Plasma IgG subtypes IgG subsets IgG1 IgG2 IgG3 IgG4	Clinical Immunology	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	**Subclass IgG1 g/L:** 0-<2 years: 1.94-8.42 2-<4 years: 3.15-9.45 4-<6 years: 3.06-9.45 6-<8 years: 2.88-9.18 8-<10 years: 4.32-10.20 10-<12 years: 4.23-10.60 12-<14 years: 3.42-11.50 14-<18 years: 3.15-8.55 ≥18 years: 3.82-9.29 **Subclass IgG2 g/L:** 0-<2 years: 0.23-3.00 2-<4 years: 0.36-2.25 4-<6 ye (more...)	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 IgG Subclasses, Serum/Plasma)						
IgG subtypes (see IgG Subclasses, Serum/Plasma)						
IgG/Alb CSF/Serum Ratio (see CSF Index)						
IgG1 (see IgG Subclasses, Serum/Plasma)						
IgG2 (see IgG Subclasses, Serum/Plasma)						
IgG3 (see IgG Subclasses, Serum/Plasma)						
IgG4 (see IgG Subclasses, Serum/Plasma)						
IgM (see Immunoglobulin M, Plasma/Serum)						
IgM antibodies to AGM1 (see Anti GM1, IgM serum)						
IgM antibodies to Asialo GM1 (see Anti GA1 IgM, Serum)						
IgM antibodies to Ganglioside Monosialic Acid (see Anti GM1, IgM serum)						
IgM vs Asialo-GM1 (GA1) (see Anti GA1 IgM, Serum)						
IgM vs GA1 (see Anti GA1 IgM, Serum)						

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	**Non-Gynaecological: Aspiration Biopsy** 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 **lymphoma**, 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	**Toxic:**Imipramine + Desipramine : Greater than 1800 nmol/L

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 **Pediatric:** 0-2 yrs: Red 1.0 pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Batch Analysis once/20 business days	Negative: ≤19 RU/mL	2010-01-11	This assay DOES NOT quantitate C1q protein. Results higher than top standard will be reported as >200 RU/mL. 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. 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immune Status for Hepatitis B (see Hepatitis B Surface Antibody)						
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 **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Interpretative analysis	2009-02-27	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 ≥ 4 years. IFE uses specific antisera to identify monoclonal immunoglobulins.

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	Protein electrophoresis (PEL) is always performed first (unless the total protein concentration in the urine sample is < 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 ≥ 4 years. IFE uses specific antisera to identify monoclonal immunoglobulins.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunoglobulin A, Plasma/Serum IgA	Core	**Adult:** 4.5 mL Light Green top Vacutainer tube (5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube are also acceptable) **Pediatric:** 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Daily	<1 year: 0.0-0.1 g/L 1-<3 years: 0.0-0.8 g/L 3-<6 years: 0.1-1.4 g/L 6-<14 years: 0.3-2.2 g/L 14-<19years: 0.4-2.9 g/L Adult: 0.7-4.0 g/L	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 **Pediatric:** 0-2 yrs: Red 0.5pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Referred out Thursdays as required	7.7-132.1 mg/L	2010-03-12	
Immunoglobulin E, Allergen Specific (see Allergen Specific IgE, Serum)						

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) **Pediatric:** 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Batch analysis	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	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Immunoglobulin G, Plasma/Serum IgG	Core	**Adult:** 4.5 mL Light Green top Vacutatiner tube (5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube are also acceptable) **Pediatric:** 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Daily	0-<15 days: 3.2-12.1 g/L 15 days-<1 year: 1.5-6.3 g/L 1-<4 years: 3.2-9.9 g/L 4-<10 years: 5.0-11.7 g/L 10-<19 years: 6.0-13.1 g/L Adult: 7.0-16.0 g/L	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	**Adult:** 1.0 mL of CSF and a 5 mL Gold or 6 ml Red top Vacutainer 0-2 years: 0.5 mL Gold or Red Microtainer 2-10 years: 3 mL Gold or Red Vacutainer tube GENERAL LABORATORY REQUISITION	Daily	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	**Adult:** 4.5 mL Light Green Vacutainer tube (5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube are also acceptable) **Pediatric:** 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top tube GENERAL LABORATORY REQUISITION	Daily	0-<15 days: 0.0-0.3 g/L 15 days-<13 weeks: 0.1-0.7 g/L 13 weeks-<1 year: 0.1-0.8 g/L 1-<19 years: 0.5-1.8 g/L (Female) 1-<19 years: 0.4-1.4 g/L (Male) Adult: 0.4-2.3 g/L	2010-01-11	Serum IgG, IgA, and IgM are tested simultaneously as a group.
Immunoreactive trypsin (see Trypsin/Trypsinogen, Serum)						
Immunoreactive trypsinogen (see Trypsin/Trypsinogen, Serum)						
Infectious Mononucleosis (see Epstein Barr Virus Serology, Heterophile Antibody Screen)						
Influenza Virus (see Respiratory Virus Panel (RPCR))						

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 HLA Workup Living Donor Initial)						
Inorganic Phosphate (see Phosphate, 24-Hour Urine, Phosphate,Plasma, Phosphate,Urine-Random)						
Inorganic Phosphate (fluid) (see Phosphate,Fluid)						
Inorganic Phosphorus, PO4 (see Phosphate,Plasma)						

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 **Pediatric:** 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	**PT results will not be released on patients. For the INR based Maddrey Score please use the following link:** 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: ≥ 4.5 PTT: ≥100 (for patients NOT on anticoagulants) 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	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Light Green (Li-Heparin) or Lavender (EDTA) top tubes are **NOT** recommended GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	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
Insulin-Like Growth Factor Binding Protein 3 (see IGFBP3, Serum)						

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

Insulin-Like Growth Factor, Serum
Somatomedin C
IGFI
IGF-1
	Endocrinology	**Adult:**
		5 mL Gold or Red top Vacutainer tube
		
		Pediatric:
		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 **NOT** acceptable
		GENERAL LABORATORY REQUISITION
			Monday- Friday
			0800-1600
				Age
				(years) &nb
				sp &
				nbspMale
				(g/L)
				  &nb
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				nbsp&n (more...)
					2014-11-17	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Intact Parathyroid Hormone (see Parathyroid Hormone, Plasma)						
Intact PTH (see Parathyroid Hormone, Plasma)						
Integrated Prenatal Screen (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
International Normalized Ratio (see INR)						
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 **unused** 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 Calcium-Ionized, Whole blood)						
IPS (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
Iron Binding Capacity Saturation (see Unsaturated Iron Binding Capacity)						
Iron Overload (see Unsaturated Iron Binding Capacity)						
Iron Overload Screen (see Transferrin Saturation)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Iron,Plasma	Core UH & VH	4.5 mL Green top Vacutainer **Pediatric:** 0-2 yrs: 0.6 mL Green pk. 2-10 yrs: 3 mL Green top GENERAL LABORATORY REQUISITION	As required	Male: 8-29 µmol/L Female: 7-26 µmol/L	2008-11-15	Plasma samples containing RBC hemolysate may have slightly increased iron values. Useful in confirming the diagnosis of iron-deficiency anemia or hemochromatosis. Assessment of patients with acute iron poisoning. Serum ferritin is the preferred method for assessing iron stores. The concentration of iron in serum/plasma is dependent on the diet and is subject to circadian variations. Values are higher in A.M. Increased levels found with liver damage, hemoylytic anemia, pernicous anemia, hemochromat (more...)

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	**Liver:** 3.6-35.8 µ mol/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.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Iron,Urine	Trace Elements	24 hour urine collected in an **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0.02-0.24 µmol/L µmol/mol creatinineAgeFemaleMale0-112.0-28.42.0-27.112-191.3-17.31.3-16.820-291.5-19.51.1-14.930-391.8-23.61.3-17.440-492.1-28.01.4-18.350-592.5-33.11.6-21.160-692.5-32.61.7-22.170-792.6-34.01.8-23.8≥ 803.1-41.82.0-27.1 24 Hour Urine: 0.05-0.36 µmol/d Conventional Units: (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
Islet Cell Antibodies (see Anti Islet Cell Antibodies, Serum)						
Isopropanol (see Alcohol Fractionation (by Gas Liquid Chromatography))						
JAK2(V617F) (see Polycythemia Vera)						
JC (see Polyoma Virus)						
Karyotype (see Chromosome Analysis, Blood, Chromosome Analysis, Bone Marrow/Blood Oncology Studies, Chromosome Analysis, Lymph Node/Tumor)						
Keppra (see Levetiracetam)						
Ketones (see Beta Hydroxybutyrate, Plasma/Serum)						
Ketones, Fluid	Core	Fluid or CSF GENERAL LABORATORY REQUISITION	Weekdays	Negative	2009-09-08	For Urine Ketones order DIPU
Kidney (see Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
Kidney Biopsy (see Renal Biopsy)						
Kleihauer (see Fetal Maternal Hemorrhage Screen)						
Krabbe Disease (see Beta-Galactocerebrosidase, Leukocyte/Fibroblasts)						
KRAS ERAS NRAS	Molecular Diagnostics	FFPE Refer to Pathology	Monday to Friday 0800-1600h	See report		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
L-Asparaginase Asparaginase Activity	Core	4 mL Lavender top Vacutainer tube L-ASPARAGINASE 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 **Pediatric:** 0-2 yrs:Green top Microtainer (BD 365985)< 2-10 yrs: 2 mL Green top 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 lU/L.
Lactate,CSF	Core	CSF GENERAL LABORATORY REQUISITION	As required	See report		RBC hemolysis may cause interference (xanthochromia) with results.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lactate,Plasma	Core UH & VH	6 mL Grey top Vacutainer tube **Pediatric:** 2-10 yrs: 2 mL Grey top Microtainer (BD 365992) GENERAL LABORATORY REQUISITION	As required	0.50-2.20 mmol/L	2008-11-15	Hemolyzed, lipemic and icteric samples may cause interference with results. Increased in sustained hypoxia and several metabolic disorders. Lactic acidosis is a frequent cause of increased anion gap. **Centrifuge and separate plasma within 15 minutes of blood collection.**
Lactate-D (see D-Lactate,Serum)						
Lactate: Pyruvate Ratio (see Pyruvate, Whole Blood)						
Lactate:Pyruvate Ratio (see Pyruvate, CSF)						
Lamictal (see Lamotrigine,Serum)						

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 Digoxin)						
LATS (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						
LBP (see Gynaecological Liquid Based PAP test for Cytology, HPV testing, for Gynaecological Liquid Based PAP test (Cytology),)						
LCFA (see Long Chain Fatty Acids,Plasma/Serum)						
LD (see Lactate Dehydrogenase,Plasma)						
LD Isoenzymes (see Lactate Dehydrogenase Isoenzymes (serum))						
LDH (see Lactate Dehydrogenase,Plasma)						
LDL (see Cholesterol-LDL,Plasma)						

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 µ mol/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,Urine	Trace Elements	24 hour urine collected in an **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0-14.5 nmol/L µmol/mol creatinineAgeFemaleMale0-110-1.720-1.6512-190-1.050-1.0220-290-1.190-0.9030-390-1.430-1.0640-490-1.700-1.1150-590-2.010-1.2860-690-1.980-1.3470-790-2.070-1.45≥ 800-2.540-1.65 24 Hour Urine: 0-19.3 nmol/d Conventional Units: 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
Lead,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): **Reference Range** All ages: 0.00-0.10 µmol/L **Alert Value:**0-16 years:>0.12 µmol/L**Action Value:**0-16 years:>0.48 µmol/L>=17 years:>1.00 µmol/L Conventional Units: **Reference Range**All ages:0.0-20.0 µgl/L**Alert Value:** 0-16 years:>25.0 µg/L**Action Value:**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
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		For more information click on: Molecular Diagnostic Laboratory N/A Please note that these samples will be subjected to direct mutational analysis which may not account for all cases of the disease diagnosed. Further information will be supplied with the test result. Analysis: Lebers hereditary optic neuropathy (LHON), is a maternally inherited disease resulting in optic nerve degeneration and cardiac dysrhythmia**1**. Three mitochondrial DNA point mutations (nt.#3460G>A, nt.#11778G>A and nt.#14484T>C (more...)

