

2021-22

Laboratory Quick Reference Guide to Test Orders

Health PEI

Provincial Laboratory Medicine

Provincial Laboratory Medicine

Guide Information

This guide has been developed by Provincial Laboratory Services as an aid for all clients when placing laboratory test orders. This document provides an alphabetical listing of laboratory tests; in addition, limited information is also provided which relates to:

- The Cerner Orderable Name
- Specimen Type
- Collection Container requirements
- Transport and Storage conditions
- Special Notes and Additional Information

While every effort is made to keep this version up to date, the electronic copy that resides on the document control system is the valid document. The electronic version of this document can also be found on the Provincial Laboratory Services website at: www.healthpei.ca/laboratoryservices. Any paper document labeled “Uncontrolled” must be verified against the electronic version prior to use.

Test Requirements

Referring labs: Refer to the Laboratory Information Manual if additional detailed information is required. Please contact the QEH laboratory for any questions/concerns around sample collection and preparation.

All Clients: If your service is unable to provide the specimen handling requirements for the requested analysis, please refer your patient to a Health PEI Hospital Laboratory Collection Centre.

Provincial Laboratory Medicine

Tests Not in Catalogue

Please contact QEH Laboratory at 894-2300 for information on tests not found in this catalogue.

Guide to Laboratory Services

The Guide to Laboratory Services is an additional document which can be viewed at on the Health PEI Provincial Laboratory Services website. This document will provide information related to:

- Provincial Site Locations

- Hours of Operation

- Laboratory Directory

- Scheduling of Appointments

- Requisition Information

- Specimen Collection Info:

 - Patient Preparation

 - Collection Procedures

 - Sample Labeling

- Ordering of Laboratory Supplies

Reference Ranges

Reference values and interpretive data are reported with test results. The Laboratory Information Manual also provides these values with each test listing.

