Reflex Testing

Corewell Health West

Contents

*Changes highlighted are approved in current calendar year, highlighting will be removed in subsequent calendar year.

*Under certain circumstances reflex testing may be initiated based on NCCN guidelines, see MEC form (07/13/2020) for more details.

Anatomical Pathology

Anatomic Pathology – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Brain	
Brain – high grade gliomas	MGMT Methylation Analysis
Breast	
All patients with invasive breast carcinoma meeting the following criteria: • Age less than 70 years • Not pure tubular, mucinous, or colloid carcinoma (grade 1 special subtypes with good prognosis) • Tumor is pathologic stage pT1b, T1c, T2, or T3 • Tumor is pathologic stage pN0 or N1mi • Tumor is ER positive and Her2/neu negative Not post-treatment (y), recurrent tumor (r) or with known distant metastatic tumor (M1)	Send for Oncotype DX testing: 1) If multifocal on same side and meet the criteria • Perform Oncotype on largest primary tumor (if same histology) • Perform Oncotype on up to three primary tumors (if different histology), indicate order of testing to Oncotype (as they will stop further testing if high recurrence score is resulted 2) If bilateral, perform Oncotype on both sides if meet the criteria. If the patient has a different higher risk concurrent breast cancer such pT4, pN1b or more, ER negative, or Her2, do not reflexively test any additional lower risk tumor(s). The higher risk cancer will drive the patient's treatment and prognosis so testing the lower risk one is not done as reflex.
GI (Gastrointestinal)	
Metastatic gastrointestinal tract adenocarcinomas (gastric, esophageal, small bowel, colon and rectum) As per NCCN guidelines 2022	• Perform Her2/neu immunohistochemistry (IHC). When metastasis is pathologically confirmed (can use either metastatic site or primary tumor), or highly suspicious for metastatic disease on imaging. Equivocal IHC results will reflex to HER2 FISH testing • Perform MMR evaluation (Immunohistochemical protein studies for MSH2, MSH6, MLH1, PMS2), if previously not performed on main tumor Based on MMR results reflex to additional testing as per current CAP protocol
Metastatic Colorectal Carcinoma	Colon Mutation Analysis Panel -includes genotyping for KRAS, NRAS, and BRAF mutations
All newly diagnosed gastrointestinal tract (luminal) adenocarcinomas (gastric, esophageal, small bowel, colon and rectum) As per NCCN guidelines 2022	• Immunohistochemical (IHC) protein studies for MSH2, MSH6, MLH1, PMS2 Based on MMR results reflex to additional testing as per current CAP protocol

Anatomic Pathology – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Gastric (stomach) gastrointestinal stromal tumors (GISTs) with epithelioid morphology As per NCCN guidelines 2022	• SHDB immunohistochemical stain
GYN (Gynecological)	
All newly diagnosed or previously untested Adult Granulosa Cell Tumors, Serous Borderline Tumors, and Low-Grade Serous Carcinomas	IHC for Estrogen and Progesterone receptors
GYN sentinel lymph nodes which show no evidence of metastasis on initial H&E levels (applies to all GYN sentinel lymph nodes, including, but not limited to, those removed for endometrial, vulvar, and cervical carcinomas).	Cytokeratin AE1/AE3 (to be performed on all bocks of all nodes deemed negative for metastasis following initial review of H&E sections).
All newly diagnosed patients with endometrial cancer, including cases of recurrence when no IHC was previously performed	• Immunohistochemical (IHC) protein studies for MSH2, MSH6, MLH1, PMS2 Based on MMR results reflex to additional testing as per current CAP protocol
All endometrial carcinomas, including carcinosarcoma, at time of hysterectomy if p53 not performed previously. May 2023	p53 by immunohistochemistry
All FIGO stage 1 and 2 (ie. Confined to uterus and cervix, see below highlighted) EXCEPT those that are • Stage 1a (no or <50% invasion) • AND grade 1/2 endometrioid adenocarcinoma • AND p53 normal with absent or minimal lymphovascular invasion May 2023	POLE molecular testing (an in-house molecular test)
All uterine serous carcinomas and carcinosarcomas As per NCCN Guidelines 2023	HER2 IHC with reflex to HER2 FISH for equivocal IHC
Head & Neck	
All newly diagnosed or previously untested oropharyngeal squamous cell carcinomas	p16 immunohistochemistry (surrogate marker for HPV)
Lung	
All resected non-small cell lung carcinomas (including squamous cell carcinoma) stages 1B-3B. EXCLUDES carcinoid and atypical carcinoid. As per NCCN guidelines 2022	Reflex to *EGFR* molecular testing
Stage 4 lung (non-small cell) adenocarcinomas and squamous cell carcinoma	If adenocarcinoma, then reflex to Molecular Lung Cancer Panel and PD-L1

