

King Hussein Cancer Center

Department of Pathology & Laboratory Medicine (DPLM)

DPLM Alphabetical Tests List & Collection Requirements

(IPPLAB-GEN.02/R11 Attach I/R4)

Issue Date August 1st, 2021

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King Hussein Cancer Center

Department of Pathology & Laboratory Medicine

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Chapter One: DPLM Directory

Office/Section	Cisco Phone Number
DPLM Chairman- Dr. Maher Sughayer	1551
Chairman Administrative Assistant	1432
Department Coordinators	1548-1250
Quality Management Office- Supervisor	1191
Quality Management Office	1194-6227
Microbiology Supervisor	1127
Anatomic Pathology Supervisor	1157
Immunochemistry Supervisor	3272
Diagnostic Immunology Section Head	1414
Hematology Supervisor	1705
Blood Bank Supervisor	1102
Phlebotomy Senior	1535
Microbiology	1547- 1706
Anatomic Pathology	1153
Immunochemistry	1345-1022-7443-7724-6220
Diagnostic Immunology	1744 - 1686
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DPLM Phlebotomy Services – Nizar Al-Naqeeb	1732 – 5063
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Floor)	

Chapter Two: Alphabetical Tests List & Collection Requirements

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
1.	17-BETA-ESTRADIOL (E2)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	State day of menstrual cycle. Steroid therapy may influence result.
2.	25 HYDROXY VITAMIN D3	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	$\begin{array}{l} deficiency \leq 20 \ ng/mL \\ Insufficient < 30 \ ng/mL \\ Normal \geq 30 \ ng/mL \end{array}$	Room Temperature
3.	17- HYDROXYPROGESTERONE	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: (5-30)days:0.7-2.5 ng/ml, Male(31-60)days:0.8-5.0 Female(31-60)days:0.5-2.3ng/ml, (3-14)years:0.07-1.7ng/ml, Female Follicular:0.2-1.3, Female Luteal:1.0-4.5ng/ml Female Postmenopausal: 0.2-0.9ng/ml	Room temperature Due to diurnal variation, sample collection time should be noted and standardized.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
4.	5-Hydroxyindole Acetic Acid (5- HIAA)	24hr urine collection	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: <15.0 mg/24hrs	On day 1, urinate into the toilet when you wake up in the morning. Collect all of your urine in a special container for the next 24 hours. On day 2, urinate into the container in the morning when you wake up Cap the container. Keep it in the refrigerator or a cool place during the collection period Label the container with your name, the date, and the time you complete the sample, and return it as instructed. Deliver the urine sample to the laboratory before 10am.
5.	5-NUCLEOTIDASE,SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	1 – 3 working days	< 10 IU/L	Glass tube
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6.	ACETAMINOPHEN (PARACETAMOL)	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	2 Days	Ref. Range :Therapeutic Level: 10-30 , Toxic Conc. : More Than 200ug/mL	Room temperature
7.	ACETONE, SCREEN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Negative	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
8.	Adjusted calcium	Calculated Test combined with Calcium & Albumin tests	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
9.	ACETYLCHOLINE RECEPTOR (MUSCL ACHR) BINDING AB	2 ml Serum	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature.
10.	ACID FAST BACILLUS CULTURE + AFB STAIN	 Tissue, skin, Tissue should be submitted in 2 to 3 mL sterile saline Blood: 3-5 Heparin tubes (green tip) Sterile Body fluids except CSF: ≥ 15 mL as much fluid as possible; Bone marrow: ≥ 10 mL sterile screw cap container Or 5 Heparin tubes (green tip) Lower respiratory tract (TRAP/Sputum/BAL) : ≥ 3 mL Urine: ≥ 40 ml CSF: 2-3 mL >2ml first morning sputum, not saliva in sterile container 	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	AFB Stain: 24 hours AFB Culture: 6- 8 Weeks If Negative	AFB stain: No acid-fast bacilli, observed. AFB Culture negative after 6 weeks of Incubation	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
11.	ACID FAST BACILLUS STAIN	See Acid Bacilli culture+ AFB stain	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	24 hours	AFB stain: No acid-fast bacilli, observed.	Room temperature
12.	ACTIVATED PARTIAL THROMBOPLASTIN TIME	Citrated blood "Blue Top"" fill to mark	Hematology 24 hours/day	4-8 Hours	28.6-38.1 sec Therapeutic range (72-103)	Room temperature
13.	ADENOVIRUS, IgG	2 ml Serum	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
14.	ADENOVIRUS, IgM	2 ml Serum	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
15.	ADENOVIRUS, STOOL	Fresh stool specimen in a clean container. Follow up on a previously positive antigen detection tests should be done not less than every 48 hours.	Microbiology 24 hours/day	2-4 Hours	Negative	Room temperature
16.	ADH(ANTI-DIURETIC HORMONE)	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	1-2 Weeks	Ref. Range : 1.1 - 4.5 pg./ml	Under ice Plasma Osmolality included.