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			
Leishmania (see Ova and Parasites-Blood and Tissue)						
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 Hypoxanthine-Guanine Phosphoribosyl Transferase, Whole blood)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Leukemia/Lymphoma Investigation	Flow Cytometry (VH)	Bone marrow collected in K_2 EDTA **(preferred for Acute Leukemia and Lymphoma)** or Peripheral blood collected in a 4 mL Lavender K_2 EDTA top Vacutainer tube **(preferred for Chronic Leukemia)** 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.	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.	2006-06-01	
Leukocyte Count (LKC) (see Complete Blood Count)						
Leukocyte Cystine (see Cystine, Leukocyte)						
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 Luteinizing Hormone, Plasma/Serum)						
LHON (see Leber's Hereditary Optic Neuropathy, Mitochondrial Genome Sequencing and Depletions/Integrity Pane)						
Li (see Lithium,Serum)						
Li-Fraumeni Syndrome (see P53 Carrier Testing)						

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lipase	Core (all sites)	4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 yrs: Green 0.5 pk. 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	As required	13-60 U/L	2014-06-02	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
LIPID LADEN MACROPHAGE INDEX for OIL RED O- Respiratory and Exfoliative Samples for Cytology Bronchoalveolar lavage (BAL) for LLM -Oil Red O	Cytopathology-UH	Non-gynecological: Respiratory BAL CYTOLOGY REQUISITION-Non Gynecological Area	Weekdays	See report	2019-06-07	Specimens procured at VH- CALL ext. 55410 to alert the cytotechnologist. DELIVER fresh sample directly to VH, Rm. D2-700, Pathology Attention: CYTOLOGY 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.

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 **Pediatric:**0-2 years: 0.5 mL Green pk. 2-10 years: 1 mL Green top GENERAL LABORATORY REQUISITION	Weekdays	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 Lipoprotein (a))						
Lipoprotein a (see Lipoprotein (a))						
Lipoprotein Fractionation: Electrophoresis **TEST NO LONGER AVAILABLE** Lipoprotein Phenotyping	Core	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out as required	See report	2005-07-01	Referred out weekdays Report will include description of Electrophoretic Profile (alpha, pre-beta and chylomicron fractions), Total Cholesterol, Triglycerides and Lipoproteinemia Phenotyping.
Lipoprotein Phenotyping (see Lipoprotein Fractionation: Electrophoresis **TEST NO LONGER AVAILABLE**)						
Liquid based PAP test (Cytology) (see HPV testing, for Gynaecological Liquid Based PAP test (Cytology),)						
Liquid based PAP test for Cytology (see Gynaecological Liquid Based PAP test for Cytology)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Lithium,Serum Li	Core (VH)	5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: Red 0.5 pk 2-10 years: 2 mL Red top Vacutainer GENERAL LABORATORY REQUISITION	As required	0.5-1.1 mmol/L	2008-11-15	The light metal, lithium, was discovered in mineral compounds, by August Arfvedson in 1817 and electrolyticly 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. **Toxic:**>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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Liver (see Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
Long Acting Thyroid Stimulator (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						
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_2 or K_3 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-**Qualitative** 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 Cholesterol-LDL,Plasma)						
Lp(a) (see Lipoprotein (a))						
Lpa (see Lipoprotein (a))						
Ludiomil (see Maprotiline,Serum/Plasma)						
Luminal (see Phenobarbital,Serum/Plasma)						
Lung (see Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Luteinizing Hormone, Plasma/Serum LH	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	Male: Tanner stage 1: ≤ 1.30 IU/L Tanner stage 2: ≤ 2.91 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 Female: Tanner stage 1: < 0.31 IU/L Tanner stage 2: ≤ 4.01 IU/L Tanner stage 3: ≤ 7.93 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...)	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
Lyme Disease Antibody Borrelia burgdorferi	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 Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
Lymphocyte Mitogen (see Lymphocyte Proliferation)						
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 either Thursday or Friday 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_2 or K_3 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 Differential Leukocyte Count (Peripheral Blood))						
Lymphocytosis Investigation (Peripheral Blood)	Flow Cytometry (VH)	Peripheral blood collected in a 4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5 mL Lavender Microtainer 2-10 yrs: 3 mL Lavender top 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 Chromosome Analysis, Lymph Node/Tumor)						

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 Acid Lipase)						
M. faeni (see Farmers Lung IgG Antibodies, Serum)						

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

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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0.6-4.9 mmol/L mmol/mol creatinineAgeFemaleMale0-1170-58770-56012-1945-35743-34720-2951-40439-30830-3961-48845-36040-4973-58047-37950-5986-68555-43660-6984-67657-45770-7988-70562-493>80108-86570-560 24 Hour Urine: 1.0-7.0 mmol/d Conventional Units: 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	Monday - Friday	**24 hour urine:** 2.50-8.50 mmol/24h	2011-01-24	Reference Ranges are based on Non-Occupationally exposed population. Useful to confirm suspected urinary magnesium loss, evaluate magnesium metabolism, abnromal serum magnesium concentrations, electrolyte status and in the workup of nephrolithiasis. Urinary excretion of magnesium is diet dependent. **Low urine magnesium:** In states of hypomagnesaemia decreased urinary magnesium indicates a non-renal cause: decreased dietary magnesium (more...)

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	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 2 mL Green top Vacutainer GENERAL LABORATORY REQUISITION	As required.	0.65-1.05 mmol/L	2008-11-15	Reference Ranges are based on Non-Occupationally exposed population. Low: <0.5 mmol/L; High: >2.00 mmol/L to be phoned to Nurse or Physician immediately Useful in the diagnosis of hypomagnesaemia as the cause of unexplained cardiac arrhythmias, tetany, neuromuscular disorders, and refractory hypocalcaemia/hypokalaemia. Useful to monitoring magnesium sulphate during anticonvulsant therapy (especially in pre-eclampsia) or therapy causing renal magnesium loss (e.g. cisplatinum). (more...)

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 Estradiol, Plasma/Serum)						
Malaria Prep (see Malaria Screen)						
Malaria Screen Malaria Prep Malarial Parasites	Core	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5 mL Lavender pk. 2-10 yrs: 3 mL Lavender top GENERAL LABORATORY REQUISITION	Available 24 hours a day, 7 days per week	Negative	2011-01-14	
Malarial Parasites (see Malaria Screen)						

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/L1-5 years:14.9-67.0 nmol/L6-9 years:5.3-40.8 nmol/L10-13 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/L1-5 years:0.82-3.68 µg/L6-9 years:0.29-2.24 µg/L10-13 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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 1.3-9.1 nmol/L µmol/mol creatinineAgeFemaleMale0-110.14-1.080.14-1.0312-190.09-0.660.09-0.6420-290.10-0.750.08-0.5730-390.13-0.900.09-0.6640-490.15-1.070.10-0.7050-590.18-1.260.11-0.8160-690.17-1.250.12-0.8470-790.18-1.300.13-0.91≥ 800.22-1.600.14-1.03 24 Hour Urine: 1.8-14.6 nmol/d Conventional Units: 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-Larny Syndrome (see Aryl Sulfatase B, Leukocytes/Fibroblasts)						

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 **Light Green top tubes (Li-heparin) or Lavender top tubes (EDTA) are** not acceptable 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 Medium Chain Acyl CoA Dehydrogenase Deficiency(MCAD))						
MDMA (see Amphetamine Screen,Urine)						
Mean Cell Volume (MCV) (see Complete Blood Count)						

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)						

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 REQUISITION FOR DNA TESTING-MOLECULAR GENETICS LABORATORY			2018-11-02	Full ACADM gene sequencing and del/dup analysis. 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>G mutation at nucleotide #985. Thus approximately 81% of clinically affected members of this population would be expected to be homozygous for the 985A>G mutation, 18% would be com (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
MELAS (see Mitochondrial Genome Sequencing and Depletions/Integrity Pane)						
Mellaril (see Thioridazine,Serum - Quantitation)						
MEN 1 (see Multiple Endocrine Neoplasia: Type 1)						
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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0-15.0 nmol/L µmol/mol creatinineAgeFemaleMale0-110-1.780-1.7012-190-1.080-1.0520-290-1.230-0.9430-390-1.480-1.0940-490-1.760-1.1550-590-2.080-1.3260-690-2.050-1.3970-790-2.140-1.50≥800-2.630-1.70 24 Hour Urine: 0-20.0 nmol/d Conventional Units: 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	SI Units (Reported on Patient Chart): **Reference Range** 0 -16 years:0.0-8.6 nmol/L≥17 years:0.0-18.4 nmol/L**Alert Value:**All age ranges>50 nmol/L**Action Value:**All age ranges>200 nmol/L Conventional Units: **Reference Range**0 -16 years: 0.00-1.72 µgl/L≥17 years: 0-3.70 µg/L**Alert Value:**All age ranges>10 µg/L **Action Value:** All age (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
MERF (see Mitochondrial Genome Sequencing and Depletions/Integrity Pane)						
Metachromatic Leukodystrophy (see Aryl Sulfatase A, Leukocyte/Fibroblasts/Urine, Sulfatides, Urine)						
Metadol (see Methadone,Urine Qualitative)						
Metanephrine (see Metanephrines, Plasma, Metanephrines, Urine)						
Metanephrines, Plasma Plasma metanephrines Fractionated metanephrines Metanephrine Normetanephrine 3-methyoxtyramine	Core	**Adult:** 4 mL Lavender top (EDTA) Vacutainer tube **Pediatric:** 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	**Adult:** 6 mL Red top Vacutainer tube **Blood collection tubes with separator gels are not recommended for this test.** Royal blue top serum tubes are also acceptable. GENERAL LABORATORY REQUISITION	Referred out Monday Thursday	100 400 ng/mL Potentially toxic range: ≥ 2000 ng/mL	2005-02-01	
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 Amphetamine Screen,Urine)						
Methanol (see Alcohol Fractionation (by Gas Liquid Chromatography))						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
METHB (see Co oximetry)						
Methemoglobin (see Co oximetry)						
Methicillin Resistant Staph Aureus Screen (see MRSA Screen)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Methotrexate,Plasma/ Serum	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube Serum Gold or Red Vacutainer tubes are also acceptable **Pediatric:** 0-2 years: Red 0.5 Microtainer tube 2-10 years 2 mL Red top tube GENERAL LABORATORY REQUISITION	As required	High-risk Concentrations for toxicity (after high dose methotrexate): 24 hrs. post dose: >10 µmol/L 48 hrs. post dose: >1 µmol/L 72 hrs. post dose: >0.2 µmol/L	2012-03-01	Specimens from patients who have received glucarpidase (carboxypeptidase G2) as a high does methotrexate rescue therapy should not be tested by the Enzyme Immunoassay due to interference. 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Methylmalonic Acid, Plasma	Core	2 X 4 mL K_2 or K_3 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	As required	See report issued by lab	2008-06-10	
Methylmalonic Aciduria Monitoring (see Methylmalonic Acid, Urine)						
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 Microarray)						