Anatomic Pathology – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
	If squamous cell carcinoma, then reflex to PD-L1
Melanoma	
Metastatic melanoma Including cases with positive lymph nodes	BRAF V600E IHC - If IHC is negative reflex to *BRAF* molecular testing
Other	
Her2/neu immunohistochemistry equivocal (score 2+)	Her-2/neu (ERBB2) Amplification by FISH

Anatomical Pathology – Optional	
Initial Test & Result	**Optional Follow up Testing**
Primary and recurrent/metastatic Invasive Mammary Carcinoma (excisional biopsy / lumpectomy / mastectomy)	Immunohistochemical stains for estrogen, progesterone, and Her2
Ductal Carcinoma In Situ (DCIS)	Immunohistochemical stains for estrogen and progesterone

Chemistry Reflex Testing

Chemistry – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
HIV Quick Test (LAB175) performed at Corewell Health Reference Laboratory West	If Reactive, reflex to HIV 1/HIV 2 Ab Ag Diagnostic (Roche) to be performed at Corewell Health Reference Laboratory West.
HIV Quick Test (LAB175) ordered at Corewell Health Reference Laboratory West	The HIV Quick Test is cancelled and reordered as HIV 1/HIV 2 Ab Ag Diagnostic (Roche). *(The Alere HIV Quick Test is not available at the Corewell Health Reference Laboratory West)*
HIV 1/HIV 2 Ab Ag Diagnostic (Roche)	If Reactive, reflex to Geenius HIV 1/HIV 2 Antibody Confirmation
Reactive Hepatitis B surface antigen	HbsAg Confirmation test
Prostate Specific Antigen (PSA) Free Level	PSA total on all orders that do not already have a PSA ordered on the same specimen.
Reactive Syphilis IgG Antibody	RPR titer at Corewell Health. If RPR is negative, additional TP-PA testing will be performed by MDHHS
Random urine microalbumin	Urine creatinine
Thyroglobulin	Automatically cancel AntiTgAB request when ordered with srTg
Reactive Hepatitis C Virus Antibody	HCV RNA
Chemistry – Optional	
Initial Test & Result	**Optional Follow up Testing**
Lipid Panel do LDL Direct if Triglycerides >400 Triglyceride result > 400 mg/dL	LDL Direct
Preg Serum Quant Progesterone if HCG result > 5 mIU/mL	Progesterone level
PSA Sym FPSA if PSA result between 2.5 and 10.0 ng/mL	Free PSA
Thyroid Function Cascade TSH result above 5.0 mcU/mL **or** TSH result below 0.3 mcU/mL **or** TSH result below 0.1 mcU/mL and FT4 result below 1.6 ng/dL	FT4 and TPO if TSH is above 5.0 mcU/mL FT4 if TSH is below 0.3 mcU/mL • Free T3 if TSH is below 0.1 mcU/mL and FT4 is below 1.6 ng/dL
TSH, Free T4 if indicated TSH result above 5.0 mcU/mL **or** TSH result below 0.3 mcU/mL	Free T4