17.	ALBUMIN, LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
18.	ALBUMIN,BODY FLUIDS	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Not Established See Portal (For interpretation) g/dl	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
19.	ALDOLASE LEVEL	Minimum 3 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-10 am	One Week	Adult: <7.6 U/L children: <16.3 U/L	Under ice Sample must be obtained at 8 am, it must be delivered to the Immunochemistry section before 10 am
20.	ALKALINE PHOSPHATASE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	130 – 335 U/L(1 - 15) years 47 – 230 U/L(16-21) years 37 - 130 U/L (22-64) years	Room Temperature
21.	ALKALINE PHOSPHATASE ISOENZYMES	3-5 ml Blood plain / Tube Red Top	Immunochemistry 8 am-10 am	One Week	Bone fraction :<15 U/L Liver fraction:<12.3 U/L	Patient should be fasting Room temperature
22.	ALANINE AMINOTRANSFERASE	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 24 hours/day	2-8 Hours	Not Applicable	Room temperature
23.	ALBUMIN, BODY FLUIDS	1-3 ml fluid	Immunochemistry 24 hours/day	8-24 Hours	Not Applicable	Room temperature
24.	ALBUMIN,SERUM LEVEL	3-5 ml Blood plain / Tube Red Top	Immunochemistry 24 hours/day	2-8 Hours	Not Applicable	Room temperature
25.	ALDOLASE, SERUM LEVEL	3-5 ml Blood plain / Tube Red Top	Immunochemistry 8 am-9 am	One Week	Not Applicable	Under ice Sample must be obtained at 8 am, it must be delivered to the Immunochemistry section before 10 am
26.	ALDOSTERONE	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	1-2 Weeks	Ref. Range: Standing: 40-310, Recombant: 10-160pg/mL	Under ice Sample must be obtained at 8 am, it must be delivered to the immunology Laboratory before 10 am, the patient must to be upright or lying down for a period of time 15-30 minutes, prior to sample collection.
27.	ALK (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
28.	ALKALINE PHOSPHATASE	3-5 ml Blood plain / Tube Red Top	Immunochemistry 24 hours/day	2-8 Hours	Not Applicable	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
29.	ALPHA-1-ANTITRYPSIN	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Adult: 90-200 mg/dl	Room temperature
30.	ALPHA-FETO PROTEIN , SERUM LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	$\leq 7.0\mathrm{ng/mL}$	Room Temperature
31.	ALT / ALANINE AMINOTRANSFERASE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	7.2 - 21.2 U/L (0 - 18) years 7.0 - 47 U/L (18 -99) Year	Room Temperature
32.	AMMONIA (NH3),PLASMA	EDTA blood tube "Lavender Top" fill to mark/ Under ice	Immunochemistry 24 hours/day	One Hours	< or =30 mcmol/L	Keep on ice
33.	AMYLASE IN 24HR URINE COLLECTION	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	3-26 U/24hr	Keep the container in a cool place (Refrigerator)
34.	AMYLASE LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	28-100 U/L	Room Temperature
35.	AMYLASE(URINE)	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
36.	AMYLASE,BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Drainage fluid:175-450 U/L Peritoneal fluid: <1100 U/L See Portal (For interpretation)	Room Temperature
37.	ANTI Insulin ANTIBODY	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Negative	Under ice 12 Hrs. fasting required. Sample must be collected at 8 am and sent to the Immunology Laboratory before 10 am.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
38.	ANTI HEPATITIS-A TOTAL Ab QUANTITATIVE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	≥1.20 COI Negative for HAV- specific antibodies ≥ 0.8 to < 1.2 COI Gray zone < 0.80 COI Positive for HAV- specific antibodies	Room Temperature
39.	ANAEROBIC SWABCULTURE	Aspirating abscess fluid with sterile syringe and needle and then injecting the aspirated material into anaerobic transport swab.	Microbiology 8 am- 5 pm	5-7 Days If Negative	- No growth after seven days incubation	Room temperature, send immediately
40.	ANAL BIOPSY / POLYP	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room temperature
41.	ANAL FISSURE / FISTULA	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room temperature
42.	ANDROSTENEDIONE(ASD), SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Male:0.7-3.6 ,Female:0.3-3.5 ng/ml	Under ice Sample must be obtained at 8 am; it must be delivered to the Immunology Laboratory before 10 am.