Provincial Laboratory Medicine

Abbreviations

| | |
|------|------------------------------|
| °C | Degrees Celsius |
| BAL | Bronchial Alveolar Lavage |
| C&S | Culture and Sensitivity |
| CSF | Cerebrospinal Fluid |
| CPHO | Chief Public Health Office |
| ETOH | Ethanol |
| HR | Hour |
| mL | Milliliter |
| NPA | Nasopharyngeal Aspirate |
| NPS | Nasopharyngeal Swab |
| PCH | Prince County Hospital Lab |
| QEH | Queen Elizabeth Hospital Lab |
| RT | Room Temperature |
| SST | Serum Separator Tube |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------------|----------------------------------|---------------|---|---------------------------------------|---|
| 17-Hydroxyprogesterone | 17 OH Progesterone | Serum | 6 mL Red/SST | Store and Ship Frozen | Department: Chemistry Referred-Out Testing Notes: Centrifuge and separate serum from cells. |
| 5HIAA 24 HR Urine Quantitative | 5HIAA 24 Hour Urine Quantitative | 24 Hour Urine | 24 Hour Urine Container for collection; Sterile Urine Container for specimen submission | Store and Ship Frozen | Department: Chemistry Referred-Out Testing Notes: Diet and drug restrictions: To be avoided for 48 hours ASA, chloralhydrate, coffee, cola drink, dopamine, erythromycin, methyldopa, niacin, phenothiazines, quinidine, quinine, riboflavin, smoking, tea, tetracycline, vitamin B. To be avoided for 72 hours avocados, bananas, chocolate, eggplant, fruit and juice, hypertensive drugs (especially Aldomet), pineapple, plums, Tylenol (acetaminophen), walnuts. Specimen Collection: Collect urine in a 24 hour urine container with 25 mL of 6N HCl as a preservative. Transfer 50 mL aliquot of the measured 24 hour urine to a sterile container. Indicate 24 hour volume on requisition. |
| 5HIAA Random Urine Screen | 5HIAA Screen Urine | Random urine | Sterile urine container | Store and ship refrigerated or frozen | Department: Chemistry Referred-Out Testing Notes: Diet and drug restrictions: To be avoided for 48 hours: ASA, chloralhydrate, coffee, cola drink, dopamine, erythromycin, methyldopa, niacin, phenothiazines, quinidine, quinine, riboflavin, smoking, tea, tetracycline, vitamin B. To be avoided for 72 hours: avocados, bananas, chocolate, eggplant, fruit and juice, hypertensive drugs (especially Aldomet), pineapple, plums, Tylenol (acetaminophen), walnuts. |
| Acanthamoeba Culture | Acanthamoeba Culture | Eye Scrapings | 50 mL Sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Cover eye scrapings with Page's Saline (Found in eye kit in specimen receiving). |
| ACE | ACE | Blood | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred-Out Testing Notes: Serum must be removed from clot or SST ASAP. |
| Acetaminophen | Acetaminophen Level | Blood | 6 mL Red/SST | RT | Department: Chemistry Notes: Do not use yellow-gel separator tube. |
| Acetylcholine Receptor Antibody | Immunology Other | Blood | 6 mL Red | | Department: Immunology - Referred Out |
| Activated Protein C Resistance | Activated Protein C Resistance | Blood | 2 X Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4 hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-------------------------------------|---|--|-------------------------------------|--|---|
| Acylcarnitine | Acylcarnitines Quantitative | Capillary Blood on a Blotter Card (Alternate: serum to HICL) | Blotter Card - specimen of choice | RT | Department: Chemistry Referred Out Testing Notes: Capillary collection applied directly to blotter card. Three circles must be filled completely and soaked all the way through. Allow circles to dry at room temperature, lying horizontally for three hours before placing in envelope. Requisition: IWK "Request for Metabolic Investigation". |
| Acylcarnitine (serum) | Acylcarnitines Quantitative (add order comment for serum specimen) | Serum | 6 mL Red/SST | Store and transport frozen. | Department: Chemistry Referred Out Testing Notes: Allow specimen to clot fully. Centrifuge and separate serum from cells. |
| Adenovirus Culture | Adenovirus Culture | Eye Swab/Scrapings | Swab in Viral Transport Media (VTM) | Specimen holding temperature 2-8°C for 24hrs | Department: Microbiology -Referred Out Notes: Referring Labs: For culture only; Specimen that will be sent to the lab outside of 24 hours should be frozen at -20°C and sent to Lab frozen on ice. If sent to lab on same day of collection then 2-8°C is fine. |
| | | Urine/ Tissue | / 50 mL Sterile container | Specimen holding temperature 2-8°C for 24hrs | Department: Microbiology -Referred Out Notes: Referring Labs: For culture only; Specimen that will be sent to the lab outside of 24 hours should be frozen at -20°C and sent to Lab frozen on ice. If sent to lab on same day of collection then 2-8°C is fine. |
| Adenovirus PCR | Adenovirus PCR | Washings/NPA/NPS | 50 mL Sterile container | Specimen holding temperature 4°C | Department: Microbiology -Referred Out Note: Adenovirus PCR is part of the Viral Respiratory Panel. |
| Adrenal Antibodies | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Adrenocorticotrophic Hormone (ACTH) | ACTH | Plasma | EDTA (Lavender) | Ship on dry ice →See Notes | Department: Chemistry Referred Out Testing Notes: Collect specimen after a 10 hour fast. Morning specimen is preferred. Specimen for this test must be collected, processed, aliquoted and frozen within 60 minutes of collection. If unable to meet these requirements, patients for this test must be referred to a Health PEI hospital specimen collection centre. Pre-chill collection tube in ice water; Mix thoroughly by gentle inversion and immediately place in refrigerator for minimum of 15 minutes, but no more than 30 minutes. Centrifuge; Separate plasma from red cells immediately following centrifugation. Aliquot plasma to a transport aliquot tube; Indicate date and time of specimen collection Dexamethasone Suppression Test and ACTH Stimulation Test may sometimes also request ACTH levels. For both these tests the only hormone that needs to be measured in the timed collections is Cortisol unless prior approval is obtained from the Chemistry Clinical Lead. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------------------|---|-------------------------|--|---|--|
| Albumin | Albumin Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Albumin | Urine Albumin Random | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Albumin - Urine | Urine Albumin 24 Hour | 24 Hour Urine | 24 hour urine container - no additive | RT | Department: Chemistry |
| Alcohol | See Ethanol | | | | |
| Aldosterone 24 HR Urine | Urine Other (Add test name in Order Comment) | 24 Hour Urine | 24 hour urine container for specimen collection. Sterile urine container for specimen submission | Store and ship frozen on dry ice | Department: Chemistry Referred Out Testing Notes: Patient must be on normal sodium intake and not receiving diuretics for one week before urine sample is collected for this test. Collect urine in a 24 hour urine container with no preservative. Transfer 50 mL aliquot of the measured 24 hour urine to a sterile container. Indicate 24 hour volume on requisition. |
| Aldosterone Serum | Aldosterone | Serum | 6mL Red/SST | Store and ship frozen on dry ice | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot serum to a transport tube. Collect as routine venipuncture. |
| Aldosterone-Renin Concentration Ratio | Chemistry Other (Add test name in Order Comment) | Serum AND Plasma | 6 mL Red Top/SST and EDTA Lavender | Store and ship frozen on dry ice | Department: Chemistry Referred Out Testing Notes: Collect in a seated position prior to 10 AM <ul style="list-style-type: none">• Patient should stop taking spironolactone or eplerenone for four to six weeks prior to testing.• Patient should be instructed to abort any reduced salt diets and consume salt ad libitum for two days prior to testing.• If hypokalemic, the patient should receive oral potassium replacement to restore eukalemia.• Oral contraceptives, corticosteroids, glucocorticoids, licorice, age, menstrual cycle and pregnancy can affect this test.• Patient should be ambulatory for 30 minutes prior to blood collection. |
| Alkaline Phosphatase | Alkaline Phosphatase | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Alkaline Phosphatase - Bone Specific | Alkaline Phosphatase: Bone Specific | Serum | 6 mL Red/SST | Store frozen and ship on dry ice →See Notes | Department: Chemistry Referred Out Testing Notes: Specimen for this test must be collected, processed, aliquoted and frozen within 45-60 minutes of collection. If unable to meet these requirements, patients for this test must be referred to a Health PEI Hospital Specimen Collection Center for collection. Centrifuge and aliquot serum to a transport tube; Freeze immediately. Collect as routine venipuncture. |
| Allergens | Allergens | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|---|-----------------|--|---|--|
| Alpha 1 Antitrypsin (AAT) | Alpha 1 Antitrypsin | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Alpha 1 Antitrypsin Phenotype | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department : Immunology - Referred Out |
| Alpha 2 Plasminogen Inhibitor | Alpha 2 Antiplasmin | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out |
| | | | | | Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4 hrs, tubes should be double spun, placed in 1 mL aliquots and sent frozen. |
| Alpha-fetoprotein | AFP | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: If delay in testing, serum should be separated and frozen. Avoid hemolysis. |
| Alpha-Galactosidase A | Chemistry Other (Add test name in Order Comment) | Whole Blood | Sodium or Lithium Heparin (Green) | Shipped at RT on same day of collection →See Notes | Department: Chemistry Referred Out Testing Notes: Collect Monday or Tuesday only – around noon – to allow for maximum time to arrive and be processed at the referral lab. Collect a control sample at the same time (green tube from another person). Keep at room temperature. Specimen must be stored and shipped at room temperature the day of collection. Specimen must be received at SickKids within 24 hours of collection. Routine venipuncture - Correlate with QEH Chemistry Send-Out -Area. This test is available only at the QEH. Please call to book. |
| Alport Syndrome Linkage / Hereditary Nephritis | DNA Analysis – Alport Syndrome Linkage | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| ALT | ALT | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Aluminum | Aluminum Level | Plasma (K2EDTA) | Dark Blue Top (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and separate within ½ hour of collection; Centrifuge with stopper on; Do not use separator gel; Aliquot plasma to polypropylene transport tube using a polypropylene transfer pipette. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium- or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. Patients should discontinue nutritional supplements, vitamins, and minerals. Patients should also avoid antacids containing aluminum which can greatly elevate the aluminum output. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-------------------------------|-------------------------------|------------------------|--|---|--|
| Aluminum Urine | Aluminum Level Urine | Random Midstream Urine | Sterile ORANGE-CAPPED (Metal Free) urine container | Store and ship refrigerated. Freezing is also acceptable. | Department: Chemistry Referred Out Testing Notes: Patient is to avoid fruits, chocolate, juices, beer, coffee and teas for 24 hours. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium- or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. Patients should discontinue nutritional supplements, vitamins, and minerals. Patients should also avoid antacids containing aluminum which can greatly elevate the aluminum output. |
| Amikacin (Peak) | Amikacin Level Post | Serum | 6 mL Red Do NOT use SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect peak specimen 1-2 hours following I.M. or 30 minutes following I.V. drug administration. Centrifuge and aliquot to transfer tube. Indicate dosage of antibiotic and time of dosage in case of possible cross reaction or interference in the assay. Indicate “Peak” on both the sample and requisition. |
| Amikacin (Trough) | Amikacin Level Pre | Serum | 6 mL Red Do NOT use SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect trough specimen prior to I.M. or I.V. drug administration. Centrifuge and aliquot to transfer tube. Indicate dosage of antibiotic and time of dosage in case of possible cross reaction or interference in the assay. Indicate "Trough" on both the sample and requisition. |
| Amino Acid Quantitation Blood | Amino Acid Quantitation Blood | Heparinized plasma | Green top Tube (Lithium heparin) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Completion of the IWK Health Centre "Request for Metabolic Investigation" requisition is required. Fasting specimen preferred; post-prandial samples should be noted. Centrifuge specimen at room temperature immediately; remove plasma and aliquot to a transport tube. |
| Amino Acid Quantitation Urine | Amino Acid Quantitation Urine | Clean Catch Urine | Sterile urine container → See notes | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Random Specimens are generally sufficient but assessment of renal handling requires timed specimens. If a 24 Hour collection cannot be readily obtained, a shorter collection (8 or 12 hr) may be submitted, but precise times become more important. Completion of the IWK Health Centre "Request for Metabolic Investigation" requisition is required. |
| Amitriptyline | Amitriptyline Level | Serum or Plasma (EDTA) | 6 mL Red or EDTA (Lavender); avoid gel-separator tubes | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect within 1 hour prior to next dose or at least 12 hours post-dose. Centrifuge and aliquot within 2 hours of collection. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|---|------------------|--|---|--|
| Ammonia | Ammonia Level | Blood | 6 mL Green stoppered specimen → See notes | Transport to Lab STAT Transport on ice | Department: Chemistry Notes: Tubes must be completely filled and immediately place on ice. Centrifuge & separate plasma from cells within 15 minutes of collection. If unable to meet these requirements, the patient must be referred to a Hospital lab for collection. |
| Amphetamines / Methamphetamines Screen Urine | Amphetamine Screen Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Must be refrigerated upon collection and analyzed within 5 days or stored frozen. |
| Amylase | Amylase Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| ANA Panel | ANA | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Anaplasma PCR | Anaplasma PCR | Whole EDTA Blood | 6 ml EDTA (Lavender) -See notes | Specimen hold temperature 2-8°C | Department: Microbiology-Referred Out Notes; Do NOT spin blood. Please submit to lab ASAP as specimens greater than 5 days old are rejected by referral lab. |
| Anaplasma Serology | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text Free text Source: type in test requested (Anaplasma Serology) | Serum | 6 mL Red/SST | Specimen hold temperature 2-8°C | Department: Microbiology-Referred Out |
| Androstenedione | Androstenedione | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Routine Venipuncture - indicate patient's age and sex. Centrifuge and aliquot serum to a transport tube. |
| Angiotensin Converting Enzyme | See ACE | | | | |
| Angleman Syndrome | DNA Analysis – Angleman | Blood | 2x6mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Anion Gap | Electrolytes | Blood | 6 mL Red/SST → See notes | Do not remove cap | Department: Chemistry Calculation Notes: Anion gap is provided with the Electrolytes panel. |
| Anti- Cardiolipin | Anti- Cardiolipin | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Anti- CCP | Anti- CCP | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|----------------------------------|-----------------------------------|---|--|--------------------------------------|--|
| Anti-Diuretic Hormone | ADH Level | Plasma | EDTA (Lavender) | Store frozen and ship on dry ice | Department: Chemistry Referred Out Testing Notes: Collect specimen in a pre-chilled EDTA tube and place immediately on ice. Specimen for this test must be collected, processed, aliquoted and frozen within 45-60 minutes of collection. If unable to meet these requirements, patients for this test must be referred to a Health PEI Hospital Specimen Collection Center for collection. No isotopes administered within 24 hours prior to venipuncture. |
| Anti-EBNA Serology | Anti-EBNA Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Anti-Glutamic Acid Decarboxylase | Anti Glutamic Acid Decarboxylase | Serum | SST | Store and Ship Frozen → See notes | Department: Chemistry Referred Out Testing Notes: Specimen must be collected, processed, aliquoted and frozen within 24 hours of collection. |
| Anti- LKM | Anti- LKM | Blood | 6 mL Red | Store and Ship Refrigerated | Department : Immunology - Referred Out |
| Anti- Mitochondrial | Anti- Mitochondrial | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Apolipoprotein B | Apolipoprotein B | Serum | SST | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Collect specimen after a 12 hour fast. Centrifuge and aliquot to a transport tube. |
| Anti- saccharomyces cerevisiae | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department : Immunology - Referred Out |
| Anti- Smooth Muscle | Anti- Smooth Muscle | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Anti- Streptolysin Titre (ASO) | ASO | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Anti- Thyroglobulin | Thyroglobulin | See Thyroglobulin - analysed as part of Thyroglobulin | | | |
| Anti-TPO Antibodies | Anti TPO Antibody | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: If delay in testing > 8 hours, serum should be separated from clot or SST. |
| Anti Xa | Anti Xa Assay | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >2hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| APT Test | Alkaline Denaturation Test | Stool, vomitus or any other secretion | Specimen jar, diaper or an article of cloth → See notes | RT | Department: Hematology Notes: Must arrive at QEH Lab before noon Monday – Thursday. Please call Lab prior to ordering. |
| APTT | PTT (Partial Thromboplastin Time) | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, spin, separate and freeze plasma. Send frozen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|----------------------|--|----------------------|---|--|---|
| APTT 50/50 Mix | PTT (Partial Thromboplastin Time) 50/50 Mix | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, spin, separate and freeze plasma. Send frozen. |
| Arsenic | Arsenic Level | Whole Blood | Dark Blue Top (K2EDTA) | Store and Ship Refrigerated | Department: Chemistry Referred Out Testing Notes: Do NOT centrifuge. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium- or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Arsenic 24 HR Urine | Arsenic Level 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Container (No preservative) | Store and Ship refrigerated (Can be frozen) | Department: Chemistry Referred Out Testing Notes: High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium- or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. Measure the total volume of the 24 hour collection. Aliquot 50.0 mL of the measured collection to a sterile ORANGE-CAPPED container. |
| Arsenic Random Urine | Arsenic Random Urine | Random Urine | Sterile ORANGE-CAPPED (Metal Free) Urine Container | Store and Ship refrigerated (Can be frozen) | Department: Chemistry Referred Out Testing Notes: High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium- or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| AST | AST | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| AT III | Anti – Thrombin III Assay | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >8 hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| ATP Binding | DNA Analysis - ATP Binding Cassette | Blood or Bone Marrow | Blood – 2 x 6 mL EDTA (Lavender) Bone Marrow - 1-2mL in an EDTA (Lavender) →See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Babesia PCR | Babesia PCR | Whole EDTA Blood | 6 ml EDTA (Lavender) →See notes | Specimen hold temperature 2-8°C | Department: Microbiology-Referred Out Notes; Do NOT spin blood. Please submit to lab ASAP as specimens greater than 5 days old are rejected by referral lab. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|--|----------------------|--|------------------------------------|--|
| Bacillus anthracis Serology | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text Free text Source: type in test requested (Bacillus anthracis Serology) | Serum | 6 mL Red/SST | Specimen hold temperature 2-8°C | Department: Microbiology-Referred Out |
| Bacterial Vaginosis | Bacterial Vaginosis | Vaginal swab | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology Notes: Female > 12 years. |
| Bank DNA | DNA Analysis – Bank DNA | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Barbiturates Screen - Urine | Barbiturate Screen Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Must be refrigerated upon collection and analyzed within 5 days or stored frozen. |