Coagulation Reflex Testing

Coagulation – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
aPTT with no endpoint detected or error code on the coagulation analyzer that cannot be resolved.	Unfractionated Heparin
Mixing Studies, aPTT, which does not correct	Lupus Anticoagulant Screen (LA1)
Mixing Studies, aPTT	Heparin Neutralization (to rule out anticoagulant: • If aPTT corrects to normal, then a Mixing Study is not indicated. • If aPTT remains elevated, then Unfractionated Heparin Level (anti-Xa assay) is ordered. If Unfractionated Heparin Level is greater than 1.0 U/mL, then aPTT Mixing Study is not indicated.
Mixing Studies, PT, which does not correct	Lupus Anticoagulant Screen (LA1)
Factor activity testing showing non-parallelism inhibitor type pattern on serial dilutions MEC Approved April 2022	Lupus Screen
Factor 8 Activity for patients on emicizumab (Hemlibra) recombinant factor 8 therapy	Chromogenic Factor 8 Activity
Heparin Dependent Antibody (HIT) Positive or Borderline	Serotonin Release Assay (SRA)
Lupus Screen LA1 elevated	Perform LA2 Perform PT and aPTT • If PT is elevated ≥ 4 seconds above normal range, perform PT mixing study • If aPTT is elevated ≥ 6 seconds above normal range, perform aPTT mixing study Pathologist interpretation
Platelet Aggregation Studies	Platelet Count and hematocrit
Platelet Function Assay (PFA 100) with Collagen/Epinephrine cartridge results greater than 180 seconds.	Collagen/ADP test
Platelet Function Assay (PFA 100)	Platelet Count and hematocrit

Cytogenetics Reflex Testing

Cytogenetics - Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Bone Marrow samples with clinical indications for possible need to perform FISH Multiple Myeloma Panel	Sort CD138 to purify (concentrate) sample and hold for possible FISH Multiple Myeloma Panel
Multiple Myeloma Panel: If positive for IGH rearrangement Updated by Lab February 2024	Add t(11;14) IGH/CCND1 If negative for t(11;14) IGH/CCND1 add t(4:14) IGH/FGFR3 and t(14;16) IGH/MAF
DLBCL Panel: If positive for MYC rearrangement ONLY February 2024	Add t(8;14) IGH/MYC/CEP8
DLBCL Panel: If positive for BCL2 with or without BCL6 rearrangement and without MYC rearrangement February 2024	Add t(14;18) IGH/BCL2 dual fusion
Chromosome Analysis Hematologic or Neoplastic Study MEC Approved October 2022	Chromosomal Microarray – Oncology (aCGH-Hematologic)
Constitutional chromosome analysis, mosaic orders WITHOUT indications of Turner Syndrome, short stature, amenorrhea, or any indication associated with an increased risk of mosaicism February 2024	Routine constitutional chromosome analysis will be ordered in place of the mosaic order
Chromosome studies with an indication of Turner Syndrome, short stature, amenorrhea, or any indication with possible mosaicism Previously approved- added 2/2023	PB Mosaic (30 cell analysis)
Additional cell lines in chromosome study Previously approved- added 2/2023	Additional karyotype will be created to represent each addition cell line identified
Abnormal or ambiguous microarray results Previously approved- added 2/2023	May be confirmed by cytogenetic chromosome analysis or fluorescence in situ hybridization (FISH) analysis as appropriate, based on specific abnormality, size and location of region identified
Newborn fluorescence in situ hybridization (FISH studies Previously approved- added 2/2023	Cytogenetic chromosome analysis as appropriate with abnormal results on interphase FISH testing to fully characterize the abnormality identified

Cytology Reflex Testing

Cytology - Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Pap test and HPV	Reflex Information Is HPV Requested? a. If NO HPV testing is desired, select NO and only the pap test will be ordered. b. If YES, HPV testing is desired, select one of two options: i. CO-TESTING (30-64 y/o) 1. If Co-testing is selected, the HPV test will be ordered and performed regardless of the pap test final diagnosis. 2. Note: Co-testing is recommended for patients age 30-64. ii. HPV REFLEX (see link below for criteria) 1. If reflex is selected the HPV test will only be performed in the following scenarios: a. The pap test final diagnosis is NIL and the patient is between ages 30-64. b. The pap test final diagnosis is ASCUS and the patient is between ages 21-64. c. The pap test final diagnosis is LSIL and the patient is between ages 25-64 and is not pregnant. c. The HPV Genotype test will automatically reflex for all patients between the ages of 30-64 with a NIL pap test diagnosis and a positive HPV test diagnosis. 1. Note: Add on HPV and HPV Genotype tests can be added up to 4 weeks from the collection date
Thyroid FNA resulting in diagnosis of AUS (Atypia of undetermined significance) and SFN (Suspicious for follicular neoplasm); Indeterminate Bethesda categories (when no concurrent malignancy is present) As per NCCN guidelines- added 2/2023	Afirma Genomic Sequencing Classifier (GSC) and Malignancy Classifiers (BRAF, MTC, RET/PTC1 and RET/PTC3); Veracyte