43.	ANGIOTENSIN CONVERTING ENZYME	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range : 8-52 U/L	Room temperature
44.	ANTIBODY ELUTION	EDTA blood tube "Lavender Top " fill to mark	Blood Bank 8 am- 5 pm	24 Hours	Not Applicable	Room temperature
45.	ANTIBODY IDENTIFICATION	Call Blood Bank Extension. 1710	Blood Bank 24 hours/day	8-24 Hours	Not Applicable	Room temperature
46.	ANTIBODIES TITER	EDTA blood tube "Lavender Top " fill to mark	Blood Bank 8 am- 5 pm	24 Hours	Not Applicable	Room temperature
47.	ANTIACETYLE CHOLINE RECEPTOR ANTIBODY	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Ref. Range: Titer: less than 1:10	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
48.	ANTI-CARDIOLIPIN AB, IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative: less than or equal 15 Positive: more than 15.0 GPL/mL	Room temperature
49.	ANTI-CARDIOLIPIN AB, IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	3-5 Working Days	Negative: less than or equal 15 Positive: more than 15.0 MPL/mL	Room temperature
50.	ANTI CYCLIC CITRULLINATED PEPTIDE	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative: less than 1.8 IU/L Borderline: more than or equal 1.8 Positive: more than or equal 2.0	Room temperature
51.	ANTI-DEOXYRIBONUCLEAR ANTIBODIES (Anti-DNA)	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
52.	ANTI ENDOMYSIAL ANTIBODY IgA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
53.	ANTI ENTAMOEBA HISTOLYTICA AB	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
54.	ANTI-GAD ANTIBODY	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Negative	Room Temperature
55.	ANTI GLIADIN ANTIBODY IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Normal: less than 12 U/ml Elevated: more than 12	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
56.	ANTI GLIADIN ANTIBODY, IgA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Normal: less than 12 U/ml Elevated: equal or more than 12	Room temperature
57.	ANTI-GLOMERULAR BASEMENT MEMBRANE ANTI BODY	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
58.	ANTI-INTRINSIC FACTOR ANTIBODYS	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative: less than 6 Positive: more than or equal 6	Room temperature
59.	ANTI ISLET CELLS ANTIBODY	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
60.	ANTI LIVER KIDNEY MICROSOMAL-1 ANTIBODY	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
61.	ANTI-MITOCHONDRIAL ANTIBODIES	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
62.	ANTI-NEURONAL NUCLEAR ANTIBODIES, SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
63.	ANTI NEUTROPHELIC CYTOPLASMIC ANTIBODY	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
64.	ANTI NUCLEAR ANTIBODYS	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Titer: less than 1:80	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
65.	ANTI OVARIAN ANTIBODIES, SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:20	Room temperature
66.	ANTI PARIETAL CELL ANTIBODIES	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:20	Room temperature
67.	ANTI-PHOSPHOLIPID ANTIBODIES, IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative: less than or equal 15 Positive: more than 15.0 UL/mL	Room temperature
68.	ANTI-PHOSPHOLIPID ANTIBODIES, IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative: less than or equal 15 Positive: more than 15.0 UL/mL	Room temperature
69.	ANTI-SACCHAROMYCES AB	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Ref. Range: Titer: less than 1:20	Room temperature
70.	ANTI-SKIN ANTIBODIES INDIRECT	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
71.	ANTI-SMOOTH MUSCLE ANTIBODIES	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:20	Room temperature
72.	ANTI STREPTOLYSIN O TITER	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
73.	ANTI THYROGLOBULIN ANTIBODIES	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	≤ 115 IU/mL	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
74.	Anti-SARS-CoV-2 Spike	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	< 0.80 U/mL Negative for anti SARS CoV 2 S ≥ 0.80 U/mL Positive for anti SARS CoV 2 S	Room Temperature
75.	ANTI-THROMBIN III ACTIVITY	SODIUM CITRATE TUBE "Blue Top" fill to mark	Immunochemistry 24 hours/day	2-8 Hours	80-120 %	Room Temperature
76.	ANTI THYROID MICROSOMAL ANTIBODYS	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:100	Room temperature