| Bardet-Biedl Syndrome | DNA Analysis - Bardet-Biedl Syndrome | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Bartonella Serology (Cat Scratch) | Bartonella Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| B-cell Lymphoid Clonality | B-Cell Clonality | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| BCL-1 | DNA Analysis - BCL-1 | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| BCL-2 | DNA Analysis - BCL-2 / DNA Analysis - t(14;18) | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| BCR-abl | DNA Analysis – BCR/ABL / DNA Analysis – t(9;22) | Blood or Bone Marrow | Blood: 2 x 6 mL EDTA (Lavender) Bone Marrow: 1-2mL in an EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| BCR mut | DNA Analysis – BCR mut | Blood or Bone Marrow | Blood: 2 x 6 mL EDTA (Lavender) Bone Marrow: 1-2mL in an EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Becket and Duchenne Muscular Dystrophies | DNA Analysis – BMD/DMD | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Benzodiazepines Screen Urine | Benzodiazepine Screen Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Must be refrigerated upon collection and analyzed within 5 days or stored frozen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|---|-------------------------|---|---|---|
| Beta-2 Glycoprotein 1 Antibody | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department : Immunology - Referred Out |
| Beta- 2 Microglobulin | Beta- 2 Microglobulin | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Beta-Carotene | Beta Carotene | Serum | SST | Store and Ship Frozen Protect from light | Department: Chemistry Referred Out Testing Notes: Fasting specimen preferred. Collect after 12 hour fast and abstain from alcohol for 24 hours. Centrifuge and separate serum within 30 minutes of collection. Aliquot serum to a transport tube. Avoid hemolysis. <u>*Protect from light*</u> |
| Beta-D-Glucan Fungal Assay | Beta-D-Glucan Fungal Assay | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C -See notes | Department: Microbiology-Referred Out Notes: During summer months store and ship at -20°C or colder. |
| | | BAL/ Pleural Fluid/ CSF | 50 mL Sterile Container | Specimen holding temperature 2-8°C -See notes | Department: Microbiology-Referred Out Notes: During summer months store and ship at -20°C or colder. |
| BETA-Hcg | Beta hCG Quantitative | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: If delay in testing > 24 hours, serum should be separated from clot or SST. |
| Beta-Hydroxybutyrate | Beta-hydroxybutyrate | Serum | 6 mL Red/SST | Store and Ship Frozen | Department: Chemistry Notes: Specimen for this test must be collected and aliquoted within 60 minutes of collection for testing. Referral labs can ship on ice same day , if delay in transport, freeze and ship frozen. |
| Beta-Transferrin | Chemistry Other (Add test name in Order Comment) | CSF | Sterile container | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Collect fluid in a sterile container and indicate fluid type. |
| Bethesda Inhibitor Assay | Bethesda Inhibitor Assay | Blood | 3 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >6 hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Bile Acids/Salts | Bile Acids Total | Serum | 6 mL Red Do NOT use SST | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Freeze serum within 24 hours. |
| Bilirubin - Conjugated | Bilirubin Direct/ Bilirubin Direct Neonatal | Blood | 6mL Red/SST Neonate:Capillary microtainer → See notes | RT | Department: Chemistry Notes: Specimens should be protected from bright light as bilirubin is sensitive to bright light. |
| Bioavailable Testosterone (Calculated) | Bioavailable Testosterone | Serum | SST | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Collect specimen between 6:00 and 10:00 am. Centrifuge and aliquot serum to a transport tube. Freeze within 24 hours of collection. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|---|-----------------|--|---|---|
| Bilirubin - Total | Bilirubin Total/BiliT /Bilirubin Total Neonatal | Blood | 6 mL Red/SST Neonate:Capillary microtainer → See notes | RT | Department: Chemistry Note: Specimens should be protected from bright light as bilirubin is sensitive to bright light. |
| Blastomyces | Blastomycosis Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology (referred out) |
| | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text Free text Source: type in test requested (Blastomyces) | Urine/ BAL/ CSF | 50 mL Sterile container | Specimen holding temperature 2-8°C | Department: Microbiology (referred out) |
| Blood Culture-Aerobic/ Anaerobic Culture | Blood Culture-Aerobic/ Anaerobic Culture | Blood | Aerobic/F (blue top, grey cap): 8-10mL; Lytic 10 Anaerobic/F (purple top, purple cap): 8-10 mL For adult patients where only one culture bottle may be collected, see Blood Culture-Aerobic (Pediatric) | Specimen holding temperature RT | Department: Microbiology Notes: One draw includes both the Aerobic and Anaerobic bottles. Do not freeze or refrigerate blood culture bottles. Please do not cover bottle barcode label with another label. Transport specimens to the Microbiology laboratory as soon as possible after collection. |
| Blood Culture-Aerobic (Pediatric) | Blood Culture-Aerobic (Pediatric) | Blood | Peds Plus/F (grey/silver top, pink cap): 1-3 mL For adult patients where only one culture bottle may be collected: Aerobic/F (blue top, grey cap): 8-10mL | Specimen holding temperature RT | Department: Microbiology Notes: Do not freeze or refrigerate blood culture bottles. Please do not cover bottle barcode label with another label. Transport specimen to the Microbiology laboratory as soon as possible after collection. |
| Blood Gases - Arterial | Blood Gas Arterial / Arterial Blood Gas | Blood | Electrolyte-balanced/Ca2+ - titrated heparin air-tight plastic syringe → See notes | Transport to Lab STAT | Department: Chemistry Notes: If delay in processing of > 30min, store specimen in ice water. Patient temperature is required for specimen processing. |
| | | | | Transport on ice | |
| Blood Gases - Capillary | Blood Gas Capillary / Cap Blood Gas | Blood | Radiometer Clinitubes containing Electrolyte-balanced/Ca2+ - titrated → See notes | Transport to Lab STAT | Department: Chemistry Notes: If delay in processing of > 30min, store specimen in ice water. Patient temperature is required for specimen processing. |
| | | | | Transport on ice | |
| Blood Gases - Cord | Cord Arterial Gas/Cord Venous Gas | Umbilical Cord | Ziploc Specimen Bag containing a slurry of ice and water | Transport to Lab STAT Transport on ice | Department: Chemistry |
| Blood Gases - Venous | Blood Gas Venous / Venous Blood Gas | Blood | 6 mL Green top tube (heparin as anticoagulant) → See notes | Transport to Lab STAT Transport on ice | Department: Chemistry Notes: If delay in processing of > 30min, store specimen in ice water. Patient temperature is required for specimen processing. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--------------------------------------|--|---|--|------------------------------------|---|
| BNP | BNP | Blood | 3 mL EDTA (Lavender) | RT | Department: Chemistry Notes: Plasma must be removed from cells as soon as possible. |
| Body Fluid Cell Count | BF WBC | Pericardial/Peritoneal/Pleural/Synovial | Aspirate in EDTA (Lavender) | Transport to Lab ASAP | Department: Hematology Notes: Fluids received in the wrong container type and/or clotted specimens will NOT be processed and test will be cancelled. |
| Body Fluid Crystals | BF Crystals | Synovial | Aspirate in EDTA (Lavender) or 50 mL sterile container | Transport to Lab ASAP | Department: Hematology Notes: Fluids received in the wrong container type and/or clotted specimens will NOT be processed and test will be cancelled. |
| Body Fluid Culture | Body Fluid Culture | Pleural/Peritoneal/Synovial/etc. | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology Notes: Transport specimen to the Microbiology laboratory as soon as possible after collection. Call/page the Microbiology laboratory if culture processing and/or Gram stain results are requested STAT. |
| Bone Culture | Bone Culture | Bone | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology Notes: Transport specimen to the Microbiology laboratory as soon as possible after collection. |
| Botulism Toxin | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text Free text Source: type in test requested(Botulism Toxin) | Stool | Plain Stool Container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| BRCA1/BRCA2 (Breast Cancer Testing) | DNA Analysis - BRCA1/BRCA2 | Blood or Bone Marrow | Blood: 2 x 6 mL EDTA (Lavender) Bone Marrow: 1-2mL in an EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Brucella Serology | Brucella Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology - Referred Out |
| C1 Esterase Inhibitor: Immunological | C1 Esterase Inhibitor: Immunological | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| C1 q Complement Component | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| C2 Complement | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| C3, C4 | C3, C3 | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| CA 15-3 | CA 15-3 | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|--------------------------------|---------------|--|---|---|
| CA 19-9 | CA 19-9 | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| CA 125 | CA 125 | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| CADASIL (Cerebral Autosomal Dominant Arteriopathy with Subcortical Infarcts and Leukencephalopathy) | DNA Analysis - CADASIL | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Cadmium | Cadmium Level | Whole Blood | Dark Blue Top (K2EDTA) → See notes | Store and Ship Refrigerated | Department: Chemistry Referred Out Testing Notes: Do NOT centrifuge. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium- or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Caffeine | Caffeine Level | Serum | 6 mL Red/SST | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Specimen must be collected, processed, aliquoted and frozen within 30 minutes of collection. Centrifuge and transfer serum to a transport tube. |
| Calcitonin | Calcitonin Level | Serum | SST | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Specimen must be collected, processed, aliquoted and frozen within 30 minutes of collection. Centrifuge and transfer serum to a transport tube. |
| Calcium | Calcium Level Total | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Calcium - Urine | Calcium Level Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Calcium - 24 Hour Urine | Calcium Level 24 Hour Urine | 24 Urine | 24 Hour Urine Collection Container with 10 mL of 50% Hydrochloric Acid per litre of urine. → See notes | Refrigerate during collection | Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |
| Calcium - Ionized | Calcium Level Ionized | Blood | 6 mL Red/SST Arterial or Capillary Blood Gas Specimen is acceptable → See notes | RT Transport to Lab STAT Transport on ice | Department: Chemistry Notes: Avoid excessive use of tourniquet and fist clenching. Tubes should be completely filled. Keep tightly sealed to prevent exposure to air. DO NOT OPEN TUBE. |
| Cannabinoids Screen Urine | Cannabinoids Screen Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Must be refrigerated upon collection and analyzed within 5 days or stored frozen. |
| Carbamazepine | Carbamazepine Level | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Trough: Take sample 0-60 minutes prior to next dose. Notes: Must include date and time of last dose. |
| Carbon Dioxide Total | Electrolytes | Blood | 6 mL Red/SST | RT | Department: Chemistry |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|----------------------------|-------------------------------|-----------------------------------|--|---|---|
| Carbon Monoxide | Carboxyhemo-globin Level | Blood | 6 mL Green stoppered specimen Arterial or Capillary Blood Gas Specimen is acceptable | RT Transport to Lab STAT Transport on ice | Department: Chemistry Notes: Blood may be stored at 4° C for 4 days for non-urgent requests. |
| Carnitine | Carnitine | Capillary Blood on a Blotter Card | Blotter Card | RT | Department: Chemistry Referred Out Testing Notes: Capillary collection applied directly to blotter card. Three circles must be filled completely and soaked all the way through. Allow circles to dry at room temperature, lying horizontally for three hours before placing in envelope. |
| Catecholamines 24 HR Urine | Catecholamines 24 HR Urine | 24 Hour Urine | 24 Hour Urine Container with 25 mL 6N HCl as a preservative → See notes | Store and Ship refrigerated | Department: Chemistry Referred Out Testing Notes: <u>Diet and drug restrictions:</u> to be avoided for 48 hours - ASA, chloralhydrate, coffee, cola drink, dopamine, erythromycin, methyl dopa, niacin, phenothiazines, quinidine, quinine, riboflavin, smoking, tea, tetracycline, vitamin B. To be avoided for 72 hours are as follows: avocados, bananas, chocolate, eggplant, fruit and juice, hypertensive drugs (especially aldomet), pineapple, plums, Tylenol (acetaminophen), walnuts. Note: coffee, cola drinks, tea and smoking are considered drugs. Measure the total volume of urine and indicate it on the requisition and aliquot container. Transfer 50 mL to a sterile urine container for transport. Note time and dates of collection on the requisition. |
| Catecholamines Plasma | Plasma Catecholamine | Plasma | EDTA (Lavender) → See notes | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Collect after an overnight fast (water and non-caffeinated drinks permissible). Catechol drugs may interfere, including alpha methyl dopa, alpha-methyl-para-tyrosine, isoproteronol, dobutamine and carbidopa. Patient must be supine for at least 15 minutes prior and during specimen collection. Specimen must be collected, processed, aliquoted and frozen within 30 minutes of collection. Centrifuge and aliquot plasma to transport tube. If specimen thaws, it is unsuitable for analysis. |
| CBC | CBC | Blood | 3mL EDTA (Lavender) | RT | Department: Hematology |
| C difficile | C difficile | Stool | Plain Stool Container | Specimen holding temperature 2-8°C | Department: Microbiology Notes: Stool must be clearly liquid and slide down the side of the container to be processed. |
| CEA | CEA | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Ceruloplasmin | Ceruloplasmin | Serum | SST | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot to transport tube. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|--|---|--|------------------------------------|---|
| CGH (Comparative Genomic Hybridization) | DNA Analysis - CGH / DNA Analysis - Comparative Genomic Hybridization | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| CH 50 | CH 50 | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Chikungunya PCR | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text Free text Source: type in test requested (Chikungunya PCR) | Plasma | 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Chikungunya Serology | Chikungunya Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Chlamydia Culture | Chlamydia Culture | Eye, Tissue, NP sunction/NP Swab | Swab in Viral Transport Media (VTM) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Samples should be collected from symptomatic patients only. Swab can be moistened with sterile saline if necessary for collection |
| Chlamydia PCR | CT/GC PCR | Cervix/Endocervix, Vagal, Urine, Rectal, Throat/Pharyngeal, and Eye | BD MAX UVE Buffer Tube | Specimen holding temperature 4°C | Department: Microbiology Notes: Urine is 1st stream collection. 1mL of Urine must be placed in the BD MAX UVE buffer tube within 24hrs of collection. PCR method is validated only for genital and urine specimens. The same single sample is used to test for Chlamydia, GC, and Trichomonas PCR. |
| Chlamydophila PCR | Mycoplasma/Chlamydophila Respiratory PCR | Throat | Swab in Viral Transport Media (VTM) | Specimen holding temperature 2-8°C | Department: Microbiology |
| CMT (Charcot Marie Tooth Syndrome) | DNA Analysis - CMT / DNA Analysis - Charcot Marie Tooth Syndrome | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Chimerism analysis for BMT | DNA Analysis - Chimerism / DNA Analysis - VNTR | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Chloride | Electrolytes | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Chloride-Urine | Chloride Level Urine | Random urine | Plastic C&S container | RT | Department: Chemistry |
| Chloride- Urine 24 | Chloride Level 24 urine | 24 Urine | 24 Hour Urine Collection Container - no preservative | Refrigerate during collection | Department: Chemistry |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------------|--|----------------------|---|-----------------------------|---|
| Cholinesterase RBC | Acetylcholinesterase Red Blood Cell | Whole Blood | 6 mL EDTA (Lavender) | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Collect one full 6 mL lavender top tube. Mix gently by inversion. Centrifuge within one hour of collection. <u>Remove plasma and submit red cells</u> . Hemolyzed samples are not acceptable. Cannot be collected on Fridays/weekends/holidays. |
| Chromium | Chromium Level | Plasma | Dark Blue Top (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge within 30 minutes of collection, do not use separator gel. Aliquot plasma to transport tube. Patient should discontinue nutritional supplements, vitamins, minerals for 5 days prior to collecting specimen. High concentrations of gadobutrol, gadodiamide and ivoserol are known to interfere with most trace elements. If gadobutrol, gadodiamide and ivoserol-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Chromogranin A | Chromogranin A | Serum | 6 mL Red / SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Specimen must be collected, processed, aliquoted to a transport tube and frozen within 24 hours of collection. Medications that stimulate secretion of neuroendocrine cells can lead to significant elevations of chromogranin A. Discontinue proton pump inhibitors (PPIs) for 2 weeks prior to testing. H2-receptor antagonists can be used at modest doses. |
| Chromosome Analysis - FISH | FISH - Multiple Myeloma Hematology Referred Test | Blood or Bone Marrow | Blood: 4 mL Sodium Heparin - Green Bone Marrow: 2 mL of none marrow in Sodium Heparin - Green → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday-Thursday. |
| Chromosome Analysis - Karyotype | Chromosome Analysis – Blood Chromosome Analysis – Bone Marrow | Blood or Bone Marrow | Blood: 4 mL Sodium Heparin - Green Bone Marrow: 2 mL of heparinized bone marrow in Sodium Heparin - Green | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| CHr-Retic Hemoglobin Content | CHr-Retic Hemoglobin Content | Blood | 3 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Citric Acid 24 HR Urine | Citrate Level 24 Hour Urine | 24 Hour Urine | 24 Hour urine container with 25 mL 6N HCl | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect a complete 24 hour urine sample. Indicate the start and end times of collection on the requisition. Check the pH of the sample. Measure the total volume of the 24 hour collection and record on the requisition. Aliquot 10 mL of the measured 24 hr urine to a sterile container. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-----------------------|---|---------------------|---|------------------------------------|---|
| CK | CK | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Clobazam (Frisium) | Clobazam Level | Serum | 6 mL Red | Store and Ship Frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge. Do not use separator gel. Separate serum from cells ASAP. Aliquot serum to a transport tube. |
| Clomipramine | Chemistry Other (Add test name in Order Comment) | Serum | 6 mL Red | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: To monitor therapy, draw trough specimen prior to morning dose or 10-12 hours after last drug administration. Centrifuge and separate ASAP. Aliquot to transfer tube. Assay includes Desmethyldclomipramine. |
| Clozapine | Clozapine Level | Serum | 6 mL Red Do NOT use SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect specimen prior to last dose or at least at the ¾ time mark of the dosing interval (i.e. Dose is every 24 hrs then collect at least 18 hrs after previous dose). Centrifuge and aliquot serum to a transport tube ASAP. Indicate date and time of last dose and date and time of specimen collection on the requisition. |
| CMH MYBPC3 | DNA Analysis - CMH MYBPC3 | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Cocaine Screen Urine | Cocaine Screen Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Must be refrigerated upon collection and analyzed within 3 days or stored frozen. |
| Coccidioides | Coccidioides Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text Free text Source: type in test requested (Coccidioides) | Urine/ BAL/ CSF | 50 mL Sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Cold Agglutinin | Cold Agglutinin | Blood | 6 mL Red | Room Temperature | Department: Immunology |
| Connexin 26/30 | DNA Analysis – Connexin 26/30 | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Copeptin & Osmolality | Chemistry Other (Add test name in Order Comment) | Plasma (Li Heparin) | 6 mL Green (Lithium Heparin) | Store and ship frozen | Department: Chemistry Referred Out Testing Centrifuge and aliquot plasma to a transport tube. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|----------------------------|---|-----------------|---|-------------------------------|--|
| Copper 24 HR Urine | Urine Copper | 24 Hour Urine | 24 Hour Collection Container with no preservative | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Measure the total volume for the 24 hour collection. Indicate total volume on the requisition. Aliquot 50 mL of the measured 24 hour urine to a sterile ORANGE-CAPPED container. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium- or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Copper Plasma | Copper Level | Plasma (K2EDTA) | Dark Blue Top Tube (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect blood in a contaminant-free (K2EDTA) tube. Centrifuge and separate plasma as soon as possible. Transfer plasma to a transport tube. |
| Copper Random Urine | Urine Copper | Random Urine | Sterile ORANGE-CAPPED (METAL FREE) Urine Container | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium- or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Cortisol | Cortisol | Blood | 6 mL Red/SST | RT | Department: Chemistry Notes: Collect specimens in early morning and/or late afternoon. |