Cytology– Optional	
Initial Test and Result	**Optional Follow up Testing**
Cervical Cytology with ASCUS, ASC-H OR LSIL	HPV-high risk
Cervical Cytology with ASCUS or AGUS	HPV
Cervical Cytology with NIL, ASCUS or AGUS	HPV

Flow Cytometry Reflex Testing

Flow Cytometry – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Diagnostic sample of B-lymphoblastic leukemia (B-ALL) and B-cell non-Hodgkin lymphoma with anti CD-19 therapy	Flow cytometry Blinatumomab tube (anti-CD19 therapy tubes)
Flow cytometry testing requiring CBC w diff for quantitation of flow cytometry results (i.e. SCID, ALPS, lymph subsets, CD20, etc)	1. CBC w diff on all orders that do not already have a CBC w diff ordered on patient on the same date and specimen is less than 10 hours old. 2. And Flow cytometry is unable to get WBC and automated differential.
Leukemia/Lymphoma/Myeloma and/or Non-Hodgkin lymphoma panels by flow cytometry: if indicated, reflex testing may be added to further characterize possible abnormal cell populations identified by the screening panel. These panels are reviewed continuously in multidisciplinary conferences and by the flow cytometry laboratory and hematopathologists.	The following add on panels may be employed after initial testing, as needed and appropriate, to further evaluate any possible abnormal population of cells. B lymphoblastic leukemia (B-ALL) panel T lymphoblastic leukemia (T-ALL) panel Chronic lymphocytic leukemia (CLL) panel Hairy cell leukemia (HCL) panel Extended B-cell tube panel Extended T-cell tube panel NK cell or LGL panel CD10 positive B-cell panel CD5 positive B-cell panel Acute myeloid leukemia (AML) panel Extended myeloid or monocytic panel Plasma cell panel Mast cell panel
Flow Cytometry – Optional	
Initial Test and Result	**Optional Follow up Testing**
Fetal Cells by Flow Cytometry → If ordered STAT and received in lab outside of flow cytometry testing hours (after 3:30 Mon-Fri or after 10:00am Sat or Sun)	Fetal Hemoglobin by Kleihauer Betke performed in place of flow cytometry
Leukemia or Non-Hodgkin Lymphoma Panel by Flow Cytometry → Cell population is diagnostic of circulating leukemia/lymphoma/myeloma, and patients under age of 80 with new diagnosis	FISH testing

Hematology Reflex Testing

Hematology – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
CBC w/ diff - will reflex to CBC w/out diff "if" the WBC is less than or equal to 0.4. Updated by Lab due to OEE March 2024	CBC w/out differential
Cerebral Spinal Fluid (CSF) RBC Cell Count greater than or equal to 400 cells in tube 3 Update Approved by MEC May 2022	Additional count of tube 1
Cerebral Spinal Fluid (CSF) WBC Cell Count greater than 0, in tube 3	Manual differential
Mononucleosis Screen, Epstein Barr (EBV) IgM if Negative: If Mononucleosis Screen is Negative	Epstein Barr (EBV) VCA IgM Acute Antibody
Malaria Rapid Screen 1. If presumptive positive for malaria antigens 2. If presumptive negative for malaria antigens	1. Parasitemia Level; Malaria speciation confirmation by thin/thick smear microscopy evaluation 2. Negative result confirmed by thin/thick smear microscopy evaluation. If smear is positive, then reflex to Parasitemia Level
Pathologist Review If review of peripheral blood smear is ordered without required accompanying CBC with differential, and if the specimen is within 10 hours of collection.	Complete Blood Count (CBC) with Differential
Platelet Count less than 100,000/µL Updated November 2021	Immature platelet fraction (IPF)
Hematology – Optional	
Initial Test and Result	**Optional Follow up Testing**
CBC order → CBC specimens that fulfill criteria listed in Pathologist Review	Pathologist review
CBC w/ Diff → CBC specimens that fulfill criteria listed in Pathologist Review	Pathologist Review
CBC w/ Diff → WBC less than 3.0 or greater than 18.0 HGB less than 8.0 or greater than 18.0 MCV less than 75.0 or greater than 110.0 (updated 04/2021) Absolute neut count less than 1.50 or greater than 9.00 Absolute lymph count less than 0.39 or greater than 4.50 Absolute mono count greater than 1.50 Absolute eos count greater than 1.00 Absolute bas count greater than 0.20 Abnormal instrument flags suggesting abnormality	Manual WBC differential
Cell Ct only BFL order → Body fluid specimens that fulfill criteria listed in Pathologist Review	Pathologist review