77.	ANTI-THYROID PEROXIDASE ANTIBODIES	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range : 0-5.61 IU/ml	Room temperature
78.	ANTI TISSUE TRANSGLUTAMINASE IGG&IGA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
79.	APPENDIX	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-3 Days	Not Applicable	Room temperature
80.	Arterial blood gas plus extended critical care profile	Minimum 0.5 ml HEPARINIZED SYRINGE – under ice	Immunochemistry 24 hours/day	One Hours	See Age -gender dependent ref. range.	Should arrive the lab ASAP No more than 30 mint
81.	AST/ASPARTATE AMINOTRANSFERASE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	8-48 U/L	Room Temperature
82.	ASPIRATE FLUID CULTURE (AEROBIC +ANAEROBIC+ GRAM STAIN)	 Volume: > 3 mL in sterile container Or Volume: 8-10 mL in Blood culture Aerobic bottles + 8-10 mL in Anaerobic bottle. 	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 Days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
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83.	BACTERIAL ISOLATE FOR ID AND SENS	Isolated organism on culture media- sealed and BIOHAZARD labeled	Microbiology 8 am- 4 pm	3-5 Days	Not Applicable	Room Temperature
84.	BETA-2-MICROGLOBULIN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
85.	BETA HUMAN CHORIONIC GONADOTROPIN (Beta-HCG)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
86.	BILE SECRETION CULTURE + GRAM STAIN	- Volume: > 3 mL in sterile container	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 Days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room temperature. Transport immediately
87.	BILIRUBIN DIRECT	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	0.01 - 0.3 mg/dl	Room Temperature
88.	BILIRUBIN TOTAL LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
89.	BILIRUBIN TOTAL,BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Not Established See Portal (For interpretation)	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
90.	BLADDER BIOPSY	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room temperature
91.	BLADDER: RADICAL CYSTECTOMY	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room temperature
92.	BLADDER TUMER TUR	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-3 Days	Not Applicable	Room temperature
93.	BLOOD CULTURE-HICKMAN- WHITE LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
94.	BLOOD CULTURE-HICKMAN- RED/BROWN LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
95.	BLOOD CULTURE-HICKMAN-BLUE LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
96.	BLOOD CULTURE-PICC- WHITE LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
97.	BLOOD CULTURE-PICC- RED/BROWN LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
98.	BLOOD CULTURE-CVP- RED/BROWN LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle.	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
99.	BLOOD CULTURE-CVP- WHITE LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
100	BLOOD CULTURE-CVP-BLUE LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle.	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	 Send to Microbiology lab after collection immediately Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
101	BLOOD CULTURE-DIALYSIS . CATH -BLUE LUMEN (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle and one anaerobic (red top)blood culture bottle.	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	 Send to Microbiology lab after collection immediately Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
102.	BLOOD CULTURE-PORT-A- CATH (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
103	BLOOD PERIPHERAL . CULTURE - Right(Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours	5-7 Days If Negative.	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	 Send to Microbiology lab after collection immediately Keep at room temperature,

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
104.	BLOOD PERIPHERAL CULTURE - Left (Aerobic + Anaerobic)	Volume: Blood fill volumes in each bottle: Optimal: 8-10 mL Minimum blood volumes in each bottle: Versa TREK: 1 - 5 ml BACTEC: 3 - 8 ml Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours/day	5-7 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	- Send to Microbiology lab after collection immediately - Keep at room temperature,
105.	BLOOD FILM	EDTA blood tube "Lavender Top" fill to mark	Hematology Working days only	8-24 Hours	Not Applicable	Room temperature