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">24 hour urine collection GENERAL LABORATORY REQUISITION	As required	Microalbumin/Creatinine Ratio: Male: 0.0 - ≤2.0 mg/mmol creatinine Female: 0.0 - ≤ 2.8 mg/mmol creatinine Microalbumin/Creatinine ratio for Microalbuminuria (MAU): Male: 2.0 - 20.0 mg/mmol creatinine Female: 2.8 - 28 mg/mmol creatinine **Microalbumin/Creatinine ratio for Overt Diabetic Nephropathy:** Male: >20.0 mg/mm (more...)	2008-11-15	

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

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.			
Micropolyspora faeni (see Farmers Lung IgG Antibodies, Serum)						
Microsporidia Investigation	Microbiology (VH)	Faeces 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_2 or K_3 EDTA Lavender top Vacutainer tube Peripheral blood collected in K_2 or K_3 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 REQUISITION FOR DNA TESTING-MOLECULAR GENETICS LABORATORY			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 Mitochondrial Respiratory Chain Enzyme)						
Mitochondrial Respiratory Chain Enzyme Mitochondrial Myopathy	Biochemical Genetics	Fresh muscle Fresh Liver GENERAL LABORATORY REQUISITION	As required	Please refer to report issued by lab	2008-06-10	
Mitotane	Core	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 Aryl Sulfatase A, Leukocyte/Fibroblasts/Urine, Sulfatides, Urine)						
MMF (see Mycophenolic Acid)						
Mogadon (see Nitrazepam,Serum)						
Molecular testing for Fragile-X (see Fragile-X)						
Molecular Typing by Pulsed Field Gel Electrophoresis	Microbiology/Epidemiology	Pure culture of organism must be submitted. MICROBIOLOGY REQUISITION	Weekly or bi-weekly			
Molybdenum Cofactor Deficiency (see Sulfocysteine, Urine)						

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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0.14-1.25 µmol/L µmol/mol creatinineAgeFemaleMale0-1115-14915-14212-1910-9110-8820-2911-1028-7830-3913-12410-9140-4916-14710-9650-5919-17412-11160-6918-17113-11670-7919-17914-125≥ 8024-21915-142 24 Hour Urine: 0.20-1.90 µmol/d Conventional Units: 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 Fungus Culture-Systemic or Subcutaneous)						
Monoclonal Protein Screen (see Protein Electrophoresis, Serum, Protein Electrophoresis, Urine)						
Monocytes (see Differential Leukocyte Count (Peripheral Blood))						
Morphine (see Opiates Screen,Urine)						
Morphine Glucuronide (see Opiates Screen,Urine)						
Morquio A Disease (see Galactose-6-Sulfatase, Fibroblast)						
Morquio B Disease (see Beta-Galactosidase, Leukocyte/Plasma/Fibroblasts)						
Mouth Culture	Microbiology (VH)	Mouth, tongue, gums MICROBIOLOGY REQUISITION	Daily			Gram stain is examined for spirochaetes/fusiform bacilli (Vincent's organisms) and yeast.
MPA (see Mycophenolic Acid)						
MPSI (see Alpha-Iduronidase, Leukocyte/Plasma/Fibroblasts)						
MPSII (see Iduronate-2-Sulfate Sulfatase, Leukocytes/Plasma/Fibroblasts)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
MPSIIIA (see Heparin Sulfamidase, Fibroblasts)						
MPSIIIB (see Alpha-N-Acetylglucosaminidase, Plasma)						
MPSIIIC (see AcCoA: Alpha-Glucosamine Acetyltransferase, Fibroblasts)						
MPSIVA (see Galactose-6-Sulfatase, Fibroblast)						
MPSIVB (see Beta-Galactosidase, Leukocyte/Plasma/Fibroblasts)						
MPSVI (see Aryl Sulfatase B, Leukocytes/Fibroblasts)						
MPSVII (see Beta-Glucuronidase, Leukocyte/Plasma/Fibroblasts)						
MRSA Screen Methicillin Resistant Staph Aureus Screen	Microbiology (VH)	Nasal Perianal Urine, Wound Swabs (Specify site) MICROBIOLOGY REQUISITION	Daily	See report	2007-10-09	
MSS (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
mtDNA sequencing (see Mitochondrial Genome Sequencing and Depletions/Integrity Pane)						
Mucopolysaccharide Characterization	Biochemical Genetics	Random urine GENERAL LABORATORY 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	As required	≤ 1 year: 3.9-22.8 mg GAG/mmol creatinine 1 year - 8 years: 3.6-13.4 mg GAG/mmol creatinine 8 years - 15 years: 1.9-8.6 mg GAG/mmol creatinine >15 years: 0.0-5.4 mg GAG/mmol creatinine	2008-06-10	
Multimer Analysis (see Von Willebrand F: Multimers)						

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 Rickettsia Serology)						
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	**Adult:** 1-2 x 5 mL Gold top Vacutainer tube **Pediatric:** 2-10 years: 1-3 x 3.5 mL Gold top Vacutainer tube UBC Neuro-Immunology Laboratory Requisition must be completed by neurologist	Referred out Monday	Negative	2010-01-11	Borderline results should be repeated. **This test is available exclusively neurologists at LHSC/SJH.** Associated with Myasthenia Gravis Centrifuge at 4 C, transfer serum to cryovials and store at 4 C.
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 PUBLIC HEALTH LABORATORY TEST REQUISITION	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_2 or K_3 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	
Mycoplasm 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
Mycoplasma Serology--**NO LONGER AVAILABLE**	Virology Laboratory				2010-05-28	

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Myelin-Associated Glycoprotein IgM, Serum Anti MAG, Serum Anti-MAG, IgM Anti Myelin-Associated Glycoprotein IgM	Core	**Adult:** 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: Red 0.5pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Titre: Normal: < 1:1600 Moderately Elevated: 1:1600 - 1:3200 Highly Elevated: > 1:6400	2010-01-11	**This test is available exclusively to SJH/LHSC physicians.** For more information, please contact: The Immunology Lab Section Head, ext 35768 or Senior Technologist (ext. 36841) 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 erythem (more...)

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	**Adult:** 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube as well as EDTA, heparin or citrate plasma **Pediatric:** 0-2 years: Red 0.5 pk 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Batch analysis	Negative	2019-04-04	**This test is available exclusively to Rheumatologists and Respirologists at LHSC/SJH and accepted from referred in locations.** 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
Myositis-specific antibodies (see Myositis Antibodies Profile)						
Mysoline (see Primidone, Serum)						
N-Acetyl-Procainamide (see N-Acetylprocainamide,Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
N-Acetylprocainamide,Serum NAPA N-Acetyl-Procainamide	Core (all campuses)	5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: Red 0.5 pk 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	**N-Acetylprocainamide:** 43.3 - 65.0 µ mol/L **Procainamide:** 16.9 - 42.3 µ mol/L		
N-Telopeptide,Urine **no longer available-see C-Telopeptide** Telopeptide-N Bone Loss Marker	Test not available (Various)				2007-12-19	
NAB (see Neutralizing Antibodies to Interferon-Beta)						
NAPA (see N-Acetylprocainamide,Serum)						
Nares Colonization screen (see Nasal Colonization Screen)						
Nasal Colonization Screen Nares Colonization screen	Microbiology (VH)	Nasal swab MICROBIOLOGY REQUISITION	Daily			

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Needle Stick Injury - Source Blood/Body Fluid Exposure: Source patient Hepatitis/HIV testing on **source** of needlestick injury or blood/body fluid exposure. HIV/Hepatitis testing on **source** of needlestick injury or blood/body fluid exposure.	Core (UH)	5 mL Gold top Vacutainer tube GENERAL LABORATORY REQUISITION	As required			Testing done in the Core Laboratory, UH only. The Core Laboratory is licenced to do HIV testing on the source patient **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**. HIV testing on victims will be sent to Public Health Laboratory. Testing on the source patient of a needle stick injury or blood/body fluid exposure includes the following tests: (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Needle Stick Injury - Victim Blood/Body Fluid Exposure: Exposed individual Hepatitis/HIV testing on **exposed individual** of needle stick injury or exposure to blood/body fluids. HIV/Hepatitis on **exposed individual** of needle stick injury or exposure to blood/body fluids.	Core/Microbiology	5 mL Gold top Vacutainer tube **and** 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION AND PUBLIC HEALTH LABORATORY HIV TEST REQUISITION	Hepatitis testing: As required HIV Testing: Referred weekdays to Public Health Laboratory as necessary			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. 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)

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 assault**or any fluid or cyst material** MICROBIOLOGY REQUISITION	Daily		2006-07-01	

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Nembutal (see Pentobarbital, Serum)						
Neopterin/Biopterin Ratio, Urine (see Pterin Analysis, Urine)						
Neoral (see Cyclosporine)						
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 Spectrum Profile 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 **Pediatric:** 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 Gabapentin,Serum/Plasma)						

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 Chronic Granulomatous Screening Investigation)						
Neutrophils (see Differential Leukocyte Count (Peripheral Blood))						
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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0-59.6 nmol/L µmol/mol creatinineAgeFemaleMale0-110-7.10-6.812-190-4.30-4.220-290-4.90-3.730-390-5.90-4.440-490-7.00-4.650-590-8.30-5.360-690-8.20-5.570-790-8.50-6.0≥800-10.50-6.8 24 Hour Urine: 0-85.2 nmol/d Conventional Units: Random Urine: 0-3.5 µg/L µg/g creatinineAgeFemaleMale0-110-3.70-3.5 (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 Sphingomyelinase, Fibroblast)						
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	
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	**Non-Gynaecological: Aspiration Biopsy** 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 **lymphoma**, 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		Genes Tested (hg19;HGVS nomenclature):GJB2(NM_004004.5), GJB6(NM__001110219.2) N/A 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...)