Hematopathology Reflex Testing

Hematopathology – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Acute myeloid leukemia **and myeloid neoplasms (includes MDS, MDS/MPN, and PMF—not CML, ET or P vera**): new diagnosis, **patient of any age** (Bone Marrow or Whole Blood)	Heme Molecular Sequence Analysis
All newly diagnosed patients with B-Cell Lymphomas with features concerning possible lymphoplasmacytic, unless otherwise specified by physician	• MYD88 L265P mutation testing on bone marrow aspirate
Diffuse large B-cell lymphoma: new diagnosis, **patient of any age**	DLBCL panel by IHC (CD3, CD20, CD5, CD10, BCL-1, Ki-67, EBERish, BCL-2, BCL-6, MUM1, MYC, CD30, and CD45), FISH for high grade B-cell lymphoma (double hit BCL-2, BCL-6, MYC, with t(8;14) reflex)
New diagnosis of neoplastic hematopoietic population by leukemia/lymphoma/myeloma flow cytometry panel **patient of any age**	FISH testing as appropriate (use especially for new diagnosis of CLL in peripheral blood)
Bone marrow or blood EDTA samples (Philadelphia positive B-ALL and CML)	RNA extract and hold

Immunochemistry Reflex Testing

Immunochemistry – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
IFA AntiNuclear Antibody (ANA) Hep-2 Substrate with Reflex positive	AntiNuclear Antibody (ANA) Titer and Pattern
Celiac Disease Cascade Transglutaminase (TTG) IgA antibody and total IgA performed Updated February 2024	• Normal total IgA, weak positive TTG IgA (15-30U/mL): reflex Endomysial IgA • Low total IgA, negative TTG IgA (≤6.9U/mL): reflex TTG IgG, Gliadin IgG, and Gliadin IgA • Low total IgA, positive TTG IgA (≥10.1U/mL): reflex TTG IgG, Gliadin IgG, and Gliadin IgA • Low total IgA, weak positive TTG IgA (15-30 U/mL): reflex TTG IgG, Gliadin IgG, Gliadin IgA, and Endomysial IgA
Hemoglobin (Hgb) A2 result is greater than 10%	Capillarys Hemoglobin Electrophoresis (to confirm Hgb E)
Hemoglobin Fractionation that identifies new Hemoglobin S	Sickle Cell Screen
Hemoglobin Fractionation	CBC on all orders for Hemoglobin Fractionation that do not already have a CBC ordered in the past 30 days.
Patient is less than 6 months of age and has suspected Hgb S by the Hgb fractionation test	Capillarys Hemoglobin Electrophoresis
Patient is suspected of having Hgb C by the Hgb fractionation test	Capillarys Hemoglobin Electrophoresis
Positive Cryoglobulin test	Positive Cryoglobulins which have not had an identification in the past 2 months will have the Reflex Cryoglobulin Interpretation ordered.
Positive Lyme Disease Screen	Western Blot
Rapid Plasma Reagin (RPR) test for syphilis	SYPHILIS IgG SCREEN will be performed instead of the RPR.
Random Urine Protein Electrophoresis IFE if indicated	For order questions of Monitoring or General screen: reflex to urine immunofixation if abnormal protein electrophoresis. For order questions of AL amyloid: always reflex to urine immunofixation.
Serum Protein Electrophoresis IFE if indicated	For order questions of Monitoring or General screen: reflex to serum immunofixation if abnormal protein electrophoresis. For order questions of AL amyloid and neuropathy: always reflex to serum immunofixation.
24-hour Urine Protein Electrophoresis IFE if indicated	For order questions of Monitoring or General screen: reflex to urine immunofixation if abnormal protein electrophoresis. For order questions of AL amyloid: always reflex to urine immunofixation.
Immunochemistry – Optional	
Initial Test and Result	**Optional Follow Up Testing**
ANA screen order →	ANA Hep2 (IFA) if positive reflex to titer. If titer is equal or greater than 1:160 reflex to Anti-dsDNA,