| Cortisol 24 HR Urine | Cortisol Free Urine | 24 Hour Urine | 24 hour urine container with no preservative | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Measure the total volume for the 24 hour collection. Indicate total volume and dates and times of collection on the requisition. Aliquot 10.0 mL of the measured 24 hour urine to a sterile urine container. |
| C-Peptide | C-Peptide | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Patient should fast 8 hours prior to collection. Centrifuge ASAP and aliquot to a transport tube. Freeze immediately. Serum stable 48 hours at 20 - 80 C. Stable frozen for 3 months. |
| Creatine Kinase-MB | Chemistry Other (Add test name in Order Comment) | Serum | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge. Aliquot to a transport tube. State Total CK if already reported. |
| Creatinine | Creatinine | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Creatinine - 24 Hour Urine | Creatinine 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Collection Container - no preservative → See notes | Refrigerate during collection | Department: Chemistry Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------|--|--|---|--|---|
| Creatinine Clearance Test | CrCl 24 Hour Urine | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: A blood specimen for serum creatinine must be collected within the period of 24 hour urine collection. |
| | | 24 Hour Urine | 24 Hour Urine Collection Container - no preservative → See notes | Refrigerate during collection | Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |
| Creatinine - Random Urine | Creatinine Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Creutzfeldt-Jakob Disease | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text Free text Source: type in test requested (Creutzfeldt-Jakob Disease) | CSF/ Whole EDTA Blood/ Tissue/ or Brain Tissue | Notes: Contact Microbiology for complete instructions. | Notes: Contact Microbiology for complete instructions. | Department: Microbiology-Referred Out Notes: Contact the Biosafety officer before handling specimen. |
| Crossmatch | BB Crossmatch Order Info PCH | Blood | 6 mL K2 EDTA tube | RT | Department: Blood Transfusion |
| | BB Crossmatch Order Info QEH | | | | |
| CRE | C CRE | Rectal swab | C&S Swab in Transport Media | Specimen holding temperature 2-8°C | |
| CRP | CRP | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Cryoglobulin | Cryoglobulin | Blood | 6 mL Red | 37 degrees | Department: Immunology |
| Cryptococcus Antigen | Cryptococcus Antigen | CSF | Sterile screw capped CSF container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Cryptococcus Serology | Cryptococcus Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| CSF Cell Count | CSF Cell Count Panel | CSF | Sterile CSF collection tube →See notes | RT | Department: Hematology Notes: Minimum volume of 1mL required. Notify and send to lab immediately. |
| CSF - Chloride | CSF Chloride | CSF | Sterile Tubes - no additive | RT | Department: Chemistry |
| CSF Culture | Cerebrospinal Fluid Culture | CSF | Sterile screw capped CSF container | Specimen holding temperature RT | Department: Microbiology Notes: After 1600, page the Microbiology laboratory for STAT CSF culture processing and Gram stain results. Transport specimen to the laboratory as soon as possible after collection. |
| CSF - Glucose | CSF Glucose | CSF | Sterile Tubes - no additive | RT | Department: Chemistry |
| CSF - Protein | CSF Protein | CSF | Sterile Tubes - no additive | RT | Department: Chemistry |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--------------------------------------|--|---|--|---|---|
| C-Telopeptide | C-Telopeptide | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge, separate and transfer serum to an aliquot tube. |
| Cyanide | Cyanide | Whole Blood | K2EDTA (Dark Blue) | Store and Ship Refrigerated | Department: Chemistry Referred Out Testing Notes: Do NOT centrifuge. Sample must be drawn soon after exposure as the half life of cyanide is short. |
| Cyclosporine | Cyclosporine Level | Whole Blood | EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: The time sample collected should be indicated on the requisition and tubes. Time of last medication should be indicated on the requisition. Cyclosporin can be ordered as random,1 point, 2 point, or 5 point. CYA 1PT is one sample collected 2 hours post medication. CYA 2PT is two samples collected 1 hour and 3 hour post medication. CYA 5PT is five samples collected before (pre) medication, and 1 hour, 2 hours, 3 hours and 4 hours after medication. Freeze whole blood. |
| Cystic Fibrosis | DNA Analysis- Cystic Fibrosis | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Cysticerocosis Serology | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source:type in test requested (Cysticerocosis Serology) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Provide Detailed History in Order Note. |
| Cystine Quantitative Random Urine | Cystine Level | Random Urine | Sterile urine container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Freeze within 24 hours of collection. |
| Cytology | Pathology Sputum | Sputum, Expecterated | 100 ml pink top container- no fixative | RT Transport to Lab within 24 hrs | Department: Cytology Notes: Deep cough sputum - not saliva Specimens arriving after 1500h must be placed in fridge in Specimen Receiving. |
| Cytology | Pathology Aspirate | Fine Needle Aspiration (select appropriate site) Breast nipple Discharge Gastric, Esophagus, Bile Duct Brushing | 100ml pink top container- equal vol. 50% ETOH fixative/ 6ml red top glass tube- equal vol. 50% ETOH fixative/ Frosted end glass slide - fixed with cytologic spray fix | RT | Department: Cytology Notes: Specimens arriving after 1500h must be placed in fridge in Specimen Receiving. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|---|---|--|---|--|
| Cytology | Pathology Fluid | Serous Fluid Bladder/Ureter Washing Urine Cath./Voided/Pelvic / Cul.de- sac Washing, Synovial Fluid CSF | 100ml pink top container- equal vol. 50% ETOH fixative/ 10ml clear tube with clear screw top-equal vol. 50% ETOH fixative | RT | Department: Cytology Notes: Voided urine- Early morning void, but not first void. Specimens arriving after 1500h must be placed in fridge in Specimen Receiving. |
| Cytology | Pathology Bronchoscopy | Bronch. Washing/Brushing Bronchoalveolar Lavage E.B.U.S. / Transbronchial F.N.A. Tracheal Secretion | 100ml pink top container- equal vol. 50% ETOH fixative | RT | Department: Cytology Notes: Specimens arriving after 1500h must be placed in fridge in Specimen Receiving. |
| Cytology | Pathology Gynceological Cytology | PAP Smear | Frosted end glass slide- fixed with cytologic spray fix | RT | Department: Cytology |
| Cytomegalovirus IgG Antibody | Cytomegalovirus IgG Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Cytomegalovirus IgM Antibody | Cytomegalovirus IgM Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Cytomegalovirus (CMV) Viral Load PCR (Blood Specimens) | Cytomegalovirus (CMV) Viral Load PCR | Plasma | 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring Labs: Remove plasma within 24 hours* of collection (*preference 6 hours). Failure to do so may result in rejection of specimen. Spin at 3500rpm for 30 minutes. |
| Cytomegalovirus (CMV) Viral Load PCR (Non Blood Specimens) | C CMV | Urine/Tissue/ Bronchial Washings | 50 mL sterile container | Specimen holding temperature 2-8°C for 24hrs | Department: Microbiology-Referred Out Notes: Specimens that will be sent to the lab outside of 24 hours must be frozen at -20°C and sent to Lab frozen. If sent to lab on same day of collection then 2-8°C is fine. |
| | C CMV | Throat/Respiratory/Urine | Swab in Viral Transport Media (VTM) | Specimen holding temperature 4°C for 24hrs | Department: Microbiology-Referred Out Notes: Specimens that will be sent to the lab outside of 24 hours must be frozen at -20°C and sent to Lab frozen. If sent to lab on same day of collection then 2-8°C is fine. |
| | C CMV | CSF | Sterile screw capped CSF container | Specimen holding temperature 2-8°C for 24hrs | Department: Microbiology-Referred Out Notes: Specimens that will be sent to the lab outside of 24 hours must be frozen at -20°C and sent to Lab frozen. If sent to lab on same day of collection then 2-8°C is fine. |
| Cytotoxic Antibodies | Cytotoxic Antibodies | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| D-Dimer | D-Dimer Quantitative | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport > 8 hrs, spin, separate and freeze plasma. Send frozen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-------------------------------------|--|------------------------|---|------------------------------------|--|
| Dengue Fever PCR | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source:type in test requested (Dengue PCR) | Plasma | 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Include Travel History, Symptoms, and Date of onset of symptoms. |
| Dengue Fever Serology | Dengue Fever Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Include Travel History, Symptoms, and Date of onset of symptoms. |
| Desipramine | Chemistry Other (Add test name in Order Comment) | Serum or Plasma (EDTA) | 6 mL Red or EDTA (Lavender) ; avoid gel-separator tubes | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect specimen within 1 hour prior to next dose or at least 12 hours after last dose. Indicate time and date of collection and last dose on requisition. Avoid gel-separator tube and separate as soon as possible. |
| DHEAS | DHEAS | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Diazepam | Diazepam Level | Serum | 6 mL Red; avoid gel-separator tubes | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect prior to morning dose or 10-12 hours after last dose. Avoid gel-separator tubes. |
| DiGeorge Syndrome / 22 q11 Deletion | DNA Analysis - DiGeorge Syndrome / DNA Analysis - 22 q11 Deletion | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Digoxin | Digoxin Level | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Trough: Take sample 0-60 minutes prior to next dose, or at least 6-8 hours after IV dose, 12 hours after oral dose. The administration of Digibind will cause falsely elevated results. This test is invalid if patient has received Digibind. |
| Dilated Cardiomyopathy | DNA Analysis-DCM Dilated Cardiomyopathy | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Diphtheria Serology | Diphtheria Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Requires Pediatrician or Microbiologist approval. |
| Direct Antiglobulin Test | Direct Coombs | Blood | 6 mL K2 EDTA tube | RT | Dept - Blood Transfusion |
| Ear Culture | Ear Culture | Ear swab | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|--|---|---|--|--|
| Echinococcosis Serology | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (Echinococcosis Serology) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: History Required. |
| Ecstasy | Urine Toxicology Confirmatory | Random urine | Sterile urine container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Place Random Urine in freezer. Complete Health PEI Urine Drug Screen Confirmatory Testing Form |
| eGFR | eGFR-MDRD | Blood | 6 mL Red/SST | RT | Department: Chemistry Notes: This test is only available once every 7 days. Repeat requests within a 7-day time frame will not be processed. |
| Ehrlichia PCR | Ehrlichia PCR | EDTA Whole Blood | 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Do NOT spin. Please submit to lab ASAP as specimens greater than 5 days old are rejected. |
| Ehrlichia Serology | Ehrlichia Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Fecal - 1 Elastase | Elastase 1-Fecal | Stool | Sterile container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Place 1 gram of formed stool into a sterile container. Freeze sterile container containing formed stool. |
| Entamoeba PCR | Entamoeba PCR | Stool | Sterile container | Specimen holding temperature -20°C or colder | Department: Microbiology-Referred Out |
| Entamoeba Serology | Entamoeba Serology | Serum | 6 mL Red | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Enteric Viral Panel PCR (Norovirus, Rotavirus, Adenovirus, Sapovirus, and Astrovirus) | Norovirus PCR Adeno/Rota Screen | Stool | Plain Stool Container | Specimen holding temperature 4°C | Department: Microbiology Notes: Stool must be clearly liquid and slide down the side of the container to be processed. |
| Enterovirus PCR | Enterovirus PCR | Tissue | 50 mL Sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| | Enterovirus PCR | Bronch Wash/Vesicle Fluid/NPA or Nasopharyngeal Swab | 50 mL sterile container or Swab in Viral Transport Media (VTM) | Specimen holding temperature -20°C or colder | Department: Microbiology-Referred Out Notes: Referring Labs: Send frozen on ice. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-----------------------------|-----------------------------|-------------------------------|---|---|--|
| Eosinophils | Eosinophil smear | Sputum Stool | Sterile container | RT | Department: Hematology Notes: Slides should be made as soon as possible after voiding, preferably within 3 hours of collection. Cells may rapidly disintegrate in urine upon storage, therefore specimens received that are >24 hours old will not be processed and testing will be cancelled. |
| Eosinophil Smear | Eosinophil Smear | Nasal swab/Sputum/Stool/Urine | Nasal Swab: Cotton Swab Sputum, Stool, Urine: Sterile Container | RT | Department: Hematology Notes: Nasal swab should be obtained by swabbing the area with a cotton swab. Sputum, stool, and urine may be obtained in a specimen container with no preservative. |
| Epstein-Barr (EBV) PCR | Epstein-Barr (EBV) PCR | EDTA Whole Blood | 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C for up to 24 hours | Department: Microbiology-Referred Out Notes: Do NOT SPIN blood. For referral Labs: Sample must arrive in lab within 24 hours of collection. |
| Epstein-Barr (EBV) Serology | Epstein-Barr (EBV) Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Testing for EBV Serology is as follows: -EBNA IgG testing will be performed on all EBV serology requests -EBV VCA IgG and IgM testing will only be performed on EBNA IgG negative specimens. |
| Epstein Barr Virus Genome | DNA Analysis- EBV Genome | Blood | 2 x 6 mL EDTA - Lavender → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Erythropoietin | Erythropoietin Level | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot to a transport tube. Erythropoietin is affected by diurnal variation. Collection of samples between 7:30 am and 12:00 pm is recommended. |
| Estradiol | Estradiol Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Ethanol - Serum | Ethanol Level | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Do not use alcohol for skin preparation prior to specimen collection. |
| Ethanol - Urine | Ethanol Level | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Ethosuximide | Ethosuximide Level | Serum | 6 mL Red; avoid gel-separator tubes | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Submit trough specimen - collect within 1 hour prior to next dose or at least 12 hours after last dose. Centrifuge; aliquot serum to a transport tube. |
| Ethylene Glycol | Ethylene Glycol Level | Serum | 6 mL Red | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot serum to a transport tube. Available STAT with approval from Clinical Lead or Pathologist on call @ QEH <u>plus</u> (during off-hours) QEII Clinical Lead. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|-------------------------------|--|--|----------------------------------|---|
| ESR (Erythrocyte Sedimentation Rate) | ESR | Blood | 3 mL EDTA (Lavender) Non- QEH Sites : 1mL Black Tube → See notes | RT | Department: Hematology Notes: Tube must be completely filled or the specimen will be rejected. |
| Eye Culture | Eye Culture | Eye fluid/Eye Swab/Eye Scraping/Contact Lens | C&S Swab in Transport Media or 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology |
| Factor II (Prothrombin Factor) | Factor II Assay | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Factor V (Labile Factor, Proaccelerin) | Factor V Assay | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Factor V Leiden | DNA Analysis- Factor V Leiden | Blood | 1 x 6 mL EDTA blood →See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Factor VII (Stable Factor, Proconvertin) | Factor VII Assay | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Factor VIII | Factor VIII Assay | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Factor IX | Factor IX Assay | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Factor X (Stuart-Prower Factor) | Factor X Assay | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Factor XI (Plasma Thromboplastin Antecedent) | Factor XI Assay | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|---|---------------|--|---------------------------------------|--|
| Factor XIII (Fibrin Stabilizing Factor) | Factor XIII Panel | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Factor XIII | Factor XIII Assay | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Familial Hemiplegic Migraine | DNA Analysis- Familial Hemiplegic Migraine | Blood | 2x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Fasciola Serology | Fasciola Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Farmer's Lung | Farmer's Lung | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Fatty Acids Long Chain | Fatty Acids Long Chain | Whole Blood | 3 mL EDTA (Lavender) | Store and ship refrigerated | Department: Chemistry Referred Out Notes: Collect Mon to Wed only; 14 hour fasting specimen is preferred. Must be received at referral lab within 72 hours of |
| Fatty Acids Very Long Chain | Fatty Acids Very Long Chain | Serum | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred Out Notes: Include relevant clinical and family history. |
| Fecal Fat Quantification (72 or 24 hour) | Fecal Fat Quantitative | Feces | Clean, dry plastic container; obtain from Lab → See notes | Refrigerate during collection. Freeze | Department: Chemistry Referred Out Notes: The patient should be on a diet containing 50 to 150 g of fat per day for 3 days prior to and during collection. The patient must not have had castor oil or other oily laxatives prior to or during collection. Consultation with dietician |
| Ferritin | Ferritin | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Fibrinogen | Fibrinogen | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >6 hrs, spin, separate and freeze plasma. Send frozen. |
| Filariasis Serology | Filariasis Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8C | Department: Microbiology - Referred Out Minimum volume 1 mL. |
| Flow Cytometry- Bone Marrow | Flow Cytometry (Select Clinical Information from drop down) | Bone Marrow | 1 mL minimum collected in a Lithium Heparin tube | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|---|---|---|---------------------------------|---|
| Flow Cytometry-For Suspected or Known Leukemia/ Lymphoma | Flow Cytometry (Select Clinical Information from drop down) | Blood | 1 x 6 mL Lithium Heparin and a 3 mL EDTA | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Flow Cytometry- T-Cell subsets (CD3, 4, 8 count, T-Cell Count, CD4/CD8 ratio) | Flow Cytometry (Select Clinical Information from drop down) | Blood or Bone Marrow | 3 mL EDTA (Lavender) | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Flunitrazepam (Rohypnol) | Urine Toxicology Confirmatory | Random urine | Sterile urine container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Place Random Urine in freezer. Complete Health PEI Urine Drug Screen Confirmatory Testing Form |
| Fragile X | DNA Analysis- Fragile X | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Free T3 | T3 Free | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: This test is only performed if warranted following initial screen with TSH. |
| Free T4 | T4 Free | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: This test is only performed if patient is receiving therapy of if warranted following initial screen with TSH. |
| Freiderich Ataxia | DNA Analysis- Freiderich Ataxia | Blood | 2 x 6 mL EDTA - Lavender → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Fructosamine | Fructosamine | Serum | SST | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot to a transport tube. |
| FSH | FSH | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Fungal Blood Culture | Fungal Blood Culture | Blood | Fungal Blood Culture Bottle (White Cap/Red Rim) Mycolytic Bottle. Collect 1-5 mL of Blood per bottle. | Specimen holding temperature RT | Department: Microbiology Notes: Culture bottles may be obtained from the Microbiology laboratory. Transport to the Microbiology laboratory as soon as possible after collection. |
| Fungal Culture | Fungal Culture | Swab/Scraping/Clippings/Tissue/Respiratory/etc. | C&S Swab in Transport Media/50 mL sterile container or Fungal collection kit | Specimen holding temperature RT | Department: Microbiology Notes: Please do not refrigerate skin scrapings/nails/hair for fungal culture. Swabs are not acceptable for skin/nail/hair |
| Gabapentin | Gabapentin Level | Serum | 6 mL Red Do NOT use SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect specimen prior to next dose. Indicate date and time of last dose and collection on requisition. Centrifuge and aliquot serum to a transport tube ASAP. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|--|---|---|--|---|
| Galactomannan | Galactomannan Invasive Aspergillus | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C for up to 48 hours | Department: Microbiology-Referred Out |