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

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 Protein Electrophoresis, CSF)						
Oligosaccharide Screen, Urine	Biochemical Genetics	Random urine	Batched and tested as required	See report issued by lab	2008-06-10	
Open Neural Tube Defect (ONTD) (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
Open Spina Bifida (OSB) (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
Opiate Screen (see Opiates Screen,Urine)						

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	Please order Urine Oxycodone separately, as the urine Opiates Screen is a poor screening tool for Oxycodone. 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). Note 1. The Opiates Screen is a poor screening test (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Organic Acid - Screening, Urine	Biochemical Genetics	Random urine GENERAL LABORATORY REQUISITION	As required	See report issued by lab	2008-06-10	
Orotic Acid, Urine Urea Cycle Disorder	Biochemical Genetics	Random urine GENERAL LABORATORY 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	
Osmolality,Urine/Serum/Plasma	Core	Random urine collected in a sterile container or 5 mL Gold or 4.5 mL Green top Vacutainer **Pediatric:** 0-2 yrs: Red 0.5pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	As required	**Urine:** 300-900 mOsm/Kg **Serum/Plasma:** 275-295 mOsm/Kg		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Other FNA (see Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
Ova and Parasite Screen	Microbiology (VH)	Faeces **See Critical Information Required before submitting samples.** For samples other then 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 Cryptosporidium)						

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)	Note:**Please contact a Medical Microbiologist before specimen collection:** 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 Urine Oxycodone)						
Oxygen Affinity (see p50 O2 Affinity Hemoglobin)						
P-ANCA / Anti-MPO (anti-myeloperoxidase antibody) (see ANCA)						

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 **Pediatric:** 0-2 years: Lavender 1.0 pk., Red 0.5 pk 2-10 years: 2 mL Lavender top, 2 mL Red Hemoglobinopathy 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@hhsc.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%)**1,2** 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 Prealbumin, Serum)						
Pancreas (see Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
Pancreatic Antibodies (see Anti Islet Cell Antibodies, Serum)						
Panel includes: (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF, Paraneoplastic Antibody Panel)						
PAP Smear (see Gynaecological Conventional Smear for Cytology)						
PAP test (see Gynaecological Liquid Based PAP test for Cytology, HPV testing, for Gynaecological Liquid Based PAP test (Cytology),)						
Paracetamol (see Acetaminophen)						
Paracoccidioides Culture (see Fungus Culture-Dimorphic)						
Paracoccidioides 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	Adequate clinical and epidemiological information must accompany specimen.

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 mutations1,2 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 Panel includes: Anti-Hu (ANNA-1) Anti-Yo (PCA-1 or Purkinje cell antibody-1) Anti-Ri (ANNA-2) Anti-CV2 (anti-CRMP5) Anti-Ma2/Ta (PNMA2) Anti-Amphiphysin (Anti-AMPH) Anti-recoverin Anti-SOX1 Anti-titin Anti-zic4 Anti-GAD65 Anti-Tr (DNER)	Clinical Immunology	6 mL Red or 5 mL Gold top Vacutainer tube EDTA, heparin or citrate plasma are also acceptable CSF samples will also be accepted. Suggest CSF be submitted with serum for testing. Serum is more sensitive than CSF for Paraneoplastic antibodies. CLINICAL IMMUNOLOGY REQUISITION	Batched analysis	Negative	2015-04-01	Immunoblot for Paraneoplastic antibodies is not suitable for the detection of antibodies against GAD65 in diabetes mellitus. A negative result does not exclude the presence of Anti-GAD65. 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. **Antibody Neurological Disorder Associated Tumour** Anti- (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Parathormone (see Parathyroid Hormone, Plasma)						
Parathyrin (see Parathyroid Hormone, Plasma)						
Parathyroid Hormone Related Peptide (see Parathyroid Hormone-Related Peptide, Plasma)						
Parathyroid Hormone, Fine Needle Aspirate PTH FNA	Core (VH)	Two samples: The first is uncontaminated Plasma-Lyte and serves as a blank. The second is 1 mL of Plasma-Lyte that has been used to rinse the biopsy needle as described below. GENERAL LABORATORY REQUISITION	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	**Adult:** 6 mL Pink top (EDTA) Vacutainer tube **Pediatric:** 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 also acceptable as long as the serum or plasma is separated from the cells immediately after collection; EDTA plasma is the preferred choice (more...)	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	**Adult:** 4 mL Lavender top (EDTA) Vacutainer tube **Pediatric:** 2-10 years: 2 mL Lavender top (EDTA) Vacutainer tube Red, Gold, Light Green, or Dark Green top tubes are **NOT** acceptable. GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	≤4.2 pmol/L	2015-02-04	
Parathyroid Related Peptide (see Parathyroid Hormone-Related Peptide, Plasma)						
Parietal Antibodies (see Anti Parietal Cell Antibody)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Paroxetine,Serum Paxil	Core	6 mL Red or Navy top Vacutainer tube **Avoid gel-separator tubes** 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_2 or K_3 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 **Pediatric:** 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 Heterophile Antibody Screen)						
Paxil (see Paroxetine,Serum)						
PBG (see Porphyrin Precursors (Random and 24 hour urine))						
PCA (see Protein C Assay)						
PCA-2/Anti-MAP1B (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
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 Hepatitis C RNA - Quantitative)						
PELS (see Protein Electrophoresis, Serum)						
PELU24 (see Protein Electrophoresis, Urine)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
PELUR (see Protein Electrophoresis, Urine)						
Pemphigus/Pemphygoid Antibodies Anti Skin Antibodies Skin Antibodies	Core (all campuses)	5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5pk. 2-10 yrs: 2 mL Red top GENERAL LABORATORY REQUISITION	Daily	Negative		Dilutions 1:20 to 1:160 Grossly hemolyzed, lipemic or microbially contaminated specimens may interfere with the performance and should be documented.
Pentacarboxylic Acid (see Porphyrins, 24-Hour Urine, Porphyrins, Urine, Random)						

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 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 **VH Core Lab.** 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 Urine Oxycodone)						
Percodan (see Urine Oxycodone)						
Pertofone (see Desipramine,Serum/Plasma)						
Pertussis (see Bordetella pertussis Investigation (PertPCR))						

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 **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 2 mL Green top 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. **Toxic:**>215 µmol/L CRITICAL VALUE to be phoned to Nurse or Physician immediately:
Phenobarbitone (see Phenobarbital,Serum/Plasma)						
Phenylalanine (see Amino Acids, Plasma)						
Phenylketonuria (see Amino Acids, Plasma)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Phenytoin,Serum-Free Free Phenytoin Free Dilantin	Toxicology/Special Chemistry	2 x 5 mL Gold top Vacutainer tube **Pediatric:** 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	
Phenytoin,Serum/Plasma-Total Anticonvulsant Dilantin	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: Green 0.5pk. 2-10 yrs: 2 mL Green top 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: **Toxic:**≥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 Chronic Myelogenous Leukemia, by Karyotype/FISH, Chronic Myelogenous Leukemia, by PCR)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Phosphate, 24-Hour Urine Inorganic Phosphate	Core	24 hour urine in acid washed container GENERAL LABORATORY REQUISITION	Weekdays	13.0-42.0 mmol/d		
Phosphate,Fluid Inorganic Phosphate (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
Phosphate,Plasma Inorganic Phosphate Inorganic Phosphorus, PO4	Core	4.5 mL Green top Vacutainer **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985)< 2-10 yrs: 3 mL Green top 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 macroblobulinemia) 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,Urine-Random Inorganic Phosphate	Core	Random urine GENERAL LABORATORY REQUISITION	Weekdays	11-42 mmol/d		
Phospholipase A2 Receptor (PLA2R) Antibodies Anti-PLA2R	Core	**Adult:** 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube. EDTA, heparin or citrate plasma are also acceptable. **Pediatric:** 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	**This test is available exclusively to SJHC/LHSC nephrologists.** 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 Vascular Tip Culture)						
Pigeon IgG Antibodies Pigeon Precipitins	Core	5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: Red 0.5 mL Microtainer 2-10 years: 2 mL Red top GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	<30 mg/L	2010-01-11	
Pigeon Precipitins (see Pigeon IgG Antibodies)						

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 Pyruvate Kinase Deficiency Assay **TEST NO LONGER AVAILABLE**)						
PKU (see Amino Acids, Plasma)						
PKU-DHPR Deficient (see Dihydropteridine Reductase, Dried Blood Spot)						
PKU-Pterin Deficient (see Pterin Analysis, Urine)						
Plasma metanephrines (see Metanephrines, Plasma)						
Platelet Aggregation (see Platelet Function Screen)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Platelet Antibodies Platelet Immunology Anti Platelet Antibodies Platelet Associated IgG	Blood Transfusion	**Samples required from mother and father:** - 10 mL whole blood collect in Red top tube - 30 mL whole blood collected in Sodium Citrate, EDTA, Blue top tube or ACD Yellow top tube **Sample required from baby:** - Whole blood: 2 mL EDTA blood or Amniotic Fluid: Discard first 3 mL amniotic fluid drawn; draw 10 mL fluid fo (more...)	Referred out Monday-Wednesday	See report issued by the Platelet Immunology Lab, Hamilton		Samples must be packaged in lab for courier pick up by the following times: SJHC: 1430 hrs Victoria Hospital, LHSC: 1400 hrs

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Platelet Associated IgG (see Platelet Antibodies)						
Platelet Count (see Complete Blood Count)						
Platelet Function Screen Platelet Aggregation	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	Samples **must** be drawn at the Victoria Hospital Campus of LHSC Specialized glass tubes are supplied by the Hemostasis and Thrombosis laboratory. 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 Platelet Antibodies)						
Pleural, Peritoneal, Pericardial, CSF, Ocular (see Fluids for Cytology)						
PMC (see Paramyotonia Congenita Hyperkalemic Periodic Paralysis)						

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 **Pediatric:** 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	Note: 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 Pneumococcal Antibody Titre)						
Pneumococcal Antibody Titre, Pre Vaccine (see Pneumococcal Antibody Titre)						
Pneumococcal Antibody Titre, Single Sample (see Pneumococcal Antibody Titre)						
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		For more information click on: 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...)