If positive ANA	anti-Sm, anti-RNP, anti-SSA, anti-SSB, anti Scl70, anti-centromere and anti-Jo1
Peanut IgE reflex order → Peanut IgE => 0.35 kU/L Updated February 2024	Peanut component allergen panel (Peanut Ara h 1 IgE, Peanut Ara h 2 IgE, Peanut Ara h 3 IgE, Peanut Ara h 6 IgE, Peanut Ara h 8 IgE, and Peanut Ara h 9 IgE)
Egg IgE reflex order → Egg white IgE =>0.35 kU/L Updated February 2024	Egg component allergen Panel (Ovomucoid IgE and Ovalbumin IgE)
Milk IgE reflex order → Milk (cow) =>0.35 kU/L Updated February 2024	Milk component allergen Panel (Casein IgE, Alpha-Lactalbumin IgE, and Beta-lactoglobulin IgE)

Microbiology Reflex Testing

Microbiology – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Anaerobic Culture	Aerobic culture on all orders that do not already have an aerobic culture ordered on the same specimen.
Blood Culture; if positive for growth of bacteria or yeast	• Organism identification will be performed if growth occurs any bottle. • Antimicrobial susceptibility testing will be performed depending on organism identification as per protocol.
Body Fluid culture greater than 1mL sample with only aerobic culture	Add anaerobic culture
Cryptococcus Antigen ordered on CSF	Fungal Culture order is added in addition to Cryptococcus Ag testing.
Clostridioides difficile by PCR	Clostridioides difficile PCR testing may only be ordered with approval from Infectious Disease. Other PCR orders are switched to C. difficile toxin EIA.
Culture from catheter tip or foreign bodies	Foreign body culture
Group A Streptococcus negative antigen test on pediatric patients	Add throat Culture
Positive culture for pathogen or organism with clinically significant concentration (bacteria or yeast)	Susceptibility and typing as necessary.
Positive Group B Strep, Penicillin allergy, PCR	Susceptibility testing.
Tissue Specimens ordered as a Body Fluid Culture	Cancel and Order as a Tissue Culture
Body Fluid Specimens ordered as a Tissue Culture	Cancel and Order as a Body Fluid Culture
HSV viral culture from cutaneous and mucocutaneous lesions	Cancel and change to HSV PCR order
Viral Cultures from swab specimens 1. Dermal Swabs 2. Genital Swabs Approved by MEC March 2022	PCR 1. Dermal Swab - HSV PCR and VZV PCR 2. Genital Swab - HSV PCR

Molecular Diagnostics Reflex Testing

Molecular Diagnostics – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Myeloproliferative Neoplasms (MPN) 1. JAK2 V617F ordered without prior 12-month BCR-ABL 2. JAK2 V617F mutation negative with BCR-ABL negative within past 12 months.	1. BCR-ABL must be performed first if Negative then JAK2 V617F performed 2. 2.Then MPN Expanded Panel
Specimens in Abbott Multi Collect tube ordered as Aptima specimens. Updated March 2024	Cancel Aptima test and reorder corresponding Abbott test for Chlamydia PCR, Gonococcus PCR, Trichomonas PCR, Mycoplasma Genitalium PCR, STI Panel (Alinity)
Specimens in Aptima collection tube ordered as Abbott Multi Collect tube specimens. Updated March 2024	Cancel Abbott test and reorder corresponding Aptima test for Chlamydia NAAT, Gonococcus NAAT, or Trichomonas NAAT, Mycoplasma Genitalium NAAT, Aptima STI Panel
Female urine specimens with Trichomonas Antigen testing ordered. November 2022	Cancel Trichomonas Antigen order and reorder as corresponding Trichomonas PCR order.
Specimens in Thinprep vial ordered as Abbott Multi Collect tube specimen. March 2024	Cancel Abbott test and reorder corresponding Aptima test for Chlamydia NAAT, Gonococcus NAAT, or Trichomonas NAAT, Mycoplasma Genitalium NAAT, Aptima STI Panel
Male urine specimen collected in Abbott Multi Collect tube or Aptima tube and ordered as Trichomonas Antigen March 2024	Cancel Trichomonas Antigen order and reorder as corresponding Trichomonas PCR order.