106.	BLOOD FILM FOR PARASITES	EDTA blood tube "Lavender Top" fill to mark	Hematology 8 am- 3 pm	8-24 Hours	Not Applicable	Room temperature
107.	BLOOD GROUP & Rh TYPE	2 ml or 4.5 ml EDTA blood tube "Lavender Top " fill to mark	Blood Bank 24 hours/day	8-24 Hours	Not Applicable	Room temperature
108.	BLOOD IRRADIATION	Call Blood Bank Extension. 1710	Blood Bank 24 hours/day	8-24 Hours	Not Applicable	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
109.	BLOOD UNIT, CROSSMATCH & DISPENSE	2 ml or 4.5 ml EDTA blood tube "Lavender Top " fill to mark or 3-5 ml Blood plain/ tube Red Top	Blood Bank 24 hours/day	8-24 Hours	Not Applicable	Room temperature
110.	BODY FLUID /WBC/RBC/DIFF	3 ml fluid	Hematology 8 am- 3 pm	8-24 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room temperature
111.	BODY FLUID/ SECRETION, ROUTINE CYTOLOGY	Sterile Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room temperature
112.	BONE BIOPSY	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-5 Days	Not Applicable	Room temperature
113.	BONE MARROW ASPIRATION	Collect in EDTA tube "Lavender Top Tube"	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature
114.	BONE MARROW ASPIRATE AND BIOPSY	Biopsy: Buffered Formalin Aspiration: EDTA Tube Peripheral Blood Sample	Pathology Sunday- Thursday 8:00am — 4:00pm	2-5 Days	Not Applicable	Room temperature
115.	BONE MARROW BIOPSY	Bone marrow biopsy (in buffer formalin)	Pathology 8 am-4 pm	2-3 Days	Not Applicable	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
116.	BONE MARROW CULTURE AND GRAM STAIN (Aerobic + Anaerobic+ Gram Stain)	Bone marrow aspirate collected in blood culture bottles. For BACTEC system: one aerobic (blue top)blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top) blood culture bottle. Send part of specimen in a sterile container for gram stain Volume: > 3 mL in sterile container	Microbiology 24 hours	Preliminary Gram stain: 2-4 Hours Culture: 1-3 Weeks If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room temperature
117.	BONE MARROW NEEDLE CORE BIOPSY, INCLUDING RETICULIN STAIN	Biopsy: Buffered Formalin Peripheral Blood Sample	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
118.	BRAF (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
119.	BRAIN TUMOR	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
120.	BREAST BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
121.	BREAST WITH AXILLARY CLEARANCE (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
122.	BREAST, REDUCTIVE (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
123.	BREAST,SIMPLE MASTECTOMY (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
124.	BREAST MASS WITH AXILLARY TAIL	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
125.	BRONCHIAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
126.	BRONCHO ALVEOLAR LAVAGE CULTURE + GRAM STAIN	- Volume: > 2 mL in sterile container	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 2-3 Days If No Pathogens	No Growth Normal Flora	Room temperature
127.	BRUCELLA ANTIBODIES	Minimum 2-3 ml Blood Plain " Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	1-3 Working Days	Negative	Room temperature
128.	BRUCELLA ANTIBODIES (2ME)	Minimum 2-3 ml Blood Plain " Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	1-3 Working Days	Negative	Room temperature
129.	BRUCELLA IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Days	Negative	Room temperature Draw sample during the first week of illness and then 3-4 weeks later.
130.	BRUCELLA IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Days	Negative	Room temperature Draw sample during the first week of illness and then 3-4 weeks later.
131.	BUCCAL/MOUTH BIOPSY/PALATE (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
			C			
132.	Calcium Adjusted panel (Calcium, Albumin and AdjCa)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Not Applicable	Room Temperature
133.	C-1 ESTERASE INHIBITOR	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	1 week	Ref. Range: 19.5-34.5 mg/dl	Freeze immediately. Cyclosporin-A treatment may inhibit the enzyme.
134.	CALCITONIN SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Days	Ref. Range: Male: less than 18.2, Female: less than 11.5 pg/ml	Fasting sample. Draw into ice-cooled plain tube. Avoid grossly haemolysed or grossly lipemic samples. Sample must be obtained at 8 am, it must be delivered to the immunology Laboratory before 10 am.
