

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
<p>P53 Carrier Testing Li-Fraumeni Syndrome</p>	<p>Molecular Diagnostics</p>	<p>Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION</p>	<p>As Required Monday - Friday 0800 - 1600 h</p>	<p>See report</p>		<p>For more information click on: Molecular Diagnostic Laboratory N/A 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 (&gt;90%)<b>1,2</b> found within the DNA-binding domain of the p53 gene which is coded for by exons 5 through 8, and (more...)</p>

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

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Parathormone (see <u>Parathyroid Hormone, Plasma</u> )						
Parathyrin (see <u>Parathyroid Hormone, Plasma</u> )						
Parathyroid Hormone Related Peptide (see <u>Parathyroid Hormone-Related Peptide, Plasma</u> )						
Parathyroid Hormone, Fine Needle Aspirate PTH FNA	Core (VH)	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	<p><b>Adult:</b> 4 mL Lavender or 6 mL Pink top (EDTA) Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Lavender top (EDTA) Microtainer 2-10 years: 2 mL Lavender top (EDTA) Vacutainer tube</p> <p>Red, Gold, or Light Green (Li-heparin) top tubes are also acceptable as long as the serum or plasma is separated from the cells immediately after collection; EDTA plasma is the pre (more...)</p>	As required	1.6-6.9 pmol/L	2010-06-09	Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Parathyroid Hormone-Related Peptide, Plasma Parathyroid Hormone Related Peptide Parathyroid Related Peptide PTHrP PTH-RP	Core	<p><b>Adult:</b> 4 mL Lavender top (EDTA) Vacutainer tube</p> <p><b>Pediatric:</b> 2-10 years: 2 mL Lavender top (EDTA) Vacutainer tube</p> <p>Red, Gold, Light Green, or Dark Green top tubes are <b>NOT</b> acceptable. GENERAL LABORATORY REQUISITION</p>	Referred out Monday-Thursday	≤4.2 pmol/L	2015-02-04	
Parathyroid Related Peptide (see <u>Parathyroid Hormone-Related Peptide, Plasma</u> )						
Parietal Antibodies (see <u>Anti Parietal Cell Antibody</u> )						



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Paroxetine, Serum Paxil	Core	6 mL Red or Navy top Vacutainer tube  <b>Avoid gel-separator tubes</b> GENERAL LABORATORY REQUISITION	Referred out Monday-Thursday	up to 150 nmol/L	2007-01-29	
Paroxysmal Nocturnal Hemoglobinuria Investigation	Flow Cytometry (VH)	Peripheral blood collected in a 4 mL K <sub>2</sub> or K <sub>3</sub> EDTA Lavender top Vacutainer tube  Referred-In Samples: FLOW CYTOMETRY REQUISITION	Monday-Friday 0800-1600  Fridays or prior to STAT holidays, routine specimens must be received in the Flow Cytometry Laboratory at Victoria Hospital by 1300.	No PNH clones are a normal result.	2006-06-01	Test is positive in Paroxysmal Nocturnal Hemoglobinuria (PNH) and HEMPAS.  Call Flow Cytometry Lab (519) 685-8500 x 57450 for further details.  Negative result is normal expression of GPI linked proteins.  Positive result is a percent of GPI linked proteins are absent from RBCs and/or WBCs.

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Paternity (for medical indications ONLY)	Molecular Diagnostics	Whole blood-2 x 4 mL Lavender EDTA top Vacutainer tube MOLECULAR DIAGNOSTIC REQUISITION	As Required Monday - Friday 0800 - 1600 h	See report		For more information click on: Molecular Diagnostic Laboratory N/A A series of four polymorphic VNTR's are analyzed in each of the individuals.
Paul-Bunnell (see <a href="#">Heterophile Antibody Screen</a> )						
Paxil (see <a href="#">Paroxetine, Serum</a> )						
PBG (see <a href="#">Porphyrin Precursors, 24-Hour Urine, Porphyrin Precursors, Random Urine</a> )						
PCA (see <a href="#">Protein C Assay</a> )						
PCA-2/Anti-MAP1B (see <a href="#">Comprehensive Autoimmune Encephalitis Panel, Serum/CSF</a> )						
PCH Donath-Landsteiner Test Donath-Landsteiner Hemolysin Test	Blood Transfusion (UH)	2 x 6 mL Red (clotted) top Vacutainer BLOOD TRANSFUSION REQUISITION or Electronic order	As required Monday-Friday	See report		Hematologist Consult required N/A Positive in paroxysmal cold hemoglobinuria (PCH).
PCR Quantitative (see <a href="#">Hepatitis C RNA - Quantitative</a> )						
PELS (see <a href="#">Protein Electrophoresis, Serum</a> )						
PELU24 (see <a href="#">Protein Electrophoresis, Urine</a> )						