| | | BAL | 50 mL Sterile container | Specimen holding temperature 2-8°C for up to 24 hours. After 24 hours store at -20°C or colder | Department: Microbiology-Referred Out |
| Galactose-1-Phosphate Uridyltransferase: Quant | Chemistry Other (Add test name in Order Comment) | Whole Blood (Heparin) | Green Top Tube (Heparin) gel-separator should not be used | Store and Send at 4°C (2°-8°C) | Department: Chemistry Referred Out Testing Notes: Failure to maintain temperature will impact the results. <u>Do NOT freeze</u> . Refrigerate whole blood. Patient should not have undergone a blood transfusion in the last three months. Blood transfusion in this time invalidates the results. Date of birth must be provided. If the patient is more than 1 yr old, testing is only available on a consultation basis. Contact the Clinical Lead of Biochemistry at QEH. |
| Gamma Glutamyl Transferase | See GGT | | | | |
| Gamma Hydroxybutyrate | Urine Other (Add test name in Order Comment) | Random Urine | Sterile urine container | Store and send cold | Department: Chemistry Referred Out Testing |
| Gastrin | Gastrin Level | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: A fasting specimen is preferred. Specimen must be collected, processed, aliquoted and frozen within 30 minutes of collection. |
| GC PCR (Neisseria gonorrhea) | CT/GC PCR | Cervix/Endocervix, Vaginal, Urine, Rectal, Throat/Pharyngeal, and Eye | BD MAX UVE Buffer Tube | Specimen holding temperature 4°C | Department: Microbiology Notes: Urine is 1st stream collection. 1mL of Urine must be placed in the BD MAX UVE buffer tube within 24hrs of collection. PCR method is validated only for genital and urine specimens. The same single sample is used to test for Chlamydia, GC, and Trichomonas PCR. |
| Genital Culture | Genital Culture (Gonorrhea Culture) | Cervical/Endocervical/Throat swab/Penis/etc. | C&S Charcoal Swab | Specimen holding temperature 4°C | Department: Microbiology Notes: Available on cervix/endocervix swabs only with diagnosis of failed treatment, sexual assault, or with Medical Microbiologist consult. Penis swabs for Gonorrhea culture are only performed on patients 13-59. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|--|---|--|------------------------------------|--|
| Genital Culture | Genital Culture | Vaginal swab/Placenta Tissue & Swabs/ Uterine Cavity/etc. | C&S Swab in Transport Media or 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology Notes: Only order on post-surgical, pre-pubital and/or documented relevant history. |
| Gentamicin | Gentamicin Level **BE SURE TO CHOOSE PROPER TEST ACCORDING TO DOSE** | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: If delay in testing > 24 hours, serum should be separated from clot or SST. Trough: Collect sample 0-30 minutes prior to next dose. Peak: Collect sample 30-60 minutes after end of infusion. Extended interval dosing: Collect sample 6 hours prior to next dose. |
| GGT | GGT | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Giardia/ Cryptosporidium Antigen Screen | Giardia/ Cryptosporidium Antigen Screen | Stool | Stool container with SAF Preservative (Red Label) | Specimen holding temperature 2-8°C | Department: Microbiology |
| Gladin Antibodies | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Glucagon | Chemistry Other (Add test name in Order Comment) | Plasma | 6 mL EDTA (Lavender) | Store and Ship frozen | Department: Chemistry Referred Out Testing Notes: Patient must be fasting. Collect blood in pre-chilled lavender top tube. Place specimen in wet ice for 10 minutes. Centrifuge in pre-chilled centrifuge cup. Immediately after centrifugation, aliquot plasma to a plastic transport tube and freeze. |
| Glucose | Glucose | Blood | 6 mL Grey | RT | Department: Chemistry |
| Glucose-6-phosphate dehydrogenase | G6PD | Blood | 1 x 3 mL EDTA (Lavender) blood | RT | Department: Hematology Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Glycogen Storage Disease Type 1 | DNA Analysis - Glycogen Storage Disease Type 1 or von Gierke's disease | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| GM 1 Ganglioside Antibody | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department : Immunology - Referred Out |
| Group and Screen | BB Group & Screen Order Info PCH | Blood | 6 mL K2 EDTA tube | RT | Department: Blood Transfusion Notes: Signature and date/time are required on both the requisition, tube label or signature label. |
| | BB Group & Screen Order Info QEH | | | | |
| Group B Strep Culture | Group B Strep Culture | Ear/Rectal/Throat/Umbilical/ Vaginal/Vaginal-Rectal/Vulva | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology |
| Growth Hormone | Growth Hormone | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Patient must fast 8 hours and be at rest 30 minutes prior to collection. Centrifuge, aliquot and freeze serum immediately. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|--|---------------|---|------------------------------------|---|
| Growth Hormone Releasing Hormone | Chemistry Other (Add test name in Order Comment) | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Patients should not be on any medications that may influence pituitary secretion. Centrifuge and separate serum immediately. Aliquot 3 mL or serum to a transport tube. Thawed samples will be rejected. |
| Hantavirus Serology | Hantavirus Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Include history of contact to rodents or their droppings. |
| Haptoglobin | Haptoglobin | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Heinz Bodies Stain | Heinz Bodies Stain | Blood | EDTA (Lavender) | 24 hrs stored at 4°C | Department: Hematology |
| Hemochromatosis | Hemochromatosis | Blood | 6 mL EDTA (Lavender) | Keep refrigerated | Department: Immunology Notes: Must be received in lab Monday-Thursday, by 13:00. |
| Hemoglobin A1c | HgbA1C/A1C | Blood | 3 mL EDTA (Lavender) | RT | Department: Hematology Notes: Testing also performed at PCH Chemistry Laboratory. |
| Hemoglobin Electrophoresis | Hemoglobin Electrophoresis Thalassemia Screen Hemoglobin Electrophoresis Panel | Blood | 1 x 3 mL EDTA (Lavender) blood 1 x 6 mL Red for Ferritin testing if not already tested within 1 week Pediatric: 1 x 3 mL EDTA (Lavender) | Room Temperature Stable for 7 days | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Hemoglobin - Plasma | Plasma Hemoglobin | Blood | 6 mL Green (Sodium Heparin) | Store and ship frozen | Department: Chemistry Referred-Out Notes: Avoid use of tourniquet if possible. Centrifuge and aliquot ASAP. |
| Heparin Induced Thrombocytopenia, Heparin Antibody | HIT | Blood | 2 x 6 mL Red | RT | Department: Hematology-Referred Out Notes: Sample must be processed within 4hrs of collection. Tube must be filled. Hemolyzed specimens will be rejected. Referred to McMaster Platelet Immunology Laboratory. |
| Hepatitis A Serology IgG | Hepatitis A Serology IgG | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology Notes: Requests to check vaccination status will not be processed |
| Hepatitis A Serology IgM | Hepatitis A Serology IgM | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Hepatitis B Core IgM (HBc IgM) | Hepatitis B Core IgM (HepBc IgM) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring Labs: Send photocopy of requisition to QEH. |
| Hepatitis B Core Total (Anti-HBc Total) (HBc IgG/IgM) | Hepatitis B Core Total (Anti-HepBc Total) (HepBc IgG/IgM) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology Notes: Referring Labs: Send photocopy of requisition to QEH. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|--|---------------|---------------------------------|------------------------------------|---|
| Hepatitis B Envelope Antibody (HBeAb) | Hepatitis B Envelope Antibody (HBeAb) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring Labs: Send photocopy of requisition to QEH. |
| Hepatitis B Envelope Antigen (HBeAg) | Hepatitis B Envelope Antigen (HBeAg) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring Labs: Send photocopy of requisition to QEH. |
| Hepatitis B NAT | HBV NAT | Plasma | one to two 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring lab: send ASAP. Requires 3-4 mLs of plasma for test. |
| Hepatitis B PCR (not same test as Hepatitis B Viral Load) | Hepatitis B PCR | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Test not performed routinely. Serology results must show markers to the Hepatitis B virus (if the HBsAg is negative justification must be provided for the request). Referring Labs: Send photocopy of requisition to QEH. |
| Hepatitis B Surface Antibody (HBsAb) | Hepatitis B Surface Antibody (HBsAb) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Hepatitis B Surface Antigen (HBsAg) | Hepatitis B Surface Antigen (HBsAg) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Hepatitis B Viral Load | Hepatitis B Viral Load | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Hepatitis C Antibody Screen (anti-HCV) | Hepatitis C Antibody Screen (anti-HCV) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Hepatitis C Genotyping | Hepatitis C Genotyping | Serum | Two 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Genotype can be tested every 3 years or if reinfection is suspected. Please contact the microbiology laboratory if reinfection is suspected. Referring Labs: Hemolysed samples will not be processed and samples <1mL of serum will not be accepted. Spin at 3000 rpm for 10 minutes. |
| HCV NAT | HCV NAT | Plasma | one to two 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring lab: send ASAP. Requires 3-4 mLs of plasma for test. |
| Hepatitis C Viral Load | Hepatitis C Viral Load | Serum | Two 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring Labs: Hemolysed samples will not be processed and samples <2mL of serum will not be accepted. ☹ |
| Hepatitis D Serology | Hepatitis D Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Hepatitis E Serology | Hepatitis E Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|---|---------------------------------------|--|---|---|
| Hereditary nonpolyposis colorectal cancer | DNA Analysis- HNPCC | Blood | 2x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Herpes PCR | Herpes PCR | CSF/Tissue/Bronchial Washing/etc. | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology |
| Herpes PCR | Herpes PCR | Throat/Eye/Oral/ Genital Swabs | Swab in Viral Transport Media (VTM) | Specimen holding temperature 4°C | Department: Microbiology |
| Herpes Serology | Herpes Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Herpes IgG I and Herpes IgG II testing is performed. Herpes IgM testing is no longer available. |
| Histoplasma | Histoplasma Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (Histoplasma) | Urine/ BAL/ CSF | 50 mL Sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| HIV Antigen/Antibody Screen | HIV Antigen/Antibody Screen | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| HIV Genotyping and Drug Resistance | HIV Genotyping and Drug Resistance | EDTA Whole Blood/Plasma -See notes | Two 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring Labs: Please call Microbiology to determine if specimen must be spun or remain as whole blood (depends on HIV viral load result).Send to lab ASAP. Send photocopy of requisition to QEH. |
| HIV P24 Antigen | HIV P24 Antigen | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring Labs: Send photocopy of requisition to QEH. |
| HIV PCR | HIV PCR | EDTA Whole Blood | 6 mL EDTA (Lavender) | Specimen holding temperature Room Temperature | Department: Microbiology-Referred Out Notes: Referring Labs: Do NOT spin or refrigerate samples. Minimum 2.0 mL required. Must be received in lab Monday-Thursday, by 14:00. Do not collect the day before a holiday. Include a room temperature ice pack and include results of previous serology (Eg: EIA, Western Blot). Must arrive in lab within 24-36 hours of collection. Send photocopy of requisition to QEH. |
| HIV NAT | HIV NAT | Plasma | one to two 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring lab: send ASAP. Requires 3-4 mLs of plasma for test. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-----------------------------|---|------------------|---|---|--|
| HIV Viral Load | HIV Viral Load | Plasma | 6 mL EDTA (Lavender) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Referring Labs: Plasma Must be separated from EDTA blood within 24 hours after collection, otherwise sample may be rejected. Spin sample at 3500rpm for 30 minutes. Send photocopy of requisition to QEH. |
| HLA B27 | HLA B27 | Blood | 6 mL EDTA (Lavender) | Room Temperature | Department: Immunology - Referred Out Notes: Must be received in lab Monday-Wednesday, by 13:00, do not refrigerate. |
| HLA Typing | HLA Typing | Blood | Refer to request form | Room Temperature | Department: Immunology - Referred Out |
| H pylori Stool Antigen Test | H pylori Stool Antigen Test | Stool | Plain Stool Container or 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology |
| Homocysteine | Homocysteine | Plasma | EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect specimen after an 8 hour fast. Do not use separator gel. Centrifuge and aliquot plasma within 1 hour to a transport tube. Avoid contamination with buffy coat. Freeze immediately. |
| Homovanillic Acid | Urine Other (Add test name in Order Comment) | 24 Hour Urine | 24 Hour Urine Container with 25 mL 6N HCl as a preservative | Ship and store frozen | Department: Chemistry Referred Out Testing Notes: Patient must not eat or drink the following: vanilla, chocolate, tomatoes, coffee, tea, colas and bananas or take aspirin and /or drugs containing aspirin three days prior to and the day of collection. The pH of the urine should be 2 to 3. Measure the total volume and record on the requisition, as well as the date and time of collection. Transfer at least 10 mL to a sterile ORANGE-CAPPED container, indicate total volume on container. |
| HTLV I&II Serology | HTLV I&II | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| HTLV PCR | HTLV PCR | EDTA Whole Blood | 6 mL EDTA (Lavender) | Specimen holding temperature Room Temperature | Department: Microbiology-Referred Out Notes: Referring Labs: Do NOT spin or refrigerate samples. Minimum 2.0 mL required. Must only collect sample Monday-Tuesday. Do not collect the day before a holiday. Include a room temperature ice pack and include results of previous serology (Eg: EIA, Western Blot). Must arrive in lab within 24-36 hours of collection. Send photocopy to requisition to QEH. |
| Huntington’s Disease | DNA Analysis- Huntington’s Chorea | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday–Thursday. |
| IA-2 Antibodies | IA-2 Antibodies | Serum | Red or SST | Store and Ship Frozen | Department: Chemistry Referred Out testing Notes: Centrifuge and aliquot to transport tube. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|---|--------------------------------|--|------------------------------------|---|
| IGF Binding Protein 3 | Chemistry Other (Add test name in Order Comment) | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot serum to a transport tube. |
| Immunoglobulin D | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Immunoglobulin G Subclasses | Immunoglobulin Subsets | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| IgA | IgA | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| IgE | IgE | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| IgG | IgG | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| IgM | IgM | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| IGRA (Interferon Gamma Release Testing for TB) | IGRA (Interferon Gamma Release Testing for TB) | Blood | Requires special collection tubes and procedure. Contact Venipuncture to book appointment for collection. | Not Applicable | Department: Microbiology-Referred Out Notes: Should be coordinated with CPHO. Collection can only be done at Venipuncture at QEH and PCH. |
| Infliximab | Infliximab Level | Serum | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot serum to a transport tube within 24 hours of collection. |
| Influenza Culture | Influenza PCR | Tissue | 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Influenza/RSV PCR | Influenza PCR | Bronchial Washings/BAL/NPA/NPS | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology Notes: The same single specimen is used to test for both Influenza and RSV |
| Influenza/RSV PCR | Influenza PCR | Throat/Nasopharyngeal Swab | Swab in Viral Transport Media (VTM) | Specimen holding temperature 4°C | Department: Microbiology Notes: The same single specimen is used to test for both Influenza and RSV |
| Insulin | Insulin Level Total | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Patient should be fasting 8 hours prior to collection. Separate serum within 5 hours of collection. |
| Insulin Antibody | Insulin Antibody | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot serum to a transport tube. |
| Insulin-Like Growth Factor 1 | Insulin-Like Growth Factor 1 | Serum | SST | Store and ship frozen. | Department: Chemistry Referred Out Testing Notes: Specimen must be collected, processed, aliquoted and frozen immediately. |
| Insulin-Like Growth Factor II | Chemistry Other (Add test name in Order Comment) | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Must be processed, aliquoted and frozen within 45-60 minutes of collection. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-------------------------------|--|---------------|---|--|---|
| Iodine | Iodine Level | Plasma | Dark Blue Top (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and separate within 1/2 hour of collection. Centrifuge with stopper on. Do not use separator gel. Aliquot plasma to a transport tube and freeze immediately. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Iron | Iron Level | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Serum iron concentrations show significant variation throughout the day, being lower in the afternoon than in the morning and quite low in the evening. |
| Isopropanol | Isopropanol Level | Serum | 6 mL Red | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Use non-alcoholic solutions such as peroxide, saline or warm water to clean venipuncture site. Do not use alcohol preparations. Centrifuge and aliquot to a transport tube. |
| JAK2 mutation | DNA Analysis- JAK 2 | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| JC Virus PCR | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (JC Virus PCR) | CSF | Sterile screw capped CSF container | Specimen holding temperature 2-8°C for up to 24 hours. After 24 hours store at -20°C or colder | Department: Microbiology-Referred Out |
| Juvenile Macular Degeneration | DNA Analysis- Stargardt’s Disease | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Keppra | Keppra | Serum | 6 mL Red Do NOT use SST | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Obtain date and time of last dose; note on requisition. Collect prior to next dose. Centrifuge and aliquot plasma to a transport tube. Do NOT delay transport. Depending on the specimen volume and storage time, the decrease in drug level due to absorption may be clinically significant. |
| Ketamine | Urine Toxicology Confirmatory | Random Urine | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Freeze urine in sterile container. Complete Urine Drug Screen Confirmatory Testing Form. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-------------------------|---|---|--|--|---|
| Kleihauer | Kleihauer-Betke | Blood | 3 mL EDTA (Lavender) | RT | Department: Hematology |
| Lactate | Lactate | Blood | 6 mL Green stoppered specimen → See notes | Transport to Lab STAT Transport on ice - water slurry | Department: Chemistry Notes: Plasma must be separated from the cells within 15 minutes of collection. Analysis must be performed within 30 minutes of collection. If testing will be delayed, centrifuge and remove plasma from cells and freeze. If unable to meet these requirements, patients should be referred to a Health PEI facility for specimen collection. Please phone the Laboratory (894-2324) to make arrangements for analysis. |
| Lactate Dehydrogenase | See LD | | | | |
| Lamin A/C | DNA Analysis- LMNA | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Lamotrigine (Lamictal) | Lamictal, Lamotrigine | Serum | 6 mL Red Do NOT use SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect trough level prior to next dose. Centrifuge and aliquot to transport tube ASAP . Note date and time of last dose on requisition. |
| LD | LD | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| LDL Ultracentrifugation | Chemistry Other (Add test name in Order Comment) | Serum | 3 X 6 mL SST Tubes | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Patient must fast at least 12 hours prior to sample collection. Centrifuge samples at 1350g for 18 minutes. Separate serum from cells within 2 hours of sample collection. Aliquot serum to a single transport tubes. Refrigerate only. Samples will be rejected if severely hemolyzed, insufficient volume for testing or previously frozen. |
| Legionella Culture | Legionella Culture | BAL/Bronchial/Endotracheal/ Sputum's/etc. | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology |
| Lead Whole Blood | Lead Level | Whole Blood | Dark Blue Top (K2EDTA) | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Do not centrifuge. Refrigerate whole blood sample. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|----------------------------|--|---------------|---|------------------------------------|---|
| Legionella Serology | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (Legionella Serology) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Legionella Urinary Antigen | Legionella Urinary Antigen | Urine | 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology Notes: Minimum 5 mL Urine required. |
| Leishmaniasis Serology | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (Leishmaniasis Serology) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology -Referred out |