135.	CALCIUM, LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	9 - 10.5 mg/d1 (0 - 18) years 8.8 - 10.2 mg/d1 (18 -99) Year	Room Temperature
136.	CALCIUM SPOT URINE	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	Random Calcium/Creatinine Ratio: <0.20 mg/mg	Room Temperature
137.	CALCIUM,24HR URINE	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	100-300 mg/24hr	Keep the container in a cool place (Refrigerator)
138.	CANCER ANTIGEN 15- 3,SERUM LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	≤34.5 U/mL	Room Temperature
139.	CANCER ANTIGEN 125	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	≤ 35 U/mL	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
140.	CANCER ANTIGEN 19-9 SERUM LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<27.0 U/ml	Room Temperature
141.	C- ANTI NEOTROPHELIC CYTOPLASMIC AB	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Days	Ref. Range: Titer: less than 1:20	Room temperature
142.	C-MYC (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
143.	CARBAMAZEPINE (TEGRETOL)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic: 4.0-12.0 mcg/mL Toxic level: > or =12.0 mcg/mL	Room Temperature
144.	CARCINOEMBRYONIC ANTIGEN (CEA)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Smoker: ≤ 5.5 ng/mL Non-Smoker : ≤ 3.8 ng/mL	Room Temperature
145.	Catecholamine, Total, 24hr	24hr urine collection	Diagnostic Immunology Send out test /contact the laboratory	One week	10 – 270 μg/24hr collection	On day 1, urinate into the toilet when you wake up in the morning. Collect all of your urine in a special container for the next 24 hours. On day 2, urinate into the container in the morning when you wake up Cap the container. Keep it in the refrigerator or a cool place during the collection period Label the container with your name, the date, and the time you complete the sample, and return it as instructed. Deliver the urine sample to the laboratory before 10am.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
146.	cBase(Ecf)/SBE	Measured test listed in Both Arterial & Venous Blood Gas + Extended Critical Care Profiles	Immunochemistry 24 hours/day	One Hours	-2 to +2 mmol/L	Should arrive the lab ASAP No more than 30 mint.
147.	CHEMISTRY PROFILE-14	Minimum 3 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	See each test individually	Room Temperature
148.	CHEMISTRY PROFILE-20	Minimum 3 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	See each test individually	Room Temperature
149.	CATHETER TIP CULTURE	Catheter tip, collect in sterile container	Microbiology 8 am- 5 pm	2-3 Days If Negative	Not Applicable	Room temperature
150.	CERULOPLASMIN SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	3-5 Working Days	Male: 15-30 Female: 16-45	Room temperature
151.	CERVIX, CONE (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room temperature
152.	CERVIX, PUNCH, POLYP (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room temperature
153.	CERVICAL SWAB CULTURE+ GRAM STAIN	Cervical swab in transport media	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	2-3 Days If Negative	No Growth No Neisseria gonorrhea isolated	Room temperature - Two swabs should be sent to have sufficient specimen to perform both gram stain & culture
154.	CH50 (Complement Hemolytic Activity-50)	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	1-2 Weeks	Titer: 1:40 -1:80	Under ice
155.	CHLAMYDIA ANTIBODY IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
156.	CHLAMYDIA ANTIBODY IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
157.	COMPLEMENT-3	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Adult: 90-180 Child: 90-180 Less than 3 months: 60- 150 4-6 months: 70-180 mg/dl	Room temperature
158.	COMPLEMENT-4	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Adult: 10-40 mg/dl Child: 10-40 Less than 3 months: 7 - 30 4-6 months: 8- 30 mg/dl	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
159.	CORTISOL FREE 24HR URINE COLLECTION	24hr urine collection	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	7-10 a.m: 6.2-19.4 4-8 p.m: 2.3-12.3 μg/24hrs	Store in refrigerator .On day 1, urinate into the toilet when you get up in the morning. Afterwards, collect all urine in a special container for the next 24 hours. On day 2, urinate into the container when you get up in the morning. Cap the container. Keep it in the refrigerator or a cool place during the collection period. Label the container with your name, the date, the time of completion, and return it as instructed. Collection of the first morning urine, which is the most concentrated, may be advised. The health care provider may advise you to stop taking certain medicines that could interfere with the test. Sample must be delivered to the Immunology Laboratory before 10 am
160.	CHLORIDE LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	98.6 - 111 mmol/L(0 - 18) years 97 - 110 mmol/L (18 -99) Year	Room Temperature
161.	CHLORIDE SPOT URINE	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	32 – 290 mmol/L	Room Temperature
162.	CHLORIDE,24HR URINE	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	40-224 mmol/24 hours	Keep the container in a cool place (Refrigerator)
163.	CHLORIDE,BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Not Established See Portal (For interpretation)	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