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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
pH, Fluid	Core	Fluid GENERAL LABORATORY REQUISITION	As required	See report	2010-06-30	
Phenobarbital, Serum/ Plasma Anticonvulsant Luminal Phenobarbitone	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube  Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable.  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Adult: 65-172 µmol/L  <18 years old: 65-110 µmol/L	2008-11-15	Long acting barbiturate with anticonvulsant, sedative-hypnotic properties. Because Primidone (Mysoline) is partially metabolized to phenobarbital, it is measured together with Primidone. <b>Toxic:</b> >215 µmol/L CRITICAL VALUE to be phoned to Nurse or Physician immediately:
Phenobarbitone (see <u>Phenobarbital, Serum/Plasma</u> )						
Phenylalanine (see <u>Amino Acids, Plasma</u> )						

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Phenytoin, Serum/Plasma-Total Anticonvulsant Dilantin	Core	4.5 mL Green (Lithium Heparin) top Vacutainer tube  Serum from a 5 mL Gold top or 6 mL Red top Vacutainer tube is also acceptable.  <b>Pediatric:</b> 0-2 years: 0.5 mL Green top Microtainer 2-10 years: 2 mL Green top tube GENERAL LABORATORY REQUISITION	As required	Adult: 40-79 µmol/L  < 3 months: 24-55 µmol/L	2008-11-15	CRITICAL VALUE to be phoned to Nurse or Physician immediately:  <b>Toxic:</b> ≥120 µmol/L Note: Falsely elevated Phenytoin concentrations have been observed in patients with renal failure due to assay interference with metabolites of Phenytoin.
Philadelphia Chromosome (see <u>Chronic Myelogenous Leukemia, by Karyotype/FISH, Chronic Myelogenous Leukemia, by PCR</u> )						
Phosphate, 24-Hour Urine Inorganic Phosphate	Core	24 hour urine in acid washed container GENERAL LABORATORY REQUISITION	As required	13.0-42.0 mmol/d		



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

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

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

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

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

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

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

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



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

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

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

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

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

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

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

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



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

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

Powassan (see Arbovirus Flavivirus Serology/PCR)

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

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

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

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

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

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

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



Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Products of Conception Chromosome Analysis QF-PCR Microarray	Cytogenetics (VH)	Amnion (0.1-5cm <sup>2</sup> ), cord (1cm <sup>3</sup> ), chorionic villi or fetal skin (0.5-1cm <sup>2</sup> ) preferred - In a sterile container, containing Hank's Balanced Salt Solution (HBSS) CYTOGENETICS REQUISITION . (must include patient's name, address, Ontario Health Insurance Number, PIN (if applicable), originating location, Dr's full name and address, test requested, specimen type and pe (more...))	As required	See final report		<p>The Cytogenetics Lab is staffed from 0700-1700 (Monday-Friday), Ext. 78974 (office), or 75714 (lab).</p> <p>For additional information please refer to the Cytogenetics Webpage.            See final report            N/A            As products of conception are prone to microbial contamination, collect sample as aseptically as possible and send to the laboratory within 24 hours.</p>

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Progesterone, Plasma/Serum	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	<p><u>Male:</u> 4 weeks - 1 year: <math>\leq 2.1</math> nmol/L 1 - 9 years: <math>\leq 1.1</math> nmol/L Adult: <math>&lt; 0.6</math> nmol/L</p> <p><u>Female:</u> 4 days - 1 year: <math>\leq 4.1</math> nmol/L 1 - 9 years: <math>\leq 1.1</math> nmol/L Follicular phase: <math>\leq 0.6</math> nmol/L     Early follicular phase: <math>\leq 1.0</math> nmol/L     Intermediate follicular phase: <math>\leq 0.7</math> nmol/L     Late follicular phase: <math>\leq 0.7</math> nmol/L     Ovulatory phase: <math>\leq 13.2</math> nmol/L      Luteal phase: 13.1 - 46.3 nmol/L</p>	2009-12-01	<p>Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. <math>&gt; 5</math> mg/day) until at least 8 hours after the last biotin administration.</p> <p>Interpret progesterone result with caution since lipemia may artificially decrease result.</p>

