**Anatomic Pathology**

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| **TEST NAME** | **RESULT** | **REFLEX TEST / ACTION** |
| BIOPSY TISSUE | Glioblastoma | MGMT GENE METHYLATION ASSAY [LAB04646] |
| BIOPSY TISSUE | Invasive breast carcinoma | ESTROEGEN RECEPTOR IHC [LAB13681]  PROGESTERONE RECEPTOR IHC  Ki67 PROLIFERATIVE INDEX IHC  HER2 IHC  *If IHC equivocal (2+), reflex to Her2 FISH [LAB11847]* |
| BIOPSY TISSUE | Ductal carcinoma in situ (DCIS) | ESTROGEN RECEPTOR IHC [LAB08904]  PROGESTERONE RECEPTOR IHC |
| BIOPSY TISSUE | Colorectal adenocarcinoma | MISMATCH REPAIR IHC [LAB00592]  *If IHC MLH1/PMS2 loss, reflex to BRAF Codon 600 Mutation Detection with Reflex to MLH1 Promoter [LAB10058]* |
| BIOPSY TISSUE | Endometrial adenocarcinoma | MISMATCH REPAIR IHC [LAB00592]  *If IHC MLH1/PMS2 loss, reflex to MLH1 Promoter Methylation [LAB10055]* |
| BIOPSY TISSUE | Endometrial serous carcinoma resections and recurrences | HER2 FISH [LAB11847] |
| BIOPSY TISSUE | Gastric/GEJ adenocarcinoma | HER2 IHC [LAB05327]  *If IHC equivocal (2+), reflex to HER2 FISH (ARUP)* |
| BIOPSY TISSUE | Large B cell lymphoma | HIT LYMPHOMA FISH PANEL [LAB10891] |
| BONE MARROW BIOPSY |  | FLOW CYTOMETRY LEUKEMIA+LYMPHOMA PANEL BM/TISSUE [LAB02971]  *Ordered at the discretion of the reviewing pathologist to establish marrow diagnosis* |
| PAP THINPREP REFLEX HPV (LAB12100) | Age <30y   * Atypical squamous cells of undetermined significance (ASC-US). * Atypical glandular cells.   Age 30-65y   * Negative for intraepithelial lesion or malignancy (NILM). * Atypical Squamous Cells of Undetermined Significance (ASC-US) * Low-grade Squamous Intraepithelial Lesion (LSIL) * Atypical Glandular Cells   Age >65y   * Atypical Squamous Cells of Undetermined Significance (ASC-US) * Low-grade Squamous Intraepithelial Lesion (LSIL) * Atypical Glandular Cells | HPV PANEL [LAB00809]  HPV HIGH RISK 16/18 GENOTYPE BY NAA (WI) [LAB12575] |
| PAP THINPREP REFLEX HPV (LAB12100)  PAP THINPREP (LAB12099) | * Epithelial cell abnormality. * Cellular changes suggestive of Herpes Virus. * Reactive/reparative cellular changes noted. | CYTOPATHOLOGIST REVIEW [CPT 88141] |