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: **BK Virus:** -4 mL Lavender top EDTA Vacutainer tube (2 mL of plasma required) **JC Virus:** -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 Alpha-Glucosidase, Dried Blood Spot, Alpha-Glucosidase, Fibroblasts)						
Porphobilinogen (see Porphyrin Precursors (Random and 24 hour urine))						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrin Precursors (Random and 24 hour urine) Precursor Porphyrins Precursor Porphyrins ALA & PBG ALA PBG Porphobilinogen Aminolevulinic Acid	Core	20 mL Random urine or 20 mL 24 hour urine collection GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Reference ranges are for adults only. Reference ranges not available for individuals 17 years and younger. Random Urine: Porphobilinogen: 0.1-0.8 mmol/mol Cr Aminolevulinic Acid: 1-5 mmol/mol Cr 24 Hour Urine: Porphobilinogen: <= 9.0 umol/d Aminolevulinic Acid: <= 50 umol/d	2011-11-09	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrins, 24-Hour Urine Urine Porphyrins 24 hour Urine Porphyrin Uroporphyrin I Uroporphyrin III Heptacarboxylic Acid Hexacarbolic Acid Pentacarboxylic Acid Coproporphyrin I Coproporphyrin III	Core	24 hour urine collected with 5g sodium carbonate. Containers with appropriate additives are obtained from the Core Laboratory. GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Note: Reference ranges are for adults only. Reference ranges not available for individuals 17 years of age and younger. Uroporphyrin I: <= 44 nmol/d Uroporphyrin III: <= 20 nmol/d Heptacarboxylic Acid: 1-16 nmol/d Hexacarbolic Acid: <= 2 nmol/d Pentacarboxylic Acid: <= 2 nmol/d Coproporphyrin I: 5-90 nmol/d Coproporphyrin III: 15-242 nmol/d Copro III/Copro I ratio: 2.6-5.3 (more...)	2003-07-08	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrins, Serum/Plasma Free Protoporphyrin Protoporphyrin - Free	Core	5 mL Gold top or 6 mL Red top Vacutainer tube or 6 mL Green (Sodium Heparin) top or 4 mL Lavender top Vacutainer tube **Avoid gel-separator tubes** GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	0.40 - 1.00 µmol/L Erc.	2010-09-28	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrins, Urine, Random Uroporphyrin I Uroporphyrin III Heptacarboxylic Acid Hexacarbolic Acid Pentacarboxylic Acid Coproporphyrin I Coproporphyrin III	Core	20 mL Urine (Random) GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	Note: Reference ranges are for adults only. Reference ranges not available for individuals 17 years of age and younger. Uroporphyrin I: 0.4-3.9 umol/mol cr Uroporphyrin III: <= 2.0 umol/mol cr Heptacarboxylic Acid: <= 1.3 umol/mol cr Hexacarbolic Acid: <= 0.7 umol/mol cr Pentacarboxylic Acid: <= 1.0 umol/mol cr Coproporphyrin I: 0.3-8.5 umol/mol cr Coproporphyrin III: 1.7-2 (more...)	2011-11-09	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrins-Quantitation, Stool Porphyrins: Quantitation, Stool (Random)	Core (VH)	Faeces GENERAL LABORATORY REQUISITION	As required	Coproporphyrin I: Less than 13 nmol/g Coproporphyrin III: Less than 12 nmol/g Uroporphyrin I: Less than 5 nmol/g Uroporphyrin III: Less than 1 nmol/g Heptacarboxylic Acid: Less than 1 nmol/g Hexacarboxylic Acid: Less than 1 nmol/g Pentacarboxylic Acid: (more...)	2012-12-10	Referred out Monday - Thursday Porphyrin reference values are not available for individuals 17 years of age and younger.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Porphyrins: Quantitation, Stool (Random) (see Porphyrins-Quantitation, Stool)						
Post-Bronch Sputum (see Respiratory and Exfoliative samples for Cytology)						
Potassium (see Electrolytes,Plasma)						
Potassium (fluid) (see Electrolytes,Fluid)						
Potassium (urine) (see Electrolytes,Urine)						
Potassium, 24-Hour Urine	Core	24 Hour Urine GENERAL LABORATORY REQUISITION	Weekdays	30-130 mmol/d		RBC hemolysis may cause interference with results.
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	4.5 mL Green top Vacutainer **Pediatric:** 0-2 yrs: 0.6 mL Green pk. 2-10 yrs: 3 mL Green top GENERAL LABORATORY REQUISITION	As required	0-3 months: 4.00-6.50 mmol/L >3 months: 3.50-5.00 mmol/L	2008-11-15	Hemolysis during collection, delay in separation, refrigeration of unseparated blood, marked luecocytosis and/or thrombocytosis and muscle activity of limb immediately prior to venipuncture may cause significant increase in potassium. 0-3 months: >6.5 mmol/L >3 months: <3.0 **or** >6.0 mmol/L Useful for monitoring potassium status in patients on intravenous therapy, in diabetic ketoacidosis or on diuretics. Investigation of mineralocortocoid status, evaluation of electrolyte balance, acid-base disturbances, cardiac arrhythmia, muscular weakness, hepatic encephalopat (more...)

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)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prealbumin, Serum Transthyretin PAB	Core	**Adult:** 5 mL Gold top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Red top Microtainer 2-10 years: 3 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Daily	0-<15 days: 0.00-0.11 g/L 15 days-<1 year: 0.04-0.24 g/L 1-<5 years: 0.11-0.23 g/L 5-<13 years: 0.13-0.26 g/L 13-<16 years: 0.17-0.31 g/L 16 years-<19 years: 0.16-0.33 g/L (Female) 16 years-<19 years: 0.20-0.35 g/L (Male) Adult: 0.2-0.4 g/L	2010-01-11	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. 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 albumin, PAB is a negative acute phase reactant and its serum (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Precursor Porphyrins (see Porphyrin Precursors (Random and 24 hour urine))						
Precursor Porphyrins ALA & PBG (see Porphyrin Precursors (Random and 24 hour urine))						
Pregnancy Test	Core	**For Female Patients Only** 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 CYTOGENETICS 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	**Adult:** 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red Vacutainer tube **Blood collection tubes with separator gels are not recommended for this test.** GENERAL LABORATORY REQUISITION	Referred out Monday - Thursday	Therapeutic: 23.0 55.0 mol/L	2009-03-10	
ProAVP (see Copeptin (Surrogate Measure of Anti-Diuretic Hormone), Plasma/Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Procainamide,Serum Pronestyl	Core	5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: Red Microtainer 2-10 years: 2 mL Red top Vacutainer GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	**Procainamide:** 16.9 - 42.3 µ mol/L **N-Acetylprocainamide:** 43.3 - 65.0 µ 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 (0.1-5cm2), cord (1cm3), chorionic villi or fetal skin (0.5-1cm2) 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		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 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.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Progesterone, Plasma/Serum	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	Male: 4 weeks - 1 year: ≤2.1 nmol/L 1 - 9 years: ≤ 1.1 nmol/L Adult: <0.6 nmol/L Female: 4 days - 1 year: ≤4.1 nmol/L 1 - 9 years: ≤ 1.1 nmol/L Follicular phase: ≤0.6 nmol/L Early follicular phase: ≤1.0 nmol/L Intermediate follicular phase: ≤0.7 nmol/L Late follicular phase: ≤0.7 nmol/L Ovulatory phase: ≤13.2 nmol/L Luteal phase: 13.1 46.3 nmol/L	2009-12-01 (more...)	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
Prograf (see Tacrolimus)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prolactin, Plasma/Serum	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	Male: 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 Female: 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...)	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 Procainamide,Serum)						
Propafenone,Serum/Plasma Rythmol	Core	**Adult:** 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red top Vacutainer tube Plasma (Sodium Heparin) is also acceptable. **Blood collection tubes with separator gels are not acceptable for this test.** GENERAL LABORATORY REQUISITION	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 Chromosome Analysis, Blood)						
Propylene Glycol (see Glycol Screen)						
Prostate Specific Antigen, Plasma/Serum PSA Total PSA	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	< 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	Simultaneous serum specimen and CSF specimens should be taken. Blood in the CSF specimen invalidates the protein value. 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.

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 **Pediatric:** 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** GENERAL LABORATORY REQUISITION	Weekly	**0 - 5 days:** 0.17-0.53 U/mL **5 days - 1 month:** 0.20-0.64 U/mL **1 month - 3 months:** 0.21-0.65 U/mL **3 months - 6 months:** 0.28-0.80 U/mL **6 months - 1 year:** 0.37-0.81 U/mL **1 year - 5 years:** 0.40-0.92 U/mL **5 years - 10 years:** 0.45-0.93 U/mL **10 years - 16 years:** 0.55-1.11 U/mL **16 years - Adult:** 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 **and** 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 **NOT** acceptable GENERAL LABORATORY REQUISITION	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 ≥ 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 ≥ 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 **Pediatric:** 0-2 years: 1.8 mL Blue Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** GENERAL LABORATORY REQUSITION	Weekly	**Adult:** 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 **Pediatric:** 0-2 yrs: 0.6 mL Green pk. 2-10 yrs: 3 mL Green top 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 hypo-gammaglobulinaemia 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	Reference range for urine protein: 0.0 0.15 g/L Reference ranges for protein:creatinine ratio: children and adults: <23 mg/mmol creatinine pregnant women: <30 mg/mmol creatinine	2008-11-15	Contamination of urine with menstrual blood, prostatic secretions, or semen may contribute to increased urine protein levels (false-positives). When protein is ordered on a random urine, creatinine will be ordered automatically and the protein:creatinine ratio will calculate automatically. Useful in the evaluation of renal disease. Screening for monoclonal gammopathy. Increased amounts of protein in the urine may be due to: (1) Glomerular proteinuria: caused by defects in the glomerular filtration barrier perme (more...)

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	Simulataneou serum specimen and CSF specimens should be taken. Blood in the CSF specimen invalidates the protein value. 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.
Prothrombin Gene (see Thrombophilia (Prothrombin))						
Prothrombin Time (see INR)						
Prothrombin/Factor V Prothrombin (see Thrombophilia (associated with Factor V deficiency))						
Protoporphyrin - Free (see Porphyrins, Serum/Plasma)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protriptyline,Serum **TESTING ON HOLD as of 11/09/15** Triptil	Core	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 Fluoxetine,Serum/Plasma)						
PSA (see Prostate Specific Antigen, Plasma/Serum)						
PSA F (see Free Prostate Specific Antigen, Plasma/Serum)						
PSAG (see Protein S Antigen (Free))						
Pseudo-cholinesterase (see Cholinesterase Phenotype (includes Cholinesterase, Total Activity))						
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 INR)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Pterin Analysis, Urine BH4/NB Ratio Neopterin/Biopterin Ratio, Urine PKU-Pterin Deficient	Biochemical Genetics	Random urine GENERAL LABORATORY 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	
PTH (see Parathyroid Hormone, Plasma)						
PTH FNA (see Parathyroid Hormone, Fine Needle Aspirate)						
PTH-RP (see Parathyroid Hormone-Related Peptide, Plasma)						
PTHrP (see Parathyroid Hormone-Related Peptide, Plasma)						
PTT (see Partial Thromboplastin Time (Activated)- PTT)						
Purkinje Cell Cytoplasmic Antibody Type Tr (see Anti Tr, Serum)						
PY Test (see H. Pylori Breath Test **test only available to Grey Bruce, Owen Sound and St. Mary's, Kitchener**)						
Pyridoxal Phosphate (see Vitamin B6)						
Pyridoxal-5-Phosphate (see Vitamin B6)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Pyruvate Kinase Deficiency Assay **TEST NO LONGER AVAILABLE** PKA	Test not available (Various)				2004-08-06	
Pyruvate, CSF Lactate:Pyruvate Ratio	Biochemical Genetics	Cerebrospinal Fluid (CSF) GENERAL LABORATORY REQUISITION	As required	Pyruvate, CSF: 0.06-0.22 mmol/L Lactate, CSF: 0.62-2.10 mmol/L	2008-06-10	
Pyruvate, Whole Blood Lactate: Pyruvate Ratio	Biochemical Genetics	6 mL Green (Sodium or Lithium Heparinized) top Vacutainer tube **Pediatric:** 0-2 yrs: 2 x 0.5 mL Green top 2-10 yrs: 3 mL Green top GENERAL LABORATORY 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	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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 CYTOGENETICS 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 CMV PCR)						
Quantitative Epstein Barr Virus (see EBV PCR)						
Quantitative RNA (see Hepatitis C RNA - Quantitative)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Quinidine Biquin	Core	6 mL Red top Vacutainer tube **Avoid gel-separator tubes** GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	6.0-15.0 µmol/L		
R&M (see Urinalysis)						
RA (see Rheumatoid Factor, Plasma)						
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 Glucose, Plasma)						
Random Stool Fat (see Stool for Fat)						
Rapamycin (see Sirolimus,Whole Blood)						
Rapid Aneuploidy Detection (see QF-PCR)						
RAST Test (see Allergen Specific IgE, Serum)						
RBC Folate (see Folate, Red Blood Cells)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
RD (see Non-Syndromic Recessive Deafness)						
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 Serum Viscosity)						