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prolactin, Plasma/Serum	Core	<p><b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 0.5 mL Light Green top (Li-Heparin) Microtainer 2-10 years: 3 mL Light Green top (Li-Heparin) Vacutainer tube</p> <p>Red, Gold, or Lavender (EDTA) top tubes are also acceptable</p> <p>GENERAL LABORATORY REQUISITION</p>	As required	<p><u>Male:</u> Tanner stage 1: 2 - 16 g/L Tanner stage 2: 2 - 12 g/L Tanner stage 3: 3 - 17 g/L Tanner stage 4: 3 - 12 g/L Tanner stage 5: 3 - 14 g/L Adult: 4 - 15 g/L</p> <p><u>Female:</u> Tanner stage 1: 2 - 16 g/L Tanner stage 2: 2 - 16 g/L Tanner stage 3: 3 - 18 g/L Tanner stage 4: 3 - 18 g/L Tanner stage 5: 3 - 18 g/L Non-pregnant Adult: 5 - 23 g/L First Trimester of Pregnancy: 10 - 101 g/L Second (more...)</p>	2009-12-01	Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Pronestyl (see <u>Procainamide, Serum</u> )						
Propafenone, Serum/P lasma Rythmol	Core	<p><b>Adult:</b> 6 mL Red top Vacutainer tube</p> <p><b>Pediatric:</b> 0-2 years: 2 x 0.5 mL Red top Microtainers 2-10 years: 3 mL Red top Vacutainer tube</p> <p>Plasma (Sodium Heparin) is also acceptable.</p> <p><b>Blood collection tubes with separator gels are not acceptable for this test.</b> GENERAL LABORATORY REQUISITION</p>	Referred out Monday- Thursday	0.2-1.6 g/mL		

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Prophase Banding (see <u>Chromosome Analysis, Blood</u> )						
Propylene Glycol (see <u>Glycol Screen</u> )						
Prostate Specific Antigen, Plasma/Serum PSA Total PSA	Core	<b>Adult:</b> 4.5 mL Light Green top (Li-Heparin) Vacutainer tube  Red, Gold, or Lavender (EDTA) top tubes are also acceptable <b>GENERAL LABORATORY REQUISITION</b>	As required	<b>Male:</b> <60 years: ≤ 3.89 g/L 60-<70 years: ≤ 5.40 g/L ≥70 years: ≤ 6.22 g/L	2018-03-06	Biotin may interfere with this test. Samples should not be taken from patients receiving high biotin doses (i.e. > 5 mg/day) until at least 8 hours after the last biotin administration.  If the total PSA result is in the range of 4-10 g/L, a free PSA result could be of value in estimating the risk of prostate cancer in a patient with no previous diagnosis.

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

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



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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein Electrophoresis, Serum PELS Monoclonal Protein Screen SPE Serum Protein Electrophoresis	Clinical Immunology	5 mL Gold top Vacutainer tube  Light Green (Li-Heparin) or Lavender (EDTA) top tubes are <b>NOT</b> acceptable  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 $\geq 3$ weeks for repeat testing. If serum protein electrophoresis is ordered and it has been <20 days since the collection date of the last sample run, the test will be cancelled.  Abnormal bands are identified by immunofixation electrophoresis.

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Protein S Antigen (Free) PSAG	Hemostasis and Thrombosis Laboratory (Victoria Hospital)	2.7 mL Blue (3.2% Sodium Citrate) top Vacutainer tube  <b>Pediatric:</b> 0-2 years: 1.8 mL Blue Sodium Citrate Coagulation tube: <b>Contact HAT lab ext. 52526 for number of tubes required prior to sampling</b> GENERAL LABORATORY REQUISITION	Weekly	<b>Adult:</b> 0.60-1.40 U/mL		<p>Level is decreased in Protein S deficiency, a prothrombotic condition.</p> <p>Testing not recommended during Warfarin therapy and in pregnancy. Blue (Sodium Citrate) top tubes should be centrifuged within 4 hours of collection.</p> <p>The blood specimen must be double centrifuged to prepare platelet free plasma.</p> <p>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...)</p>

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

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

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

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



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

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

Test Name	Laboratory	Specimen Type	Test Schedule	Reference Range	Effective Date	Comments
Pyruvate, Whole Blood Lactate: Pyruvate Ratio	Biochemical Genetics	6 mL Green (Sodium or Lithium Heparinized) top Vacutainer tube  <b>Pediatric:</b> 0-2 yrs: 2 x 0.5 mL Green top 2-10 yrs: 3 mL Green top BIOCHEMICAL GENETICS LAB REQUISITION	As required	Pyruvate: 0.06-0.22 mmol/L  Lactate: 0.62-2.10 mmol/L  Lactate-Pyruvate Ratio: ≤ 20.00	2008-06-10	