**Chemistry**

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| **TEST NAME** | **RESULT** | **REFLEX TEST / ACTION** |
| COMMUNITY EXPOSURE PANEL EXPOSED | Reactive results:  HIV P24 AG + HIV-1/HIV-2  HCV  HEPATITIS B SURFACE AB  HEPATITIS B SURFACE AG | HIV 1 HIV 2 AB DIFFERENTIATION [LAB00750]  HEPATITIS C RNA QUANTITATIVE [LAB08315]  HEPATITIS B CORE AB  [LAB01486]  HEPATITIS B SURFACE ANTIGEN CONFIRMATION [LAB00077] |
| COMMUNITY EXPOSURE PANEL SOURCE | Reactive results:  HIV P24 AG + HIV-1/HIV-2  HEPATITIS B SURFACE AG | HIV 1 HIV 2 AB DIFFERENTIATION [LAB00750]  HEPATITIS B SURFACE ANTIGEN CONFIRMATION [LAB00077] |
| EXPOSURE PANEL EMPLOYEE | Reactive results:  HIV P24 AG + HIV-1/HIV-2 | HIV 1 HIV 2 AB DIFFERENTIATION [LAB00750] |
| EXPOSURE PANEL EXPOSED | Reactive results:  HIV P24 AG + HIV-1/HIV-2  HCV  HEPATITIS B SURFACE AB  HEPATITIS B SURFACE AG | HIV 1 HIV 2 AB DIFFERENTIATION [LAB00750]  HEPATITIS C RNA QUANTITATIVE [LAB08315]  HEPATITIS B CORE AB  [LAB01486]  HEPATITIS B SURFACE ANTIGEN CONFIRMATION [LAB00077] |
| EXPOSURE PANEL SOURCE | Reactive results:  HIV P24 AG + HIV-1/HIV-2  HEPATITIS B SURFACE AG | HIV 1 HIV 2 AB DIFFERENTIATION [LAB00750]  HEPATITIS B SURFACE ANTIGEN CONFIRMATION [LAB00077] |
| T4 FREE | Test results >2.8 ng/dL | THYROXINE, FREE (FREE T4) [ARUP 0070138] |
| HEPATITIS B SURFACE AG | Reactive | HEPATITIS B SURFACE ANTIGEN CONFIRMATION [LAB00077] |
| HEPATITIS C ANTIBODY | Reactive *or* Equivocal | HEPATITIS C RNA QUANTITATIVE [LAB08315] |
| HEPATITIS SCREEN ACUTE | HBSAG = Reactive  HCV = Reactive | HEPATITIS B SURFACE ANTIGEN CONFIRMATION [LAB00077]  HEPATITIS C RNA QUANTITATIVE [LAB08315] |
| HIV-1 HIV-2 ANTIBODY + HIV P24 AG PANEL | Reactive | HIV 1 HIV 2 AB DIFFERENTIATION [LAB00750] |
| LACTIC ACID BLOOD REFLEX TO REPEAT | > 2 mmol/L | LACTIC ACID REPEAT REFLEX [LAB11162]  *Repeat order (up to 2 times)* |
| LYME DISEASE ANTIBODY | Positive *or* Equivocal | LYME DISEASE WESTERN BLOT PANEL [LAB08457] |
| THYROID SCREEN | < 0.35 *or* > 4.95 uIU/mL | T4 FREE [LAB01147] |
| VITAMIN B12 REFLEX | <150 pg/mL  150-400 pg/mL | INTRINSIC FACTOR BLOCKING ANTIBODY [ARUP 0070210]  METHYLMALONIC ACID (MMA) [LAB06897] |

**Hematology / Coagulation**

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| **TEST NAME** | **RESULT** | **REFLEX TEST / ACTION** |
| BLOOD PARASITES | Blood parasites seen  Blood flagellates seen  Microfilaria seen | MALARIA SMEAR [2170206] |
| Cytoplasmic inclusions seen | EHRLICHIA + ANAPLASMA PCR [LAB07438] |
| CBC WITHOUT DIFF  CBC WITH DIFF  CBC WITH ABSOLUTE NEUTROPHIL COUNT | Pathology review criteria:   * WBC: < 1.0 x 10^3/uL OR > 40.0 x 10^3/uL * Platelet: < 50 x 10^3/uL OR > 1,000 x 10^3/uL * Schistocytes: Moderate (2+) or greater * Sickle cells: None previously reported/new diagnosis * Howell-Jolly bodies: Moderate or Many (unless patient has had splenectomy) * Suspected blood parasites: Any * Abnormal lymphoid cells: > 5% (if undiagnosed) * Reactive lymphocytes: > 10% (if mononucleosis screening test is negative) * Metamyelocytes and myelocytes: > 10% * Lymphocytes Absolute: > 5.0 x 10^3/uL (adults) and > 8.0 x 10^3/uL (< 12 years old) * Monocytes: > 3.0 x 10^3/uL (absolute) or > 30% (adults) * Eosinophils: > 2.0 x 10^3/uL (absolute) or > 20% * Basophils: > 0.5 x 10^3/uL or > 5% * Promyelocytes: > 1% * Blasts: Any * Plasma cells: > 1% * Hypersegmentation of neutrophils: > 5% with 6 or more lobes * Hyposegmentation of neutrophils: > 5% * Unidentified cells: Any * NRBCs: > 10% on an adult | PATHOLOGY SLIDE REVIEW  *Note: Normally confirmed internally by pathologist at no charge to patient. If findings are determined to be potentially clinically actionable, a formal pathology smear report may be issued (CPT 85060)* |