| Leptospira Serology | Leptospira IgG Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Lipase | Lipase Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Lipid Emulsion | Lipid Emulsion - Triglyceride | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Lipid Panel | Lipid Panel | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: 12 - 14 hour fast is required. |
| LH | LH | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Lithium | Lithium Level | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Trough: collect specimen 0-60 minutes prior to next dose or at least 12 hours after last dose. Peak concentration is reached 2-4 hours after oral dose. |
| Long Q T Syndrome | DNA Analysis- LQTS | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Lorazepam | Chemistry Other (Add test name in Order Comment) | Serum | 6 mL Red; do not use serum separator tube | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge. Separate serum from cells ASAP. Aliquot serum to transport tube. |
| Lupus Anticoagulant | Lupus Anticoagulant | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-----------------------------|---|---------------|---|------------------------------------|--|
| Luteinizing Hormone | See LH | | | | |
| Lyme Disease Screen (ELISA) | Lyme Disease Screen (ELISA) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Requires the following information for specimen to be processed: 1. Specific clinical features suggestive of lyme disease (dermatological, neurological) 2. Travel and exposure history 3. Tick exposure date (or possible dates) and duration of attachment if known. When a specialist has recommended the test please indicate their full name. See http://www.healthpei.ca/micro for the PEI Lyme Disease Algorithm. |
| Lysozyme | Lysozyme | Serum | SST | Store and ship RT | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot to transport tube. |
| Macroprolactin | Chemistry Other (Add test name in Order Comment) | Serum | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot to transport tube. |
| Magnesium | Magnesium Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Magnesium 24 Hour Urine | Magnesium Level 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Collection Container - no preservative → See notes | Refrigerate during collection | Department: Chemistry Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |
| Magnesium Random Urine | Magnesium Level Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Malaria | Malaria Test Panel | Blood | 3 mL EDTA (Lavender) → See notes | RT | Department: Hematology Notes: Specimen must be received in lab within 1hr of collection. |
| Manganese | Manganese Level | Plasma | Dark Blue Top (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Avoid hemolysis. Centrifuge within 30 minutes of collection. Aliquot to transport tube. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Manganese Whole Blood | Manganese Whole Blood | Whole Blood | Dark Blue Top (K2EDTA) | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Used to monitor TPN. |
| Marfan’s Syndrome | DNA Analysis- Marfan’s Syndrome | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|-----------------------------|-------------------------|---|------------------------------------|---|
| Mastocytosis Next Generation Sequencing Panel | Hematology Referred Test | Blood or Bone Marrow | Blood: 1 x 6 mL EDTA (Lavender) Bone Marrow: 1-2 mL in an EDTA (Lavender) →See notes | Specimen holding temperature 4°C | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday–Thursday. |
| Maternal Cell Contamination | DNA Analysis- MCC | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Maternal Screen | Maternal Screen | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Patient must be within the indicated gestation period (First Trimester: 9-13 ^{6/7} weeks; Second Trimester: 15-20 ^{6/7} weeks). Centrifuge and transfer to transport tube. Completed IWK "Maternal Serum Testing Requisition" must be forwarded with specimen. |
| Measles IgG | Measles IgG | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Measles IgM | Measles IgM | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Measles PCR testing is preferred. |
| Measles PCR | Measles PCR | Urine/ BAL/ Bronch Wash | 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| | | CSF | Sterile screw capped CSF container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| | | NP suction/NP swab | Viral Transport Media (VTM) | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Mercury Whole Blood | Mercury Level | Whole Blood | Dark Blue Top (K2EDTA) | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Do NOT centrifuge. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Metanephrines 24 Hour Urine | Metanephrines 24 Hour Urine | 24 Hour Urine | 24 Hour Urine container with 25 mL 6N HCl as a preservative. | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: <u>Diet and drug restrictions:</u> To be avoided for 48 hours - ASA, chloralhydrate, coffee, cola drink, dopamine, erythromycin, methyldopa, niacin, phenothiazines, quinidine, quinine, riboflavin, smoking, tea, tetracycline, vitamin B. To be avoided for 72 hours are as follows: avocados, bananas, chocolate, eggplant, fruit and juice, hypertensive drugs (especially aldomet), pineapple, plums, Tylenol (acetaminophen), walnuts. Note: coffee, cola drinks, tea, smoking are considered drugs. pH the specimen. Measure the 24 hour total volume, indicate volume on the specimen, on the requisition and in Cerner. Aliquot 50 mL to a sterile urine container. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|-------------------------------|-----------------------------|--|---|---|
| Metanephrines Plasma & 3-Methoxytyramine | Metanephrine Plasma | Plasma (EDTA) | EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Patient must abstain from smoking tobacco for at least 4 hours prior to collection. Patient should be at rest in a supine position during collection to minimize false positive results. Collect fasting sample. Centrifuge and <u>aliquot (only one required)</u> and freeze. Specimen is stable for 2 months when frozen. If the specimen thaws, it is unsuitable for analysis. |
| Methadone Screen Urine | Methadone EDDP Screen Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Must be refrigerated upon collection and analyzed within 5 days or stored frozen. |
| Methanol | Methanol Quantitative | Serum | 6 mL Red | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Use non-alcoholic solutions such as peroxide, saline, or warm water to clean venipuncture site. Do not use alcoholic preparations. Centrifuge and aliquot serum to transport tube. |
| Methemoglobin | Methemoglobin | Blood | 6 mL Green stoppered specimen | RT | Department: Chemistry |
| | | | Arterial or Capillary Blood Gas Specimen is acceptable | Transport to Lab STAT Transport on ice | Notes: Blood may be stored at 4° C for 4 days for non-urgent requests. |
| Methotrexate | Methotrexate Level | Serum | red top tube → See notes | Refrigerated or Frozen | Notes: specimen must be protected from light. |
| Methylmalonic Acid Plasma | MMA-Methylmalonic Acid | Plasma | EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Separate plasma within 6 hours of collection. Aliquot to a transport tube and freeze. Only refer out if B12 is between 142 and 295 pmol/L. |
| Methylmalonic Acid Urine | Methylmalonic Acid Urine | Random Urine → See notes | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Early morning urine preferred. Indicate patient's medications. |
| Methylphenidate | Urine Toxicology Confirmatory | Random Urine | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Place urine sample in freezer. Complete Urine Toxicology Confirmatory Testing form |
| Microarray | DNA Analysis- Microarray | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Molybdenum | Molybdenum Level | Plasma | Dark Blue Top (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge within 30 minutes of collection. Do not use separator gel. Aliquot to transport tube and ship frozen. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|--|---|---|------------------------------------|---|
| Monospot | Mononucleosis Screen | Blood | 3 mL EDTA (Lavender) / 6 mL Red/SST | RT | Department: Hematology Notes: Testing also performed at PCH Chemistry Laboratory. |
| MRSA Screen | MRSA Screen | Nares/Rectal/Skin/Wound/ Urine/etc. | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology |
| Mucopolysaccharides Screen | Mucopolysaccharide | Random Clean Catch Urine (avoid first morning collection) | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Avoid first morning collection. Completion of the IWK Health Centre "Request for Metabolic Investigation" requisition is required to facilitate interpretation of analytical findings and recommendation for further testing or consultation. |
| Multiple Endocrine Neoplasia Type 2A | DNA Analysis- Multiple Endocrine Neoplasia Type 2A | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Mumps PCR | Mumps PCR | Deep Oral swab; Urine (if Orchitis present) | Swab in Viral Transport Media (VTM); Urine-50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: STAT testing available upon request. Please contact the Microbiology Laboratory if requesting STAT testing. Include on requisition date of symptom onset, date of last mumps vaccination (if recent) and travel history. |
| Mumps IgG Antibody | Mumps IgG Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Musk Quantitative Titres Antibody Test | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology-Referred Out |
| Mycobacterium Culture | Mycobacterium Culture | Sputum/Tissue/Washings/Urine | 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Mycobacterium Culture | Mycobacterium Culture | Skin/Wound swabs | C&S Swab in Transport Media | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Mycobacterium Culture, Blood | Mycobacterium Culture, Blood | Blood | Mycolytic Blood Culture Bottle (White Cap/Red Rim): collect 1-5 mL of Blood per bottle. | Specimen holding temperature RT | Department: Microbiology Notes: Do not freeze or refrigerate blood culture bottles. Please do not cover bottle barcode label with another label. Transport specimen to the Microbiology laboratory as soon as possible after collection. |
| Mycophenylate | MMF or Mycophenolate Level | Plasma | EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect specimen prior to next dose. Centrifuge. Aliquot plasma to a transport tube. Indicate date and time of last dose, as well as <u>date</u> and time of collection on the requisition. Can be done on micro samples when necessary. |
| Mycoplasma IgM | Mycoplasma IgM | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|------------------------------------|--|---|---|--|
| Mycoplasma PCR (Genital) | Ureaplasma/ Mycoplasma Genital PCR | Urine | 50 mL sterile container | Specimen holding temperature 2-8°C or -20°C | Department: Microbiology-Referred Out |
| | | Vaginal swab/ Cervical swab/ Endocervical swab/ Urethra swab/ penis swab/ Rectal swab/ | Swab in Viral Transport Media (VTM) or C&S collection swab | Specimen holding temperature 2-8°C (VTM can be stored at -20°C or colder) | Department: Microbiology-Referred Out |
| Mycoplasma PCR (Respiratory) | Mycoplasma/ Chlamydophila PCR | BAL/Washings | 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Mycoplasma PCR (Respiratory) | Mycoplasma/ Chlamydophila PCR | Throat swab | Swab in Viral Transport Media (VTM) | Specimen holding temperature 2-8°C | Department: Microbiology |
| Myelodysplastic Syndrome Next Generation Sequencing Panel | Hematology Referred Test | Blood or Bone Marrow | Blood: 1 x 6 mL EDTA (Lavender) Bone Marrow: 1-2 mL in an EDTA (Lavender) → See notes | Specimen holding temperature 4°C | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday |
| Myeloproliferative Neoplasm Next Generation Sequencing Panel | Hematology Referred Test | Blood or Bone Marrow | Blood: 1 x 6 mL EDTA (Lavender) Bone Marrow: 1-2 mL in an EDTA (Lavender) → See notes | Specimen holding temperature 4°C | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday |
| Myotonic Dystrophy | DNA Analysis- Myotonic Dystrophy | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Nasal Culture | Nasal Culture | Nasal/Nares | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology |
| Nasopharynx Culture | Nasopharynx Culture | NP suction/NP swab | Tubing in a 50 mL sterile container, syringe attached or C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology |
| Neisseria gonorrhea PCR | See GC PCR | | | | |
| Neonatal Toxicology Hair | Neonatal Toxicology Hair | Hair | Collection foil, sterile container or envelope → See notes | Store and Ship RT | Department: Chemistry Referred-Out Testing Notes: USDTL Custody and Control Form must be completed. Date and Time of birth required. |
| Neonatal Toxicology Meconium | Neonatal Toxicology Meconium | Meconium - collect first few bowel movements - within the first 48 hours post-partum | USDTL-provided container → See notes | Store and Ship Frozen | Department: Chemistry Referred-Out Testing Notes: USDTL Custody and Control Form must be completed. Date and Time of birth required. |
| Neurofibromatosis 1 | DNA Analysis- Neurofibromatosis 1 | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Neuromyelitis Opica | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Newborn Group and Coombs | BB Cord Group & Coombs Order Info | Blood | Cord blood | RT | Department: Blood Transfusion |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|------------------------|---|----------------------------|--------------------------------------|----------------------------------|---|
| Newborn Screen | Newborn Screen | Capillary Blood on Blotter | Blotter Card | RT | Department: Chemistry Referred Out Testing Notes: Collected within 24-48 hours of birth. Capillary collection applied directly to blotter card. Five circles must be filled completely and soaked all the way through. Allow circles to dry at room temperature, lying horizontally for three hours before placing in envelope. |
| Nickel Plasma | Nickel | Plasma | Dark Blue Top (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and separate within 1/2 hour of collection. Centrifuge with stopper on. Do not use separator gel. Aliquot plasma to transport tube. High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Nortriptyline | Nortriptyline | Serum or Plasma | 6 mL Red or EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: To monitor therapy, draw trough specimen within 1 hour prior to dose or at least 12 hours after last drug administration. Remove serum/plasma within 2 hours of collection. Aliquot to transfer tube. Do not use separator gel. Indicate date and time of last dose, as well as date and time of collection, on requisition. |
| NT-Pro BNP (HFX) | Chemistry Other (Add test name in Order Comment) | Plasma | Lithium Heparin (Green) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and transfer plasma to aliquot tube ASAP. Patient must present with NT-Pro BNP approval form. |
| Occult Blood | Occult Blood FIT | Stool | OB FIT Container | Specimen holding temperature 4°C | Department: Chemistry |
| Olanzapine | Olanzapine Level | Serum or Plasma (Heparin) | 6 mL Red or Green Top Tube | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Submit trough specimen collected just prior to next dose or post-dose at a time >75% of dosing interval. Do not use gel-separator tubes. Centrifuge and aliquot to transport tube. |
| Oligosaccharide Screen | Oligosaccharide | Random Clean Catch Urine | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Completion of the IWK Health Centre "Request for Metabolic Investigation" requisition is required. |
| Opiates Screen Urine | Opiates Screen Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Must be refrigerated upon collection and analyzed within 5 days or stored frozen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--------------------------------|--|----------------------------|--|------------------------------------|--|
| Organic Acid | Organic Acids Urine | Random early morning urine | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Use clean catch urine techniques; results may be uninterpretable in the presence of significant proteinuria or urinary tract infection. Include relevant clinical and family history on IWK "Request for Metabolic Investigation" requisition. |
| Orotic Acid | Urine Other (Add test name in Order Comment) | Random Urine | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Specimen must be collected, processed, aliquoted and frozen within 30 minutes of collection. |
| Osmolality | Osmolality | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Osmolality Urine | Osmolality Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Collect urine without preservative and send to Lab with a minimum of delay. |
| Osmotic Fragility | Osmotic Fragility | Blood | 2x6mL Lithium Heparin -Green → See notes | RT | Department: Hematology Notes: Please call Lab prior to ordering. |
| Oxalate 24 HR Urine | Oxalate 24 Hour Urine | 24 Hour urine | 24 Hour urine container with 25 mL 6N HCl as a preservative. | Store frozen and ship on dry ice. | Department: Chemistry Referred Out Testing Notes: Measure the volume and transfer a 50 mL aliquot to a Sterile Urine Container for specimen submission. Indicate 24 hour total volume. |
| Oxycodone Screen Urine | Oxycodone Screen Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Must be refrigerated upon collection and analyzed within 5 days or stored frozen. |
| Pancreatic Islet Cell Antibody | Islet Cell Antibody | Serum | 6 mL Red/SST | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Do NOT Freeze. Centrifuge and separate serum from cells immediately. Deliver within 14 days. |
| Paragonimiasis Serology | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (Paragonimiasis Serology) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Parathyroid Hormone | See PTH | | | | |
| Parathyroid Hormone - Intact | See PTH | | | | |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|---|---|--|------------------------------------|---|
| Parathyroid Hormone Related Peptide | PTH-Related Peptide | Plasma | 6 mL EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect into a chilled EDTA tube. Specimen must be collected, processed, aliquoted and frozen within 15 minutes of collection. |
| Parietal Antibodies | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Paroxysmal Nocturnal Hemoglobinuria | Flow Cytometry (Select Clinical Information from drop down) | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Parvovirus B19 IgG Antibody | Parvovirus B19 IgG Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: Testing should only be performed on women of child bearing age. |
| Parvovirus B19 IgM Antibody | Parvovirus B19 IgM Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Parvovirus PCR | Parvovirus PCR | Serum or Plasma | 6 mL EDTA (Lavender) or 6 mL Red | Specimen holding temperature 2-8°C | Department: Microbiology |
| Peritoneal Dialysate Fluid Culture | Peritoneal Dialysate Fluid Culture | PD Fluid | Peritoneal Dialysate Fluid Collection Kit | Specimen holding temperature 4°C | Department: Microbiology |
| Pertussis Serology | Pertussis Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Bordetella Pertussis / Parapertussis PCR | Bordetella Pertussis / Parapertussis PCR | Nasopharyngeal Swab/Aspirate **Aspirates should never be collected on patients ≥ 12 years of age** | Swab in Viral Transport Media (VTM) | Specimen holding temperature 4°C | Department: Microbiology-Referred Out Notes: The nasopharyngeal swab is the specimen of choice for all ages. |
| Phenobarbital | Phenobarbital Level | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Trough: Collect sample 0-60 minutes prior to next dose. |
| Phenylalanine/Tyrosine | Phenylalanine & Tyrosine | Capillary Blood on Blotter Card | Blotter Card | RT | Department: Chemistry Referred Out Testing Notes: Capillary collection applied directly to blotter card. Three circles must be filled completely and soaked all the way through. Allow circles to dry at room temperature, lying horizontally for three hours before placing in envelope. |
| Phenytoin | Phenytoin Level Total | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Trough: Collect sample 0-60 minutes prior to next dose. |
| Phosphate | Phosphate Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Phosphate | Phosphate Level 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Collection Container with 20-30 mL of 6 mol/L Hydrochloric Acid preservative added → See notes | Refrigerate during collection | Department: Chemistry Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------------|---------------------------------------|---|--|---|--|
| Phosphate Urine | Phosphate Level Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Pinworm Prep | Pinworm Prep | Pinworm Kit | Pinworm Kit or Pinworm Paddle | Specimen holding temperature RT | Department: Microbiology |
| Plasminogen | Plasminogen | Blood | 2 x Sodium Citrate (Blue top) | RT | Department: Hematology-Referred out |
| Plasminogen Activator Inhibitor | PAI-1 Plasminogen Activator Inhibitor | Blood | 2 x Sodium Citrate (Blue top) | RT | Department: Hematology-Referred Out Notes: Fasting sample required. Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Pneumocystis PCR | Pneumocystis PCR | BAL/ Bronch Wash/ Sput induced/ Endotracheal tube aspirates | 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: send ASAP to lab. |
| Polyoma PCR (BK Virus) | Polyom Virus (BK Virus) | Plasma | 6 mL EDTA (Lavender) | Specimen holding temperature -20 °C or colder | Department: Microbiology-Referred Out Notes: Referring Labs: Remove plasma within 24 hours of collection. Spin sample at 3500 rpm for 30 minutes. Ship plasma frozen on wet ice. |