164.	CHOLESTEROL,BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Not Established See Portal (For interpretation)	Room Temperature
165.	CHOLESTEROL LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Children: See Portal Adult: Desirable: <200 mg/dL Borderline high: 200-239 mg/dL High: > or =240 mg/dL	Room Temperature
166.	C-KIT (CD117)	Block or 10% neutral buffered formalin	Pathology 8 am-4 pm	1-2 Days	Not Applicable	Room temperature
167.	CLOSTRIDIUM DIFFICILE TOXIN A/B	Fresh stool specimen in a clean container. Follow up on a previously positive antigen detection tests should be done not less than every 48 hours.	Microbiology 24 hours	2-4 Hours	Negative	Room temperature
168.	COLON + LYMPH NODE DISSECTION (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
169.	COLON, MUCOSAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
170.	COLON, RIGHT HEMICOLOCTOMY (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
171.	COLON, SEGMENT (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
172.	COLD AGGLUTININS TITER	3-5 ml Blood Plain " Red Top Tube"	Blood Bank 8 am- 5 pm	24 Hours	Not Applicable	Room temperature
173.	COMPLETE BLOOD COUNT WITH DIFFERENTIAL	EDTA blood tube "Lavender Top" fill to mark	Hematology 8 am- 3 pm	24hr/7day	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room temperature
174.	CONCENTRATION PROROCEDUR-STOOL ANALYSI	Stool sample in a clean container	Microbiology 24 hours	12-24 Hours	No ova or parasite seen	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
175.	CONJUNCTIVAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
176.	CONSULTATION BONE MARROW ASPIRATION	Aspiration Slides, Peripheral Blood Sample & Report	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
177.	CONSULTATION BONE MARROW ASPIRATION & BIOPSY	Aspiration Slides , Peripheral Blood Sample Paraffin Block & Report	Pathology Sunday- Thursday 8:00am — 4:00pm	2-5 Days	Not Applicable	Room Temperature
178.	CONSULTATION BONE MARROW BIOPSY	PARAFFIN BLOCK, SLIDES &REPORT	Pathology Sunday- Thursday 8:00am — 4:00pm	2-5 Days	Not Applicable	Room Temperature
179.	CONSULTATION FINE NEEDLE ASPIRATION, DEEP MASS, ROUTINE	1-Slides 2-Blocks 3-Report	Pathology Sunday- Thursday 8:00am — 4:00pm	2-5 Days	Not Applicable	Room Temperature
180.	CONSULTATION FINE NEEDLE ASPIRATION, SUPERFICIAL MASS, ROUTINE	1-Slides 2-Blocks 3-Report	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
181.	CONSULTATION PATHOLOGY CONSULTATION, SECOND OPINION (WITHOUT MARKERS)	Buffered formalin or blocks + slides+ report	Pathology 8 am-4 pm	2-5 Days	Not Applicable	Send physician order
182.	CONSULTATION(PATHOLOG Y REVIEW)	1-Slides 2-Blocks 3-Report	Pathology Sunday- Thursday 8:00am — 4:00pm	2-5 Days	Not Applicable	Room Temperature
183.	COOMB'S TEST, INDIRECT	EDTA blood tube "Lavender Top " fill to mark or 3-5 ml Blood plain/ tube Red Top	Blood Bank 24 hours/day	8-24 Hours	Not Applicable	Room temperature
184.	COOMB'S TEST DIRECT	EDTA blood tube "Lavender Top " fill to mark	Blood Bank 24 hours/day	1 Hours	Not Applicable	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
185.	COPPER LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Week	27 – 170 mcg/dL	Room Temperature
186.	COPPER TEST 24HR UR	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	One Week	0 – 60 mcg/24hr	Keep the container in a cool place (Refrigerator). It must be delivered to the section before 10 am
187.	COPROPORPHYRIN,24HR	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	One Week	Not Established •	Keep the container in a cool place (Refrigerator). • It must be delivered to the section before 10 am
188.	CORTISOL Free 24HR URINE COLLECTION	24 hours urine collection	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Store in refrigerator
189.	CORTISOL TOTAL STUDY-T- 120	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established mcg/dL	Room Temperature
190.	CORTISOL TOTAL STUDY-T-30	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established mcg/dL	Room Temperature
191.	CORTISOL TOTAL STUDY-T- 90	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established mcg/dL	Room Temperature
192.	CORTISOL TOTAL STUDY-T- ZERO	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established mcg/dL	Room Temperature
193.	CORTISOL(AM)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Morning hours 6-10 a.m.: 6.02-18.4 mcg/dL	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
194.	CORTISOL(PM)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Afternoon hours 4-8 p.m.: 2.68-10.5 mcg/dL	Room Temperature
195.	CORTISOLTOTAL STUDY-T- 60	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established mcg/dL	Room Temperature
196.	C-REACTIVE PROTEIN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	< or =8.0 mg/L	Room Temperature
197.	CREATINE KINASE TOTAL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Males :39-308 U/L Females: 26-192 U/L	Keep the container in a cool place (Refrigerator)
198.	CORTISOL TOT INSULIN IND HYPOGLY STUDY,T 90	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am- 3 pm	1-3 Working Days	Not Applicable	Immediate delivery
199.	CORTISOL TOT INSULIN IND HYPOGLY STUDY,T 120	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am- 3 pm	1-3 Working Days	Not Applicable	Immediate delivery
200.	COXSACKIE A IgG SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Days	Negative	Room temperature Serum should be collected at onset of disease and then 2-4 wks later to determine acute and convalescent titres.