Referrals Reflex Testing

Referrals – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Positive Gamma HydroxyButyrate (GHB)	GC/MS Confirmation (Mayo)
Blastomyces Antibody by EIA, Serum equivocal or Positive	Blastomyces Antibody by Immunodiffusion

Toxicology Reflex Testing

Toxicology – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
For obstetric inpatients (Mothers and their babies): Positive Amphetamine, Cannabinoids, Ethanol, Methadone, opiates, Oxycodone or cocaine on a Drug of Abuse screen. For OB 330 Residency: any positive analytes on a Drug of Abuse screen.	LC/MS Confirmation
Positive opiates on Comprehensive Drug Screens	LC/MS Confirmation
Lead Screen, Filter Paper order with whole blood sample. June 2023	Change order to Lead, Blood Level to match provided sample.
Lead, Blood Level order with filter paper sample collected. June 2023	Change order to Lead Screen, Filter Paper to match provided sample.

Transfusion Medicine/Blood Bank Reflex Testing

Transfusion Medicine – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
Antibody Screens	ABO/RH
Antibody Titer	ABO/Rh and Antibody Screen
All patients that are identified with hemoglobinopathy including: • hgSS • hgSC • beta thalassemia And have not been transfused in the last 3 months.	Serological C, E, and K antigen typing
NICU patients with a cord blood workup	Antibody Screen
Positive Antibody Screen, or a positive Direct Antiglobulin Test (DAT) on inpatients, outpatients, and surgical patients	Relevant studies as needed including antibody identification, antigen typing, direct antiglobulin test, elution and absorption. In addition, packed blood cells will be antigen typed and crossmatched.
Positive prenatal Profile Type & Antibody Screen	Antibody identification with titer if identified antibody is clinically significant
Women of childbearing age identified as RHD variants or "weak D phenotypes" via serological testing with no previous RHD genotyping on file.	Molecular RHD Genotyping
Type & Screen (T&S) on a patient with autologous or directed units	Crossmatch of the units
Type & Screen (T&S) on a pre-op patient with an antibody	Crossmatch of two antigen negative units
Patients with difficult antibody situation (e.g., red cell autoantibodies, multiple red cell antibodies or atypical serologic difficulties due to medication, rare antisera or broad serologic reactivity)	Testing for red cell genotyping (molecular testing) to further determine patient management, as deemed necessary by the Blood Bank physician/pathologist. For more details, please see original MEC from 8/2021
Known Sickle cell disease or thalassemia patient that is requiring transfusion and has not had a prior Red Cell Genotyping Panel May 2024	Red Cell Genotyping Panel. Lab Referrals Misc 848

Urinalysis Reflex Testing

Urinalysis – Mandatory	
Initial Test and Result	**Confirmation Testing/Additional Workup**
UA or UA culture if with inadequate volume for microscopic exam	Urine Dipstick (U dip)
Urinalysis – Optional	
Initial Test and Result	**Optional Follow Up Testing**
If urinalysis (UA) with two or more of the following abnormal findings, provided there are less than 10 squamous epithelial cells observed per high power field: -Greater than or equal to 10 WBC -Positive leukocyte esterase -Positive nitrite OR if specimen is -Grossly bloody	Urine Culture
If volume is inadequate for microscopic exam and Urine Dipstick (U dip) with one or more of the following abnormal findings: -Positive leukocyte esterase -Positive nitrite	Urine Culture