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	When booking a Renal Biopsy contact: **Victoria Hospital** 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. **University Hospital** Monday to Friday from 0800-1600 Page: 15718 **After Hours and weekends:** Contact (more...)	See report	2009-03-23	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Renin Mass (see Renin, Plasma)						
Renin, Plasma Direct Renin Renin Mass	Endocrinology	**Adult:**4 mL Lavender top (EDTA) Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Lavender top (EDTA) Microtainers 2-10 years: 3 mL Lavender top (EDTA) Vacutainer tube Red, Gold, Light Green (Li-Heparin), or Lavender (EDTA) top tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	Age 20 60 years: 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	**Non-Gynaecological: Respiratory** 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 (includesTracheostomy 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 VIROLOGY REQUISITION	From November 1 to April 30,samples will be processed for Influenza A/B and RSV A/B 7 days per 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 bronchoalveolar lavage samples and all paediatric patient samples (inpatient and ICU) that are negative for Influenza and RSV will be tested for Parainfluenza 1, 2, 3, 4, (more...)	See report	2010-08-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Reticulocyte Absolute Reticulocyte Count	Core	**Adult:** 4 mL K_2 EDTA (Lavender) Vacutainer tube **Pediatric Venous:** 2 mL Paeds K2 EDTA (Lavender) Vacutainer **Pediatric (Capillary):** 0.5 mL MAP K_2 EDTA (Lavender) Microtube 0.5 mL K_2 EDTA (Lavender) Microtube GENERAL LABORATORY REQUISITION	As required	10-100 x 109/L	2006-11-14	Reflection of erythropoietic activity.
Reticulocyte Count (see Reticulocyte Absolute)						

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		For more information click on: Molecular Diagnostic Laboratory N/A 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 in broader than i (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
RF (see Rheumatoid Factor, Plasma)						
Rheumatoid Factor, Plasma RF RA	Core	**Adult:** 4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube 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 Fungus Culture-Dermatophytes)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Risperidol (see Risperidone,Serum/Plasma)						
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	**Risperidone:** 19-49 nmol/L **9-Hydroxyrisperidone:** 19-211 nmol/L	2006-05-19	
Ritalin™ (see Methylphenidate, Urine)						
Rituximab Monitoring	Flow Cytometry (VH)	Peripheral blood collected in K_2 or K_3 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 Clonazepam,Serum)						
Rocky Mountain Spotted Fever (see Rickettsia Serology)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Rohypnol (see Flunitrazepam, Urine Qualitative)						
Routine (see Urinalysis)						
Routine and Microscopic (see Urinalysis)						
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 Measles Serology - Measles IgG/IgM)						
Rythmol (see Propafenone,Serum/Plasma)						
Salicylate,Serum Salicylic Acid ASA	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 yrs: Green 0.5pk. 2-10 yrs: 2 mL Green top 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 Salicylate,Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Salivary Cortisol (see Cortisol, Saliva)						
Salivary Gland (see Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
Sandhoff Disease (see Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts)						
Sanfilippo A Syndrome (see Heparin Sulfamidase, Fibroblasts)						
Sanfilippo B Syndrome (see Alpha-N-Acetylglucosaminidase, Plasma)						
Sanfilippo C Syndrome (see AcCoA: Alpha-Glucosamine Acetyltransferase, Fibroblasts)						
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 Alpha-Iduronidase, Leukocyte/Plasma/Fibroblasts)						
Schindler Disease (see Alpha-N-Acetylgalactosaminidase, Leukocyte/Plasma/Fibroblasts)						
Schistosoma (see Ova and Parasites-Blood and Tissue)						

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sedimentation Rate (see Erythrocyte Sedimentation Rate)						
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/L1-5 years:1.22-1.82 µmol/L6- 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/L1- 5 years:96.4-143.8 µg/L6-9 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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0.25-1.14 µmol/L µmol/mol creatinineAgeFemaleMale0-1129-13629-12912-1918-8318-8020-2921-9316-7130-3925-11318-8340-4930-13419-8850-5935-15822-10160-6935-15623-10670-7936-16325-114≥ 8044-20029-129 24 Hour Urine: 0.38-1.65 µmol/d Conventional Units: 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	Monday - Friday - VH and SJHC only. 0800 - 1600 h	No spermatozoa should be detected in at least two samples taken two to four weeks apart.	2006-12-27	
Serotonin, 24-Hour Urine	Endocrinology	24-hour urine GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	≤1133 nmol/day	2009-02-12	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Serotonin, Serum 5-Hydroxytryptamine 5-HT	Endocrinology	**Adult:** 6 mL Red top Vacutainer tube **Pediatric:** 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 **NOT** acceptable Gold top tubes are acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	170-1134 nmol/L	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 **Avoid gel-separator tubes** GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	0-980 nmol/L		
Serum Free Light Chains (see Free Light Chains, Serum/Plasma)						
Serum Protein Electrophoresis (see Protein Electrophoresis, Serum)						
Serum Viscosity Relative viscosity, Serum	Core	6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday-Friday 0800-1600	1.4-2.0	2006-06-01	
Sex Determination (see Sexing (for medical indications))						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sex Hormone Binding Globulin, Plasma/Serum SHBG	Core	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red or Gold top tubes are also acceptable Lavender top (EDTA) tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Male: 20 49 years: 18.3 54.1 nmol/L ≥ 50 years: 20.6 76.7 nmol/L Female: 20 49 years: 32.4 128.0 nmol/L ≥ 50 years: 27.1 128.0 nmol/L **FREE ANDROGEN INDEX:** Male: 20 49 years: 35.0 92.6 % ≥ 50 years: 24.3 72.1 % Female: 20 49 years: 0.3 5.6 % ≥ 50 years: 0.2 3.6 %	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
Sexing (for medical indications) Sex Determination Y-marker	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 This test will be available for medical indications only, usually to aid in linkage analysis or to clarify prenatal diagnosis and must be referred from the Genetics Clinic. The tooth enamel gene, amelogenin, is encoded on the short arm of the X chromosome1. 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...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
SHBG (see Sex Hormone Binding Globulin, Plasma/Serum)						
Sialidase (see Alpha-N-Acteylneuraminidase, Fibroblasts)						
Sickle Cell Screen	Core	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 0-2 yrs: Lavender 0.5pk. 2-10 yrs: 2 mL Lavender top 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. **All** 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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0-0.46 nmol/L nmol/mol creatinineAgeFemaleMale0-110-55.20-52.712-190-33.60-32.620-290-38.00-29.030-390-45.90-33.840-490-54.50-35.750-590-64.40-41.060-690-63.50-42.970-790-66.20-46.4≥800-81.30-52.7 24 Hour Urine: 0-0.61 nmol/d Conventional Units: 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 Doxepin + Desmethyldoxepin,Serum/Plasma)						
Sirolimus,Whole Blood Rapamycin	Toxicology/Special Chemistry	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 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 mm2 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 Pemphigus/Pemphygoid Antibodies)						
Sly Syndrome (see Beta-Glucuronidase, Leukocyte/Plasma/Fibroblasts)						
Sodium (see Electrolytes,Plasma)						
Sodium (fluid) (see Electrolytes,Fluid)						
Sodium (urine) (see Electrolytes,Urine)						
Sodium, 24-Hour Urine	Core	24 Hour urine collection GENERAL LABORATORY REQUISITION	Weekdays	40-217 mmol/d		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sodium, Urine (tested in Trace Elements Lab)	Trace Elements	24 hour urine collected in an **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 40-200 mmol/L mol/mol creatinineAgeFemaleMale0-114.5-23.84.5-22.712-192.9-14.52.8-14.120-293.3-16.42.5-12.530-394.0-19.82.9-14.640-494.7-23.53.1-15.450-595.6-27.83.5-17.760-695.5-27.43.7-18.570-795.7-28.64.0-20.0≥ 807.0-35.14.5-22.7 24 Hour Urine: 40-217 mmol/d Conventional Units: 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
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 Image-Guided Fine Needle Aspirate Cytology, Non-Image Guided Fine Needle Aspiration Biopsy for Cytology)						
Somatomedin C (see Insulin-Like Growth Factor, Serum)						
Somophyllin (see Theophylline, Serum)						
SPE (see Protein Electrophoresis, Serum)						
Specific Gravity,Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	Weekdays	See report	2010-05-17	
Sphingomyelinase, Fibroblast Niemann-Pick Disease Type A and Type B	Biochemical Genetics	Fibroblast Culture REGIONAL CYTOGENETICS REQUISITION	As required	56-113 nmol/hr/mg protein	2008-06-10	
Sputum (see Respiratory and Exfoliative samples for Cytology)						
St. Louis Encephalitis (see Arbovirus Flavivirus Serology/PCR)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Sterility Culture	Microbiology/Epidemiology	For products and specimens **not** requiring a U.S.P. sterility test. MICROBIOLOGY REQUISITION	Daily			
Sterility Culture U.S.P.	Microbiology/Epidemiology	See Collection Information MICROBIOLOGY REQUISITION	Daily but testing of an initial product must be arranged with Epidemiology at ext. 57412.			
Steroid Cell Antibodies (see Adrenal Antibodies, Serum)						
Stomach Brush/Wash (see Gastrointestinal/Hepatobiliary Specimens for Cytology)						
Stones (see Calculi, Renal)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Stool Culture Faeces Culture	Microbiology (VH)	Stool Colostomy or Ileostomy contents MICROBIOLOGY REQUISITION	Daily		2009-12-11	1. **Adults:** The Lab routinely screens for Campylobacter jejuni/coli, E.coli 0157:H7, Salmonella and Shigella. Note: if Yersinia is suspected, please indicate when ordering. 2. **Children:** The Lab routinely screens for Campylobacter jejuni/coli, E.coli 0157:H7, Salmonella, Shigella and Yersinia. If other pathogens are suspected due to patient history or travel etc., please discuss with a Microbiologist and notify the laboratory in advance. Inpatients (in hospital 72 hours or more) whose admitti (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Stool Culture for Botulism (see Botulism (Botulism Toxin))						
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	Adequate clinical and epidemiological information must accompany the specimen. Clearly indicate on label and requisition "STRONGYLOIDES SEROLOGY". Must be ordered by the Lab.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Strontium,Urine	Trace Elements	24 hour urine collected in an **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0.34-1.82 µmol/L µmol/mol creatinineAgeFemaleMale0-1139-21739-20712-1925-13224-12820-2928-15021-11430-3934-18125-13340-4940-21526-14050-5948-25330-16160-6947-25032-16970-7949-26134-182≥ 8060-32039-207 24 Hour Urine: 0.46-2.62 µmol/d Conventional Units: 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 Pseudoephedrine, Urine Qualitative)						
Sulfatides, Urine Metachromatic Leukodystrophy MLD	Core	Random urine GENERAL LABORATORY REQUISITION	As required	See report	2008-06-10	
Sulfite Oxidase Deficiency (see Sulfocysteine, Urine)						
Sulfocysteine, Urine Sulfite Oxidase Deficiency Molybdenum Cofactor Deficiency	Biochemical Genetics	Random urine GENERAL LABORATORY 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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 4.4-18.7 mmol/L mmol/mol creatinineAgeFemaleMale0-110.50-2.230.50-2.1312-190.32-1.360.31-1.3220-290.36-1.530.27-1.1730-390.43-1.850.32-1.3740-490.51-2.200.34-1.4450-590.61-2.600.39-1.6660-690.60-2.560.40-1.7370-790.62-2.670.44-1.87≥ 800.77-3.280.50-2.13 24 Hour Urine: 7.8-25.0 mmol/d Conventional Units: 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 Trimipramine,Serum/Plasma)						
Sweat Chloride (see Chloride, Sweat)						
Syphilis (see Syphilis Antibody Screen)						
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	**Adult:** 5 mL Gold top Vacutainer tube or 6 mL Red top Vacutainer tube as well as EDTA, Heparin or Citrate plasma **Pediatric:** 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	**This test is available exclusively to Rheumatologists and Respirologists at LHSC/SJHC and accepted from referred in locations.** 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 Farmers Lung IgG Antibodies, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tacrolimus FK506 Prograf	Toxicology/Special Chemistry	4 mL K_2 or K_3 EDTA Lavender top Vacutainer tube **Pediatric:** 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 Cysticercosis Serology)						
Tau Protein (see Beta-2 Transferrin)						
Tay-Sachs Disease (see Beta-N-Acetylhexosaminidase %A, A, A+B, Leukocyte/Plasma/Fibroblasts)						
TB Culture (see Mycobacterium Culture)						
TBG (see Thyroxine Binding Globulin,Serum)						
TBII (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						
TCOM (see Complement Total, Serum)						
TCRG Gene clonality assay (see T-Cell Lymphoma)						
Tegretol (see Carbamazepine,Serum/Plasma-Total)						
Telopeptide-N (see N-Telopeptide,Urine **no longer available- see C-Telopeptide**)						
Tempra (see Acetaminophen)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Teriflunomide (see Leflunomide)						
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	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	Male: 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 Female: 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	2018-03-06	Nandrolone (19-nortestosterone) interferes with this assay. 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.