**Microbiology / Molecular**

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| **TEST NAME** | **RESULT** | **REFLEX TEST / ACTION** |
| CULTURE (ALL) | Growth of pathogen | Organism ID / Susceptibility |
| STREP A SCREEN DIRECT | Negative and patient < 18 years old | CULTURE THROAT [LAB04107] |
| C. DIFFICILE GDH ANTIGEN TOXIN A + B | Indeterminate | C. DIFFICILE PCR [LAB04280] |
| CULTURE BLOOD | Bacterial or yeast growth | Organism ID / Susceptibility  Blood Culture ID Panel [LAB13534] |
| CRYPTOCOCCUS ANTIGEN CSF | Positive | CRYPTOCOCCUS ANTIGEN CSF TITER [LAB03310] CULTURE FUNGUS OTHER [LAB12162] |
| CRYPTOCOCCUS ANTIGEN SERUM | Positive | CRYPTOCOCCUS ANTIGEN TITER [LAB04130] CULTURE FUNGUS OTHER [LAB12162] |
| MENINGITIS/ENCEPHALITIS PANEL CSF | Positive for *Cryptococcus neoformans/gattii* | CRYPTOCOCCUS ANTIGEN CSF TITER [LAB03310] |
| GROUP B STREP DNA | Positive and penicillin allergy indicated | Susceptibility Group B Strep Reflex [LAB90851] |

**Transfusion Medicine**

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| **TEST NAME** | **RESULT** | **REFLEX TEST / ACTION** |
| BLOOD TYPE | The Lab adds a no-charge Blood Type Verification to transfusion candidates if they have not had 2 independent blood types performed at an SSM hospital. | BLOOD TYPE VERIFICATION [LAB03166] |
| TYPE AND SCREEN  ANTIBODY SCREEN INDIRECT | Positive Antibody screen | ANTIBODY IDENTIFICATION [LAB03003]  *Note: All testing needed to complete the antibody identification will be reflexed and performed which may include:*   * *Adsorptions if panreactive* * *DTT treatment if patient is taking a DARA drug* * *Enzyme pretreatments if weak reactions* * *Patient antigen typing if 1st time identified and no transfusion within last 3 months* * *Poly DAT if autocontrol is positive* |
| FETAL SCREEN | Positive *or* Infant type is unknown | KLEIHAUER BETKE STAIN  [LAB03186] |
| DIRECT COOMBS DAT | Positive polyspecific DAT  Positive IgG DAT | IgG DAT and C3 DAT  ELUTION [LAB03758] |
| PRENATAL TITER | Antibody screening will be automatically added on and performed. | ANTIBODY SCREEN [LAB03001] |

**Urinalysis**

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| **TEST NAME** | **RESULT** | **REFLEX TEST / ACTION** |
| URINALYSIS (ANY) REFLEX MICROSCOPIC | Micro exam if any criteria are met:   * Protein: 1+, 2+, 3+ * Blood: Trace, 1+, 2+, 3+ * Leukocytes: Trace, 1+, 2+, 3+ * Nitrites: Pos, No result due to interfering color | Urine Microscopic performed |
| URINALYSIS (ANY) REFLEX TO CULTURE | Culture if either criterion is met:   * WBC: Female >10   Male >5   * Nitrites: Positive | CULTURE URINE [LAB04047]  *Note: Organism ID / Susceptibility may be performed if pathogenic organism is present.* |