| Porphobilinogen 24 HR Urine | Porphobilinogen Quantitative Urine | 24 Hour Urine - protected from light | 24 hour urine container with no preservative | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. Measure the total volume. Transfer a 50 mL aliquot to a sterile urine container. Indicate 24 hour total volume. Protect from light. |
| Porphyrin 24 HR Urine | Porphyrin Quantitative Urine | 24 Hour Urine | 24 hour urine container with 5 gram Sodium Carbonate | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Protect from light. Measure total 24 hour volume. Transfer 50.0 mL to a sterile urine container. Quantitation may only be done if a preliminary screen is positive. Indicate 24 hour total volume and date of collection. |
| Porphyrin Quantitative (RBC) | Porphyrin (Blood) | Whole Blood | EDTA (Lavender) | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Protect from light. Do NOT centrifuge. Must be received at reference lab within 7 days. |
| Porphyrin Random Urine | Porphyrin Screen Urine | Random Urine | Sterile Urine Container Note: 0.5 gram Sodium Carbonate is to be added immediately upon collection. Do not add to the container before urine | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Specimen must be collected, processed and frozen <u>within 30 minutes of collection</u> . Final pH should be 8 to 10. <u>Protect from light.</u> Quantitation may only be done if the preliminary screen is positive. |
| Porphyrin Screen Fecal | Fecal Porphyrin Screen | Random Stool | Sterile Container | Store and ship frozen protected from light | Department: Chemistry Referred Out Testing Notes: Protect from light. Freeze within 30 minutes of collection. If screen positive, quantitative will be done. |
| Potassium | Electrolytes | Blood | 6 mL Red/SST | RT | Department: Chemistry |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------|---|---------------|--|-------------------------------|--|
| Potassium 24 Hour Urine | Potassium Level 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Collection Container - no preservative → See notes | Refrigerate during collection | Department: Chemistry Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |
| Potassium Random Urine | Potassium Level Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Prader Willi Syndrome | DNA Analysis - PWS Prader Willi Syndrome | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday–Thursday. |
| Prealbumin | Prealbumin | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Pregnancy Test | Pregnancy Test Urine | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: First morning urine is best. |
| Pregnancy Test | Pregnancy Test Serum | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Premature Ovarian Failure | DNA Analysis - POF Premature Ovarian Failure | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Prenatal | Prenatal Work up | Blood | 6 mL K2 EDTA tube | RT | Department: Blood Transfusion |
| Primidone | Primidone Level | Serum | 6 mL Red; do not use separator gel | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect trough specimen just prior to next dose. Centrifuge and aliquot serum. Indicate date and time of last dose and date and time of specimen collection. |
| Proinsulin | Proinsulin Level | Serum | SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect after a 12 hour fast. Specimen must be collected, processed, aliquoted and frozen within 24 hours of collection. |
| Progesterone | Progesterone Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Prolactin | Prolactin Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Propoxyphene | Chemistry Other (Add test name in Order Comment) | Serum | 6 mL Red Do NOT use SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot to transport tube immediately. |
| Propoxyphene Urine | Propoxyphene Urine | Random Urine | Sterile Urine Container | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Refrigerate only. Must be received at reference lab within 14 days. |
| Protein C Activity | Protein C Activity | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Protein S Activity | Protein S Activity | Blood | 2 x Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------------|--|---------------|---|------------------------------------|--|
| PSA (Prostate Specific Antigen) | PSA | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: PSA testing is performed on men between the ages of 40 and 75 years of age. <ul style="list-style-type: none">• No PSA testing on females• No PSA testing on males < 40 years of age• PSA testing on males >75 years only if a clinical indication including previous diagnosis of prostate cancer or evaluation of metastatic carcinoma of unknown origin. |
| PSA Free/Total Ratio | PSA Free/Total Ratio | Serum | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge. Aliquot to a transport tube. |
| Protein - Total | Protein Total | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Protein - Total Random Urine | Protein Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Protein - Urine 24 Hour Urine | Protein Level 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Collection Container - no preservative → See notes | Refrigerate during collection | Department: Chemistry Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |
| Prothrombin Gene Mutation | DNA Analysis-Prothrombin Gene Mutation | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Prothrombin Time Defect | DNA Analysis-Prothrombin Time Defect | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Prothrombin time 50/50 mix | Prothrombin time 50/50 Mix PT 50/50 Mix | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Testing must be completed within 24hrs of collection. Tube must be filled. Hemolyzed specimens will be rejected. |
| PT/INR | PT (Prothrombin Time) Panel | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Testing must be completed within 24 hrs of collection. Tube must be filled. Hemolyzed specimens will be rejected. |
| PTH (Parathyroid Hormone) | PTH | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Q Fever IgG Antibody (Coxiella) | Q Fever IgG Antibody (Coxiella) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Q Fever IgM Antibody (Coxiella) | Q Fever IgM Antibody (Coxiella) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|--|--|---|------------------------------------|--|
| Quetiapine | Chemistry Other (Add test name in Order Comment) | Serum | 6 mL Red - do NOT use separator gel | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Submit trough specimen collected just prior to next dose or post-dose at a time >75% of dosing interval. Do not use gel-separator tubes. Centrifuge and aliquot serum to a transport tube. |
| Rabies IgG Serology | Rabies IgG Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred out |
| RAR | DNA Analysis- RAR alpha, Retinoic acid receptor, Translocation (15;17), t(15;17), PML-RAR gene fusion | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| RBC Folate | Folate RBC | Whole blood | 3 mL EDTA (Lavender) → See notes | Store and Ship Frozen | Department: Chemistry Referred-Out Testing Notes: Hematocrit must be obtained before specimen is frozen. Requires CBC and Retic within last 30 days. |
| Renin (MASS) | Renin Mass | Plasma | EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: • Patient should stop taking spironolactone or eplerenone for four to six weeks prior to testing. • Patient should be instructed to abort any reduced salt diets and consume salt ad libitum for two days prior to testing. • If hypokalemic, the patient should receive oral potassium replacement to restore eukalemia. • Oral contraceptives, corticosteroids, glucocorticoids, licorice, age, menstrual cycle and pregnancy can affect this test. Patient should be ambulatory for 30 minutes prior to blood collection. Record on requisition the posture at the time of collection (upright or supine). Separate and freeze ASAP. |
| Respiratory Culture | Respiratory Culture | BAL/Bronchial/ Endotracheal/ Sputum's/CF Throat/etc. | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology |
| Reticulocyte Count | Reticulocyte Count | Blood | 3 mL EDTA (Lavender) | RT | Department: Hematology |
| Retinoblastoma | DNA Analysis- Retinoblastoma | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Rheumatoid Factor | Rhematoid Factor | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Rickettsia Serology (Rocky Mountain Spotted Fever) | Rickettsia Serology (Rocky Mountain Spotted Fever) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--------------------------|--|----------------|--|------------------------------------|---|
| RSV Antigen | See Influenza/RSV PCR | | | | |
| Rubella IgG Antibody | Rubella IgG Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Rubella IgM Antibody | Rubella IgM Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Salicylate | Salicylate Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Scabies Exam | Scabies Exam | Skin Scrapings | Glass Slide in Slide holder placed in a sealed Biohazard Bag | Specimen holding temperature RT | Department: Microbiology Notes: Lesion scrapings: Submit two specimens per patient. Use a separate slide for each scraping. Patient’s first and last name & MRN MUST be written on frosted end of slide in lead pencil. Drop a small button (2-3 drops) of mineral oil onto the center of a glass slide. Place a drop of mineral oil directly to several un-excoriated lesions. Firmly scrape lesions with the edge a second glass slide. Place the scraped material in the oil on the slide. Cover the material with another (clean) glass slide. Tape the slides together at their ends. Do not cover the sample area with tape. Place the slides in a slide holder, place slider holder in a biohazard bag, seal bag and transport to the laboratory along with a completed requisition. Please note that failure to follow all steps in the collection procedure may result in rejection of samples. Lab: Collection Instructions are available in the Laboratory Information Manual (LIM). |
| Schistosomiasis Serology | Schistosomiasis Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Selenium | Selenium Level | Plasma | Dark Blue Top (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: High concentrations of gadolinium and iodine are known to interfere with most trace element tests. If gadolinium or iodine-containing contrast media have been administered, a specimen should not be collected for 48 hours. Centrifuge within 30 minutes of collection. Do not use separator gel. Aliquot plasma to polypropylene transport tube. |
| Seminal Analysis | Seminal Complete Seminal Post Vasectomy | Seminal Fluid | Sterile Container | RT Monday-Friday 8-4 | Department: Immunology Notes: Must be received in lab Monday-Thursday, by 13:00. Seminal samples submitted to PCH area accepted Monday - Friday from 8-2. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-----------------------------------|---|--------------------------|---|--|---|
| Serotonin | Serotonin Level | Serum | 6 mL Red | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Monoamine oxidase inhibitor drugs must be discontinued for at least one week prior to sampling since they tend to increase the level of serotonin. Specimen must be collected, processed, aliquoted and frozen within 30 minutes of collection. |
| Serum Free Light Chains | Serum Free Light Chains | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Serum Protein Electrophoresis | Protein Electrophoresis | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology |
| Sex Hormone Binding Globulin | SHBG | Serum | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Centrifuge and aliquot to transport tube. |
| Sickle Cell Test | Sickle Cell Screen (Hemoglobin S) | Blood | EDTA (Lavender) | RT | Department: Hematology |
| Sirolimus | Sirolimus Level | Whole Blood | EDTA (Lavender) | Freeze in original container, unless capillary collection - mix well and transfer into plastic transport tube. | Department: Chemistry Referred Out Testing Notes: Can be ordered as a random or 5 point (Pre, 1hr, 2hr, 3hr, 4hr, post medication). Can be done on capillary collection if necessary. |
| Skeletal Muscle Antibodies | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department: Immunology - Referred Out |
| Skin Antibodies (Pemphigus) | Immunology Other | Blood | 6 mL Red | Store and Ship Refrigerated | Department : Immunology - Referred Out |
| Skin Culture | Skin Culture | Swab of affected site | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology Notes: Please specify site of collection. |
| Smear For WBCs | Smear For WBCs | Stool | Plain Stool Container | Specimen holding temperature 4°C | Department: Microbiology Notes: Must be received in Microbiology within 2 hours of collection Sunday through Saturday 8-3. Specimens received after the 2 hours will be rejected. |
| Smear For Yeast | Smear For Yeast | Oral/Vaginal/Vulva/Other | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology Notes: If "other" site is collected, please specify site of |
| Smooth Muscle Alpha Actin / ACTA2 | DNA Analysis – Smooth Muscle Alpha Actin / DNA Analysis – ACTA2 | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Sodium | Electrolytes | Blood | 6 mL Red/SST | RT | Department: Chemistry |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-----------------------------------|--------------------------------------|---|---|--|--|
| Sodium 24 Hour Urine | Sodium Level 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Collection Container - no preservative → See notes | Refrigerate during collection | Department: Chemistry Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |
| Sodium Random Urine | Sodium Level Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Solute Carrier Family 6 | DNA Analysis- SLC6A8 | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Spinal Muscular Atrophy | DNA Analysis- SMA | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Stone Analysis (Calculi) | Stone Analysis Infrared Spectroscopy | Calculus | Sterile Urine Container | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Collection: passed, lithiasis, etc. Specimen should not routinely be submitted in liquid (formalin, urine, blood, etc.), in gauze, filters, taped or on Q-tips. Renal calculi will be accepted in a urine sample <u>if</u> absolutely necessary. |
| Stool Culture | Stool Culture | Stool/Rectal Swab | Stool container with Cary Blair Preservative or C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology Notes: May be collected in a Plain Stool Container if it will be Received in Microbiology within 2 hours of collection, Sunday through Saturday 8-3. |
| Streptococcus Pneumoniae Serology | Pneumococcal Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Streptococcus Urinary Antigen | Pneumococcal Urinary Antigen | Urine | 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Surgical Culture | Surgical Culture | Swab of affected site/Tissue/etc. | C&S Swab in Transport Media or 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology Notes: Please specify site of collection. Call/page the Microbiology laboratory if culture processing and/or Gram stain results are requested STAT. |
| Surgical Pathology | Pathology Tissue | AMPUTATION (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Deliver to lab. Keep at room temperature. |
| Surgical Pathology | Pathology Tissue | AMPUTATION-LIMB (select appropriate Cerner order from drop down menu) | Place in tote designated for transport of amputated limbs | Fresh- Transport to Histology- IMMEDIATELY | Department: Histology Notes: After hours, the Porter must place the box in the walk-in refrigerator. The requisition is either left on the counter in Specimen Receiving or brought into the Histology Lab. PCH: Deliver to lab. Store in walk-in fridge. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--------------------|-------------------------|---|--|--|--|
| Surgical Pathology | Pathology Tissue | LYMPH NODE LYMPHOMA (select appropriate Cerner order from drop down menu) | QEH: Container with leak-resistant lid, on Telfa pad moistened with saline. PCH: A plastic bag is acceptable. | Fresh- Transport to Histology- IMMEDIATELY | Department: Histology Notes: Specimen(s) must be received in laboratory between 8:30 and 13:30 Monday to Thursday. Deliver directly to Histology Lab. PCH: Notify histology in advance 4288/4289. Specimen(s) must be received in laboratory between 8:30 and 10:30 Monday to Thursday. |
| Surgical Pathology | Pathology Tissue | LYMPH NODE (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Specimens are received in histology during regular working hours from Monday to Wednesday and before 10:30 on Thursdays. Deliver to lab. Keep at room temperature. |
| Surgical Pathology | Pathology Tissue | MUSCLE BIOPSY (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid, on Telfa pad moistened with saline | Fresh- Transport to Histology- IMMEDIATELY | Department: Histology Notes: Specimen(s) must be received in laboratory between 8:30 and 13:30 Monday to Thursday. Deliver directly to Histology Lab. |
| Surgical Pathology | Pathology Head and Neck | ALL HEAD AND NECK SITES (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Deliver to lab. Keep at room temperature. |
| Surgical Pathology | Pathology Skin | ALL SKIN AND SUBCUTANEOUS SITES (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Deliver to lab. Keep at room temperature. |
| Surgical Pathology | Pathology Bone Marrow | ALL BONE MARROW SPECIMENS (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Deliver to lab. Keep at room temperature. |
| Surgical Pathology | Pathology Breast | LUMPECTOMY (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | Fresh or 10% Formalin at Room Temperature- Transport to Histology- IMMEDIATELY | Department: Histology Notes: <u>Please notify the laboratory (2339)</u> when specimen is en route. Deliver directly to Histology Lab. Pathologist on call must be called after 16:30. PCH: Call 4288. After hours notify the technologist on duty. |
| Surgical Pathology | Pathology Breast | LUMPECTOMY WITH WIRE LOCALIZATION (select appropriate Cerner order from drop down menu) | Contained within a plastic bag | Fresh- Transport to Histology- IMMEDIATELY | Department: Histology Notes: Specimen(s) should be received in laboratory between 8:30 and 16:30 Monday to Friday. <u>Please notify the laboratory (2339)</u> when specimen is en route. Deliver directly to Histology Lab. Pathologist on call must be called after 16:30. PCH: Call 4288. After hours notify the technologist on duty. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--------------------|----------------------------|---|---|--|--|
| Surgical Pathology | Pathology Breast | MASTECTOMY (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | Fresh or 10% Formalin at Room Temperature- Transport to Histology- IMMEDIATELY | Department: Histology Notes: Please notify the laboratory (2339) when specimen is en route. Deliver directly to Histology Lab. Pathologist on call must be called after 16:30. PCH: Call 4288. After hours notify the technologist on duty. |
| Surgical Pathology | Pathology Breast | NEEDLECORE BIOPSY (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Deliver to lab. Keep at room temperature. |
| Surgical Pathology | Pathology Breast | REDUCTION (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Deliver to lab. Keep at room temperature. |
| Surgical Pathology | Pathology Gynecological | FETAL TISSUE for Cytogenetics Testing (piece of amnion, skin, or cartilage from costal/chondral junction) | Container with leak-resistant lid, with RPMI transport medium (available from lab) | Fresh- Transport to Histology- IMMEDIATELY | Department: Histology Notes: Deliver directly to Histology Lab. If collected after hours between Sunday and Thursday morning, store at room temperature. From Thursday evening through to Saturday, place specimen in refrigerator. |
| Surgical Pathology | Pathology Urology | KIDNEY-NEEDLECORE (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid, or a sealed bag between two Telfa pads moistened with saline | Fresh- Transport to Histology- IMMEDIATELY | Department: Histology Notes: Specimen(s) must be received in laboratory between 8:30 and 13:30 Monday to Thursday. Deliver directly to Histology Lab. |
| Surgical Pathology | Pathology Urology | KIDNEY (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. |
| Surgical Pathology | Pathology Urology | PROSTATE TISSUE (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. |
| Surgical Pathology | Pathology Urology | PROSTATE-NEEDLECORE (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Deliver to lab. Keep at room temperature. |
| Surgical Pathology | Pathology Gastrointestinal | ABDOMINAL SURGURY (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: Large Specimens with known or suspected cancer, need to be sliced upon arrival in the laboratory. Please notify the lab (2339/2338) or after 16:30, the Pathologist on call, when specimen is en route. PCH: Call 4288. After hours notify the technologist on duty. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-----------------------------|--|---|--|---|---|
| Surgical Pathology | Pathology Endoscopy | ALL ENDOSCOPIC PROCEDURES incl. Lung & G.I. (select appropriate Cerner order from drop down menu) | Container with leak-resistant lid | 10% Formalin | Department: Histology Notes: After 16:30, the Porter must place specimen in refrigerator in Specimen Receiving Room. PCH: Deliver to lab. Keep at room temperature. |
| Strongyloidiasis | Strongyloidiasis Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Sweat Chloride | Sweat Chloride Analysis | Sweat | → See notes | N/A | Department: Chemistry Note: This is a specialized procedure performed at the QEH Laboratory. Please contact the lab at 894-2324 for information and to book an appointment. |