(more...)

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 Thyroglobulin, Serum/Plasma)						
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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0-1.96 nmol/L nmol/mol creatinineAgeFemaleMale0-110-2330-22212-190-1420-13820-290-1600-12230-390-1940-14340-490-2300-15150-590-2720-17360-690-2680-18170-790-2800-196≥800-3430-222 24 Hour Urine: 0-2.94 nmol/d Conventional Units: Random Urine: 0-0.400 µg/L ng/g creatinineAgeFemaleMale0-110-4210-40 (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 Theophylline, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Theophylline, Serum Aminophylline Theo-Dur Somophyllin Elixophyllin Xanthine	Core	**Adult:** 6 mL Red top Vacutainer tube **Pediatric:** 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red top Vacutainer tube **Blood collection tubes with separator gels are not recommended for this test.** 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). **Toxic: >110 mol/L** Critical Value to be phoned to nurse or physician immediately
Thermoactinomyces vulgaris (see Farmers Lung IgG Antibodies, Serum)						
Thiamine Diphosphate (see Vitamin B1, Whole Blood)						
Thiamine Pyrophosphate (Whole Blood) (see Vitamin B1, Whole Blood)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thiocyanate,Serum/Plasma	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	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,Serum - Quantitation Mellaril	Core	5 mL Gold top Vacutainer tube **Avoid gel-separator tubes** GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	2.7-4.0 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_2 or K_3 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 Hypercoagulable Screen)						
Thyrocalcitonin (see Calcitonin, Fine Needle Aspirate, Calcitonin, Serum)						
Thyroglobulin, Fine Needle Aspirate	Core	Two samples: The first is uncontaminated Plasma-Lyte and serves as a blank. The second is 1 mL of Plasma-Lyte that has been used to rinse the biopsy needle as described below. GENERAL LABORATORY REQUISITION	As required	≤ 1.0 g/L	2017-07-04	The limit of quantitation of the assay is 0.1 g/L. If a blank result of > 0.1 g/L were to be obtained, a technical investigation would be performed prior to reporting of result. An elevated thyroglobulin level in the fine needle aspirate may indicate the presence of metastatic differentiated thyroid cancer.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thyroglobulin, Serum/Plasma Tg	Core	**Adult:** 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Red or Gold top Microtainer 2-10 years: 3 mL Red top Vacutainer tube Lavender top (EDTA) tubes are also acceptable Light Green top (Li-Heparin) tubes are **NOT** acceptable GENERAL LABORATORY REQUISITION	Thursday 0800-1600	Thyroidectomized patients: < 0.2 g/L Normal population: 3.5 77.0 g/L	2017-07-04	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. In the follow-up of thyroidectomized patients, a concentration > 0.2 g/L is suspicious for local or metastatic disease. In non-thyroidectomized patients, a concentration greater than the reference interval is not diagnostic of cancer. This assay is to be used to monitor patients who have had thyroidectomy for cancer. It is not recommended (more...)

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thyroid Stimulating Hormone, Plasma/Serum TSH TSH-3 Thyrotropin	Core	**Adult:**4.5 mL Green top Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	0 6 days: 0.70 15.2 mIU/L 6 days 3 months: 0.72 11.0 mIU/L 3 12 months: 0.73 8.35 mIU/L 1 6 years: 0.70 5.97 mIU/L 6 11 years: 0.60 4.84 mIU/L 11 20 years: 0.51 4.30 mIU/L > 20 years: 0.27 4.20 mIU/L	2008-11-15	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. The TSH cut-offs are: 2 <6 years: <0.70 or >5.97 mIU/L (more...)

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Thyroid Stimulating Immunoglobulin (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						
Thyrotropin (see Thyroid Stimulating Hormone, Plasma/Serum)						
Thyrotropin Binding Inhibitor Immunoglobulin (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						
Thyrotropin Receptor Antibodies (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						
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		Referred out Monday - Thursday
TIBC (see Unsaturated Iron Binding Capacity)						
Ticks (see Ova and Parasites-Ticks/Arthropods)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tin,Urine	Trace Elements	24 hour urine collected in an **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 4.2-42.2 nmol/L µmol/mol creatinineAgeFemaleMale0-110.5-5.00.5-4.812-190.3-3.10.3-3.020-290.3-3.50.3-2.630-390.4-4.20.3-3.140-490.5-5.00.3-3.250-590.6-5.90.4-3.760-690.6-5.80.4-3.970-790.6-6.00.4-4.2≥ 800.7-7.40.5-4.8 24 Hour Urine: 8.4-59.0 nmol/d Conventional Units: 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 Fungus Culture-Dermatophytes)						
Tip Culture (see Vascular Tip Culture)						
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, Conjuctival 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 Anti-Tissue Transglutaminase Antibodies (IgA), Serum/Plasma)						
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 High Sensitivity Troponin T)						

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 **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	Daily	Therapeutic Range **Trough (Pre Dose):** < = 1.4 mg/L **Peak (Post Dose):** 6-10 mg/L	2010-07-12	
Tofranil (see Imipramine, Serum/Plasma)						
Topamax (see Topiramate,Serum/Plasma)						

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 **Pediatric:** 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 Metanephrines, Urine)						
Total Complement Function Assay (see Complement Total, Serum)						
Total Homocysteine (see Homocysteine)						
Total PSA (see Prostate Specific Antigen, Plasma/Serum)						

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 Ova and Parasites-Blood and Tissue)						
Toxoplasma Serology - Toxoplasma IgG/IgM	Core (UH)	5 mL Gold or 6 mL Red top Vacutainer tube GENERAL LABORATORY REQUISITION	Daily Monday-Friday	See report	2006-07-01	
TPMT Genotype (see Thiopurine Methyltransferase: Genotype)						
TPMT Phenotype (see Thiopurine Methyltransferase: Phenotype)						
TRAb (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						

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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	Creatinine Reference Ranges used for random urine calculations for Trace Elements **SI Units mmol/L** 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 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		11.0-56.0%		The test is not valid and may be misleading in patients receiving iron therapy. Useful in the investigation of suspected iron deficiency or iron overload. Serum ferritin is the preferred method for assessing iron stores. Assessment of patients with acute iron poisoning. In cases of iron deficiency, the transferrin saturation is lowered; with iron overload, it is increased.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Transferrin, Plasma TRF	Core	**Adult:** 4.5 mL Green (Lithium Heparin) top Vacutainer **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube GENERAL LABORATORY REQUISITION	Daily	2.00-3.60 g/L	2010-01-11	Turbidimetric assays not suitable for measurement of highly lipemic or hemolytic samples or samples containing high levels of circulating immune complexes. Transferrin quantitation not to be confused with transferrin saturation. **To screen for chronic iron overload diseases, hemochromatosis, please order Transferrin saturation.**
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 Anti-Tissue Transglutaminase Antibodies (IgA), Serum/Plasma)						
Transthyretin (see Prealbumin, Serum)						
Trazodone Desyrel	Core	4 mL Dark Green (Lithium Heparin) top Vacutainer tube **Avoid gel-separator tubes** GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	2.2 - 4.3 µmol/L	2005-07-01	
TRF (see Transferrin, Plasma)						
Trichinella (see Ova and Parasites-Blood and Tissue)						

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 requistion "TRICHINOSIS SEROLOGY".
Tricyclic Screen Tricyclics, Plasma	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer tube (preferred) or 5 mL Gold top Vacutainer tube **Pediatric:** 0-2 yrs: 0.5pk. Green top 2-10 yrs: 2 mL Green top GENERAL LABORATORY REQUISITION	As required	Negative	2009-06-04	
Tricyclics, Plasma (see Tricyclic Screen)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Triglycerides, Plasma	Core UH & VH	4.5 mL Green top Vacutainer **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 3 mL Green top GENERAL LABORATORY REQUISITION	Weekdays	* 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). Triglyceride: Suggested optimal plasma triglyceride concentration is <1.50 mmol/L. Triglyceride level >10.00 mmol/L is a risk factor for pancreatitis
Trimipramine,Serum/ Plasma Surmontil	Core	2 x 6 mL Red top Vacutainer tube or 2 x Lavender top Vacutainer tubes **Avoid gel-separator tubes** GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	170-1000 nmol/L	2005-07-01	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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.** REGIONAL CYTOGENETICS 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 Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
Triple Screen (see Maternal Serum Screen (for Open Neural Tube Defect and Down Syndrome Risks))						
Triptil (see Protriptyline,Serum **TESTING ON HOLD as of 11/09/15**)						
Tropheryma whipplei (see Whipple's Disease)						
Troponin T - High sensitivity (see High Sensitivity Troponin T)						
Trypanosoma (see Ova and Parasites-Blood and Tissue)						
Trypanosomiasis Screen (see Blood Parasite Screen)						
Trypsin-like immunoreactivity (see Trypsin/Trypsinogen, Serum)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Trypsin/Trypsinogen, Serum Immunoreactive trypsin Immunoreactive trypsinogen Trypsin-like immunoreactivity	Core	**Adult:** 5 mL Gold Vacutainer tube **Pediatric:** 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 **NOT** acceptable GENERAL LABORATORY REQUISITION	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) **Pediatric:** 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 Thyroid Stimulating Hormone, Plasma/Serum)						
TSH-3 (see Thyroid Stimulating Hormone, Plasma/Serum)						
TSI (see Anti-Thyroid Stimulating Hormone Receptor Antibodies, Serum)						
tTGAB (see Anti-Tissue Transglutaminase Antibodies (IgA), Serum/Plasma)						
TTR (see Familial Amyloidotic Polyneuropathy-TTR)						
Tularensis antibody (see Francisella tularensis Serology)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Tylenol (see Acetaminophen)						
Autoimmune Encephalitis Antibodies (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Other Antibody (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
Paraneoplastic Antibodies (see Comprehensive Autoimmune Encephalitis Panel, Serum/CSF)						
UIBC (see Transferrin Saturation, Unsaturated Iron Binding Capacity)						
Umbilical Cord Blood Testing (see Cord Blood Testing)						
Unsaturated Iron Binding Capacity Iron Binding Capacity Saturation UIBC TIBC Iron Overload	Core UH & VH	4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	As required	19.7-66.2 µmol/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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0-0.042 nmol/L nmol/mol creatinineAgeFemaleMale0-110-5.00-4.812-190-3.00-3.020-290-3.40-2.630-390-4.20-3.140-490-4.90-3.250-590-5.80-3.760-690-5.80-3.970-790-6.00-4.2≥800-7.40-4.8 24 Hour Urine: 0-0.063 nmol/d Conventional Units: 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 **Pediatric:** 0-2 yrs: 0.6 mL Green pk. 2-10 yrs: 3 mL Green top 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	Weekdays	0.00-0.30 mmol/L	2006-03-01	
Urea Cycle Disorder (see Orotic Acid, Urine)						
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 **Pediatric:** 0-2 yrs: Green top Microtainer (BD 365985) 2-10 yrs: 3 mL Green top 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	Weekdays	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	**Non-Gynaecological: Urinary** Orange top routine specimen container containing 30 mL Cytolyt solution/60 mL body fluid CYTOPATHOLOGY REQUISITION-NON-GYNAECOLOGICAL AREA	Weekdays		2010-11-25	Close specimen lid tightly to prevent leakage. 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.
Urine Bile Urine Bilirubin	Core (UH)		TEST NO LONGER AVAILABLE (EFFECTIVE NOVEMBER 25, 2013)		2009-08-20	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Urine Bilirubin (see Urine Bile)						
Urine Culture (Urine C & S)	Microbiology (VH)	Urine **OR** 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 Urinary Fluid for Cytology)						
Urine Microalbumin (see Microalbumin,Urine)						
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 Porphyrins (see Porphyrins, 24-Hour Urine)						
Urine Protein Electrophoresis (see Protein Electrophoresis, Urine)						
Uroporphyrin I (see Porphyrins, 24-Hour Urine, Porphyrins, Urine, Random)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Uroporphyrin III (see Porphyrins, 24-Hour Urine, Porphyrins, Urine, Random)						

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
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 µg/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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0.26-2.36 nmol/L nmol/mol creatinineAgeFemaleMale0-1129-28029-26812-1918-17118-16620-2921-19316-14730-3925-23319-17240-4930-27720-18150-5935-32723-20860-6935-32324-21870-7936-33726-236≥ 8045-41329-268 24 Hour Urine: 0.39-3.93 nmol/d Conventional Units: 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:
Vancomycin	Core (VH)	4 mL Lavender top EDTA Vacutainer tube (preferred), **separate** tube required. 5 mL Gold top Vacutainer tube also acceptable. **Pediatric:** 0-2 yrs: EDTA Microtainer GENERAL LABORATORY REQUISITION	As required	**Therapeutic Ranges:** Trough (Pre-dose): 10-20 mg/L Effective February 4, 2013 paediatric ranges, including the post-dose (peak) range, have been discontinued	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. **Random urine testing available for pediatric patients only.** GENERAL LABORATORY REQUISITION	Monday Friday 0800-1600	**Random Urine (VMA in mol/mmol creatinine):** 0 - 2 years: ≤ 10.7 2 - 4 years: ≤ 6.3 5 - 9 years: ≤ 4.7 10 - 19 years: ≤ 5.0 > 19 years: ≤ 3.5 **24-Hour Urine (VMA in mol/day):** 0 - 2 years: ≤ 12.0 2 - 4 years: ≤ 15.0 5 - 9 years: ≤ 18.0 10 - 19 years: ≤ 30.0 > 19 years: ≤ 34.0	2017-07-04	VHHU24 (for 24-hour urine; includes VMA and HVA) or VMAR (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. **For STAT requests, please call the toxicology lab at ext. 64664 to make arrangements.** For 24-hour urine collections, transfer an aliquot of the measured urine to a 5-mL Greiner tube.

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	

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vascular Endothelial Growth Factor, Plasma VEGF	Core	**Adult:** 4 mL Lavender top (EDTA) Vacutainer tube GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	31 86 pg/mL	2018-04-23	**This test should not be ordered more frequently than 4 times per year for patients with POEMS syndrome.**
Vascular Tip Culture Tip Culture Catheter Tip Culture PICC tip Culture	Microbiology (VH)	Vascular Catheter Tip: 5-7 cm (2-3 inches) off the distal ends and 1 set peripheral blood culture collected at the same time. MICROBIOLOGY REQUISITION	Daily		2008-07-24	Vascular catheter tips are to be submitted only in cases of line related infections and line in question is being removed. Ventricular and epidural tips for culture should be ordered under CSFC. Foley catheter tips are not acceptable for culture.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Vasoactive Intestinal Polypeptide VIP	Core	4 mL K_2 or K_3 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)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Virus Culture	Virology Laboratory	Specimen should reflect the target organism whenever possible. Respiratory Viruses: See RPCR Respiratory Virus Panel Herpes Simplex Virus: See HSV PCR Varciella zoster viruses: VZVPCR Adenovirus: swabs - conjunctiva, rectal, stools MUMPS: Swabs-throat, buccal (more...)	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 Influenza Virus Serology-Test not available)						
Vitamin A,Serum/Plasma	Toxicology/Special Chemistry	Serum: 6 mL Red top Vacutainer tube Plasma: 4 mL Lavender or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Once a week	1.2-2.8 µmol/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		55-190 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	**Adult:** 4.5 mL Light Green top (Li-Heparin) Vacutainer tube **Pediatric:** 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube Red, Gold, or Lavender (EDTA) top tubes are also acceptable GENERAL LABORATORY REQUISITION	As required	145 569 pmol/L	2015-11-02	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. Necessary for normal hematopoiesis and requires intrinsic factor for normal absorption. Decreased in pernicious anemia and malabsorption syndromes.

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) **or** 4 mL (EDTA) Lavender top Vacutainer tube Serum is also acceptable GENERAL LABORATORY REQUISITION	Routine	20-96 nmol/L	2009-07-02	
Vitamin C Ascorbic Acid	Toxicology/Special Chemistry	4.5 mL Green (Lithium Heparin) top Vacutainer tube **Pediatric:** 0-2 years: 0.5 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	Serum: 6 mL Red top Vacutainer tube Plasma: 4 mL Lavender or 4.5 mL Green (Lithium Heparin) top Vacutainer tube GENERAL LABORATORY REQUISITION	Monday - Friday 0800-1600	18-29 µmol/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 Long Chain Fatty Acids,Plasma/Serum)						
VMA (see Vanillylmandelic Acid, Urine)						
Volatile Screen (see Alcohol Fractionation (by Gas Liquid Chromatography))						

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

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 **Pediatric:** 0-2 years: 1.8 mL Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** GENERAL LABORATORY REQUISITION	Referred out Monday - Thursdays as required	See report	2006-06-01	
Von Willebrand's Factor (see Von Willebrand's Screen)						

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 **Pediatric:** 0-10 years: 1.8 mL Sodium Citrate Coagulation tube: **Contact HAT lab ext. 52526 for number of tubes required prior to sampling** 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 Pediatric: 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 Arbovirus Flavivirus Serology/PCR)						
Western Encephalitis (see Arbovirus Flavivirus Serology/PCR)						
Whipple's Disease Tropheryma whipplei	Microbiology (VH)	Tissue biopsy (should be reviewed by a Pathologist prior to submission) **Note:** 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 Differential Leukocyte Count (Peripheral Blood))						
Whooping Cough (see Bordetella pertussis Investigation (PertPCR))						
Wolman's Disease (see Acid Lipase)						

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Xanthine (see Theophylline, Serum)						
Xylocaine (see Lidocaine, Serum/Plasma)						
Y-marker (see Sexing (for medical indications))						
Yeast (see Fungus Culture-Systemic or Subcutaneous)						
Yellow Fever (see Arbovirus Flavivirus Serology/PCR)						
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 Ethosuximide,Serum)						
Zika Virus (see Arbovirus Flavivirus Serology/PCR)						

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 Protoporhyrin 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:10.3-18.1µmol/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 µmol/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 **unused** 24 hour urine container or random urine TRACE ELEMENTS REQUISITION	Batched analysis	SI Units: Random Urine: 0.9-6.1 µmol/L µmol/mol creatinineAgeFemaleMale0-11104-729104-69512-1967-44365-43120-2975-50257-38330-3991-60667-44740-49108-72071-47150-59128-85081-54260-69126-83885-56770-79131-87492-612≥ 80161-1074104-695 24 Hour Urine: 1.5-9.2 µmol/d Conventional Units: (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 Sertraline,Serum/Plasma)						
ZPP (see Zinc Protoporphyrin,Whole blood)						

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Zygosity (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		This test will be available for medical indications only usually to aid in linkage analysis or to clarify prenatal diagnosis and must be referred from the Genetics Clinic. For more information click on: Molecular Diagnostic Laboratory N/A A series of polymorphic VNTR's are analyzed on two twins and assessed to dertermine if they are identical.
Zyprexa (see Olanzapine, Urine Qualitative)						