| Syphilis Antibody Screen | Syphilis Antibody Screen | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology |
| Syphilis-CSF | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (Syphilis-CSF) | CSF | Sterile screw capped CSF container | Specimen holding temperature 2-8°C for up to 48 hours | Department: Microbiology-Referred Out Notes: Syphilis CSF testing is only performed if there is a positive syphilis serology result. |
| T-Cell Clonality | T-Cell Receptors, T-Cell Lymphoid Clonality, T-cell gene rearrangement, TCR beta chain, Lymphoma protocol | Blood or Bone Marrow | Blood: Adult/Children: 2 x 6 mL EDTA (Lavender) Bone Marrow: 1 - 2 mL in an EDTA (Lavender) tube | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Tacrolimus | Tacrolimus Level | Whole Blood | 2 x EDTA (Lavender) | Specimen holding temperature 4°C | Department: Chemistry - PCH Notes: Trough whole blood should be collected before medication. Can be ordered as a random, 1 point (2 hr post med) or 5 point (Pre, 1hr, 2hr, 3hr, 4hr post med). Note date and time of last dose on requisition. Can be done on capillary collection if necessary. |
| Testosterone | Testosterone Level Total | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Tetanus Toxoid IgG Serology | Tetanus Toxoid IgG Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Theophylline | Theophylline Level | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Trough: Collect sample 0-30 minutes prior to next dose. Peak IV: Collect sample 30 minutes after completion of IV infusion. Peak Oral: Collect sample 2 hours after ingestion of oral liquids and immediate-release tablets. Collect 3-7 hours after ingestion of sustained-release medication. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--|-------------------------|---|--------------------------------------|----------------------------------|--|
| Throat Culture | Throat Culture | Throat/Throat CF/Tonsil | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology |
| Thrombin Time | Thrombin Time | Blood | Sodium Citrate - Blue → See notes | RT | Department: Hematology Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, spin, separate and freeze plasma. Send frozen. |
| Thyroglobulin | Thyroglobulin | Serum | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Separate serum within 5 hours of collection. |
| Thyroid Peroxidase Antibodies | Immunology Other | Blood | 6 mL Red | Store and ship refrigerated | Department: Immunology - Referred Out |
| TSH (Thyroid-Stimulating Hormone) | TSH | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| TSH - Newborn | TSH - Newborn | Blood | Neonate:Capillary microtainer | RT | Department: Chemistry |
| TIBC | FE/TIBC | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Serum iron concentrations show significant variation throughout the day, being lower in the afternoon than in the morning and quite low in the evening. |
| Tip Culture | Tip Culture | Cath Tip/Central Line Tip (ie. intravenous catheter tips) | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology Notes: Urinary-type catheter tips are not acceptable specimens for culture. |
| Tissue Culture | Tissue Culture | Tissue | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology Notes: Please specify tissue type/site of collection. Transport specimen to the Microbiology laboratory as soon as possible after collection. Call/page the Microbiology laboratory if culture processing and/or Gram stain results are requested STAT. |
| Tissue Transglutaminase (TTG, Celiac Screen) | Tissue Transglutaminase | Blood | 6 mL Red | Store and ship refrigerated | Department: Immunology |
| Tobramycin | Tobramycin Level | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Trough: Collect sample 0-30 minutes prior to next dose. Peak IV: Collect sample 30-60 minutes after completion of IV infusion. Extended interval dosing: Collect sample 6 hours prior to next dose. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|------------------------------------|--|--------------------------------------|---|------------------------------------|--|
| Topiramate | Topiramate Level | Serum | 6 mL Red Do NOT use SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Note date and time of last dose on requisition. Centrifuge and aliquot serum to a transport tube ASAP. |
| Toxocara IgG Antibody | Toxocara IgG Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Toxocara IgM Antibody | Toxocara IgM Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Toxoplasma IgG Antibody | Toxoplasma IgG Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Toxoplasma IgM Antibody | Toxoplasma IgM Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Transfusion Reaction Investigation | Transfusion Reaction Investigation | Blood | 6 mL Red- no additives 6 mL K2 EDTA tube | RT | Department: Blood Transfusion |
| Trichinosis Serology | Orderable is: Misc Microbiology Order. Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (Trichinosis Serology) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Trichomonas Prep | Trichomonas Prep | Vaginal/Vulva | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology Notes: Must be received in Microbiology within 2 hours of collection, Sunday through Saturday 8-3. |
| Trichomonas PCR | Trichomonas PCR | Cervix/Endocervix, Vaginal and Urine | BD MAX UVE Buffer Tube | Specimen holding temperature 4°C | Department: Microbiology Notes: 1mL of Urine must be placed in the BD MAX UVE buffer tube within 24hrs of collection. |
| Tricyclic Antidepressant Screen | TCA Screen | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Triglyceride-TPN | See Lipid Emulsion | | | | |
| Trileptal | Trileptal | Serum | 6 mL Red → See notes | Store and Ship Frozen | Department: Chemistry Referred-Out Testing Notes: Specimens will be rejected if collected in a gel-barrier tube. |
| Troponin I | Troponin-I | Blood | 6 mL green | RT | Department: Chemistry |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|--------------------------|--|--|---|---|---|
| Trypanosomiasis Serology | Orderable is: Misc Microbiology Order Specimen type: Misc Micro Source Body Site: See Free text, Free text Source: type in test requested (Trypanosomiasis Serology) | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Trypsin | Chemistry Other (Add test name in Order Comment) | Serum | 6 mL Red/SST | Store and Ship Frozen | Department: Chemistry Referred-Out Testing Notes: Separate from cells within 2 hours. Centrifuge, transfer serum to a transport tube. |
| Tryptase | Tryptase | Serum | 6 mL Red - do NOT use separator gel | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Specimen collection timing is critical. Sample preferably should be taken between 15 minutes to 3 hours after the suspected anaphylactic event. Centrifuge and aliquot to a transport tube. |
| Ulcer Culture | Ulcer Culture | Decub/Diabetic Ulcer | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology Notes: Please specify type of ulcer and site of collection. |
| Urea | Urea Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Urea 24 Hour Urine | Urea Level 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Collection Container - no preservative → See notes | Refrigerate during collection | Department: Chemistry Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |
| Ureaplasma PCR (Genital) | Ureaplasma /Mycoplasma Genital PCR | Vaginal swab/ Cervical swab/ Endocervical swab/ Urethra swab/ penis swab/ Rectal swab/ | C&S Swab in Transport Media or Swab in Viral Transport Media (VTM) 8 | Specimen holding temperature 2-8°C (VTM can be stored at -20°C or colder) | Department: Microbiology-Referred Out 8 |
| | | Urine | 50 mL sterile container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out 8 |
| Urea Random Urine | Urea Level Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Uric Acid | Urate | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Uric Acid 24 Hour Urine | Urate Level 24 Hour Urine | 24 Hour Urine | 24 Hour Urine Collection Container - no preservative → See notes | Refrigerate during collection | Department: Chemistry Notes: Please follow 24 Hour Urine collection instructions closely. Incomplete collection may result in rejection of specimen. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------------------|--|---------------|---|------------------------------------|--|
| Uric Acid Random Urine | Urate Level Urine | Random Urine | Plastic C&S container | RT | Department: Chemistry |
| Urinalysis | Urinalysis | Random Urine | Plastic C&S container → See notes | RT | Department: Chemistry Notes: Send specimen immediately for analysis. Microscopic analysis will not be performed on specimens greater than 4 hours old. |
| Urine Culture | Urine Culture | Urine | 50 mL sterile container | Specimen holding temperature 4°C | Department: Microbiology |
| Urine Protein Electrophoresis | Urine Protein Electrophoresis | Urine | Random or 24 hour | | Department: Immunology |
| Urine Toxicology Confirmatory Testing | Urine Toxicology Confirmatory Testing | Urine | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Freeze urine in sterile container. Complete Urine Drug Screen Confirmatory Testing Form |
| Valproate | See Valproic Acid | | | | |
| Valproic Acid | Valproic Acid Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Vancomycin | Vancomycin Level Pre or Vancomycin Level Post | Blood | 6 mL Red/SST → See notes | RT | Department: Chemistry Notes: Trough: Collect sample 0-60 minutes prior to next dose. Peak: Collect sample 60-90 minutes after end of infusion. |
| Vanillylmandelic Acid (VMA) | VMA 24 Hour Urine | 24 hour Urine | 24 hour urine container with 25 mL HCl as a preservative. | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Diet and drug restrictions: To be avoided for 48 hours: ASA, chloralhydrate, coffee, cola drink, dopamine, erythromycin, methyldopa, niacin, phenothiazines, quinidine, quinine, riboflavin, smoking, tea, tetracycline, vitamin B. To be avoided for 72 hours: avocados, bananas, chocolate, eggplant, fruit and juice, hypertensive drugs (especially aldomet), pineapples, plums, Tylenol (acetaminophen), walnuts. Note: coffee, cola drinks, tea, smoking are considered drugs. Measure the total volume of the 24 hour collection. Note total volume and Date and Time of Collection on requisition. Transfer 50 mL to a sterile container. Must deliver to reference lab within 21 days. Always cancel VMA unless it is for a pediatric patient (< 16 years of age) or ordered by a pediatrician. |
| Varicella IgG Antibody | Varicella Zoster IgG Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology Notes: STAT testing is available for pregnant women or patients with known exposure. Please call the microbiology laboratory if requesting stat testing. |
| Varicella IgM Antibody | Varicella Zoster IgM Antibody | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---|---|--|--|--|--|
| Varicella PCR (CSF) | Varicella PCR (CSF) | CSF | Sterile screw capped CSF container | Specimen holding temperature 4°C | Department: Microbiology-Referred Out |
| Vasculitis (ANCA) | Vasculitis | Blood | 6 mL Red | Store and ship refrigerated | Department: Immunology |
| Vasoactive Intestinal Polypeptide (VIP) | Chemistry Other (Add test name in Order Comment) | Plasma | 6 mL EDTA (Lavender) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Patient must not have received radioactive substances 24 hours prior to test. Patient must fast 8 hours prior to collection. Specimen must be collected, processed, aliquoted and frozen within 30 minutes of collection. Sample must not thaw. |
| Venlafaxine | Urine Toxicology Confirmatory Testing | Random Urine | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Freeze urine in sterile container. Complete Urine Drug Screen Confirmatory Testing Form. |
| Viral Respiratory Panel | Viral Respiratory Panel | Nasopharyngeal/Throat swab Aspirates/Lower Respiratory Nasopharyngeal Aspirate ☒ | Viral Swab (Nasopharyngeal/Throat swab) 50 ml sterile container (aspirates/lower respiratory) 5 – 10 mL Nasopharyngeal Aspirate – visible | Specimen holding temperature 4°C | Department: Microbiology-Referred Out Notes: Test includes: Adenovirus, Influenzae virus types A and B, Parainfluenzae virus types I, II and III, Coronavirus, Respiratory Syncytial virus (RSV), Bocavirus and Human Metapneumovirus. |
| Viral Respiratory Screen | Viral Respiratory Screen | Nasopharyngeal/Throat swab Aspirates/Lower Respiratory Nasopharyngeal Aspirate ☒ | Viral Swab (Nasopharyngeal/Throat swab) 50 ml sterile container (aspirates/lower respiratory) 5 – 10 mL Nasopharyngeal Aspirate – visible sample in tubing | Specimen holding temperature 4°C | Department: Microbiology-Referred Out Notes: Test includes: Influenzae virus types A and B, Respiratory Syncytial virus (RSV). |
| Viscosity | Viscosity | Blood | 6 mL red | Store and ship refrigerated | Department: Immunology |
| Vitamin A | Vitamin A Level | Serum | 6 mL Red/SST | Store and ship frozen - protected from light | Department: Chemistry Referred Out Testing Notes: Fasting specimen preferred. Collect after a 12 hr fast. Patient should be without vitamin supplements and abstain from alcohol for 24 hours prior to testing. Centrifuge and separate serum within 30 minutes. Aliquot serum to a transport tube. Avoid hemolysis. <u>Protect from light.</u> |
| Vitamin B1 | Thiamine-Vitamin B1 Level | Whole Blood | EDTA (Lavender) | Store and ship frozen - protected from light | Department: Chemistry Referred Out Testing Notes: Specimen should be collected before breakfast in the am and prior to any medication. Do NOT centrifuge. Specimen for this test must be collected, processed and frozen within 30 minutes of collection. <u>Protect from light.</u> |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------------|--------------------------------|---------------|--|--|---|
| Vitamin B6 | Vitamin B6 | Plasma | EDTA (Lavender) | Store and ship frozen - protected from light | Department: Chemistry Referred Out Testing Notes: Patient must avoid dietary vitamin B6 on the day of collection. Specimen must be collected, processed, aliquoted and frozen within 30 minutes of collection. Protect from light. Centrifuge and aliquot plasma to transport tube. |
| Vitamin B12 | Vitamin B12 Level | Blood | 6 mL Red/SST | RT | Department: Chemistry |
| Vitamin C | Vitamin C | Serum | SST | Store and ship frozen - protected from light | Department: Chemistry Referred Out Testing Notes: Specimen must be collected, processed, aliquoted and frozen within 45-60 minutes of collection. PROTECT FROM LIGHT. |
| Vitamin D 1,25 Dihydroxy | Vitamin D 1,25 Dihydroxy Level | Serum | 6 mL Red/SST | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Specimen for this test must be collected, processed, aliquoted and frozen within 30 minutes of collection. Centrifuge and aliquot plasma to a transport tube. |
| Vitamin D-25 OH | Vitamin D 25 Hydroxy Level | Blood | 6 mL Red/SST | RT | Department: Chemistry Notes: One or more clinical indications must be met and provided with sample prior to testing. |
| Vitamin E | Vitamin E Level | Serum | 6 mL Red → See notes | Store and Ship Frozen | Department: Chemistry Referred-Out Testing Notes: Fasting specimen preferred. Patient should fast for 12 hours and abstain from alcohol for 24 hours prior to collection. Patient should be without vitamin supplementation for 24 hours prior to testing. Centrifuge & separate from cells within 45-60 minutes of collection. PROTECT FROM LIGHT. |
| Vitamin K | Vitamin K Level | Plasma | EDTA (Lavender) | Store and ship frozen - protected from light | Department: Chemistry Referred Out Testing Notes: Fasting specimen required. Collect after an 8hr fast. Patient should refrain from eating liver or taking multivitamins or Vitamin K at least 24 hrs before sample collection. For infants, draw prior to next feeding. Centrifuge and separate serum within 1 hr of collection. Aliquot serum to a transport tube. If unable to centrifuge immediately, sample should be covered with aluminum foil and immediately placed on ice until plasma can be separated from the cells. Avoid hemolysis. Protect from light. |
| Von Hippel-Lindau Disease | DNA Analysis - VHL | Blood | Adult/Children: 2 X 6 mL EDTA (Lavender) Nursery: 1 X 3 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|------------------------------------|---|---|--|------------------------------------|---|
| Von Willebrand’s Multimer Analysis | VWD Multimer Analysis | Blood | 3 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Von Willebrand’s Panel | Factor VIII Assay Referred, VWD Antigen Assay, VWD Activity Ristocetin cofactor Assay | Blood | 3 x Sodium Citrate - Blue → See notes | RT | Department: Hematology-Referred Out Notes: Tube must be filled. Hemolyzed specimens will be rejected. If delay in transport >4hrs, tube should be double spun, placed in 1 mL aliquots and sent frozen. |
| Voriconazole | Voriconazole Level | Plasma | Green Top (Heparin) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Collect 0-30 minutes prior to dose. Centrifuge and aliquot plasma to a transport tube. |
| VRE Screen | VRE Screen | Stool/Rectal Swab | C&S Swab in Transport Media or Plain Stool container. | Specimen holding temperature 4°C | Department: Microbiology Notes: VRE Screens are only processed on in limited situations: ICU/CCU patients, provincial renal dialysis program, and/or requested by an infection control professional. |
| West Nile Serology | West Nile Elisa Serology | Serum | 6 mL Red /SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| West Nile PCR | West Nile PCR | Plasma* *See notes or Serum or CSF | **6 mL EDTA (Lavender) or 6 mL Red/SST or Sterile screw capped CSF container | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out Notes: **Plasma is the preferred specimen however testing can be performed on blood (serum) or CSF. |
| Wilson’s Disease | DNA Analysis – Wilson’s Disease | Blood | 2 x 6 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |
| Worm Exam | Worm Exam | Worms | 50 mL sterile container or SAF Container | Specimen holding temperature RT | Department: Microbiology Notes: Referral Lab: please add SAF to sterile container if received. |
| Wound Culture | Wound Culture | Swab of affected site | C&S Swab in Transport Media | Specimen holding temperature 4°C | Department: Microbiology Notes: Please specify type of wound and/or site of collection. |
| X-Inactivations | DNA Analysis - X-Inactivations | Blood | Adult/Children: 2 X 6 mL EDTA (Lavender) Nursery: 1 X 3 mL EDTA (Lavender) → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday – Thursday. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|---------------------|---|--|---|--|--|
| X-Microdeletions | DNA Analysis - X-Microdeletions | Blood | Adult/Children: 2 X 3 mL EDTA Nursery: 6 mL EDTA → See notes | RT | Department: Hematology-Referred Out Notes: Must arrive at QEH Lab before noon Monday–Thursday. |
| Yersinia Serology | Yersinia Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Zika Virus PCR | Zika PCR | Serum (collected 10-14 days following symptom onset) or Urine (collected 10-14 days following symptom onset) | 6 mL Red/SST Urine: 50 mL Sterile container | Specimen holding temperature serum at -20°C urine at 2-8°C for up to 48 hours | Department: Microbiology-Referred Out |
| Zika Virus Serology | Zika Serology | Serum | 6 mL Red/SST | Specimen holding temperature 2-8°C | Department: Microbiology-Referred Out |
| Zinc 24 HR Urine | Urine Other (Add test name in Order Comment) | 24 hour urine | 24 hour urine container with no preservative | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Patients should discontinue nutritional supplements, vitamins and minerals. High concentrations of gadobutrol, gadodiamide, ioversol and iodixanol are known to interfere with most trace elements. If gadobutrol, gadodiamide, ioversol or iodixanol-containing contrast media have been administered, a specimen should not be collected for 48 hours. Measure the total volume of the 24 hour collection. Note total volume and date and time of collection on requisition. Transfer 50 mL to a sterile ORANGE-CAPPED container. |
| Zinc Plasma | Zinc Level | Plasma | Dark Blue Top (K2EDTA) | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Patients should discontinue nutritional supplements, vitamins and minerals. High concentrations of gadobutrol, gadodiamide, ioversol and iodixanol are known to interfere with most trace elements. If gadobutrol, gadodiamide, ioversol or iodixanol-containing contrast media have been administered, a specimen should not be collected for 48 hours. Centrifuge. Separate serum from cells immediately. Aliquot plasma to a transport tube. |
| Zinc Protoporphyrin | Zinc Protoporphyrin | Whole Blood | EDTA (Lavender) | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Protect from light. Do NOT centrifuge. Must be received at reference lab within 7 days. |

| TEST | CERNER ORDERABLE | SPECIMEN TYPE | Container | TRANSPORTATION & STORAGE | ADDITIONAL INFORMATION |
|-------------------|---------------------------------------|---------------|--|-----------------------------|--|
| Zinc Random Urine | Zinc Random Urine | Random Urine | Sterile ORANGE -CAPPED Urine Container | Store and ship refrigerated | Department: Chemistry Referred Out Testing Notes: Patients should discontinue nutritional supplements, vitamins and minerals. High concentrations of gadobutrol, gadodiamide, ioversol and iodixanol are known to interfere with most trace elements. If gadobutrol, gadodiamide, ioversol or iodixanol-containing contrast media have been administered, a specimen should not be collected for 48 hours. |
| Zopiclone | Urine Toxicology Confirmatory Testing | Random Urine | Sterile Urine Container | Store and ship frozen | Department: Chemistry Referred Out Testing Notes: Freeze urine in sterile container. Complete Urine Drug Screen Confirmatory Testing Form |