201.	C-PEPTIDE , SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	1.1-4.40	Under ice Patient should be fasting. Sample must be obtained at 8 am, it must be delivered to the Immunology Laboratory before 10 am
202.	CREATININE 24HR UR	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	Males: 955-2936 mg/24 hours Females: 601-1689 mg/24 hours	Room Temperature
203.	CREATININE BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	80 - 150 mg/dl See portal	Room Temperature
204.	CREATININE CLEARANCE URINE	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	77-160 mL/min	Keep the container in a cool place (Refrigerator)

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
205.	CREATININE LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	0.22 - 0.9 mg/dL (0 - 18) years 0.5 - 1.12 mg/dL (18 -99) Year	Room Temperature
206.	CREATININE SPOT URINE	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	Male: 20-320 mg/dL Female: 20-275 mg/dL	Room Temperature
207.	CRYOPRECIPITATE/UNIT	Call Blood Bank Extension. 1710		2 Hours	Not Applicable	Call Blood Bank
208.	CRYPTOCOCCUS ANTIGEN , CSF/SERUM	1ml CSF or 5 ml whole blood "plain tube" without gel.	Microbiology 24 hours/day	4-8 Hours	Negative	 Keep CSF specimen at Room temperature Request Fungal culture - CSF if Cryptococcus Antigen test is positive
209.	CRYPTOSPORIDIUM PARVUM, STOOL	Fresh stool specimen in a clean container. Follow up on a previously positive antigen detection tests should be done not less than every 48 hours.	Microbiology 24 hours/day	2-4 Hours	Negative	Room temperature
210.	CSF ANALYSIS, CHEMISTRY	Minimum 0.5 ml CSF in Falcon tube	Immunochemistry 24 hours/day	One Hours	See each test individually	Room Temperature
211.	CSF ANALYSIS, HEMATOLOGY	1-2 ml CSF in Falcon tube	Hematology 24hr/7 Days	Up To 2hrs	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room temperature
212.	ctO2	Measured test listed in Arterial Blood Gas + Extended Critical Care Profile	Immunochemistry 24 hours/day	One Hours	NA	Should arrive the lab ASAP No more than 30 mint.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
213.	CSF CULTURE + GRAM STAIN	CSF collected in a sterile container If only one tube of fluid is available, it should be given to the microbiology laboratory. If more than one tube (1-ml each) is available, the second or third tube should go to the microbiology laboratory. Or use blood culture bottles (BACTEC or Versa TREK), send part of specimen in a sterile container for gram stain.	Microbiology 24 hours/day	Preliminary Gram stain: 1-2 Hours Culture: 3-5 Days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room temperature. Transport immediately - Tube# 2 for Microbiology
214	CSF LATEX AGGLUTINATION	1 ml CSF in a sterile container	Microbiology 24 hours/day	2-4 Hours	 - H. influenzae: Negative - STRP. B: Negative - S. pneumonia: Negative - N. meningitidis: Negative - E.coli: Negative 	Room temperature - CSF culture must be requested with this test, because our Policy state that CSF culture performed in conjunction with bacterial antigen tests.
215.	CULTURE FOR BRUCELLA	Blood / Bone Marrow. For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top) blood culture bottle.	Microbiology 24 hours	21 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	- Negative culture for Brucella, or - No growth after 21 days incubation	Use blood culture bottles. Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
216.	CYCLOSPORINE LEVEL	Whole Blood EDTA tube "Lavender Top" fill to mark	Immunochemistry 24 hours/day	1-3 Hours	Therapeutic range 12hrs after dose: 100.0 - 400.0 ng/mL, Toxic value: > 400.0 ng/mL, Critical value: less than 85.0 ng/mL, High: ≥375.0 ng/mL	Room Temperature
217.	Cyclosporine Peak LEVEL	Whole Blood EDTA tube "Lavender Top" fill to mark	Immunochemistry 24 hours/day	1-3 Hours	2-hour post dose cyclosporine ranges are only suggested guidelines: Renal transplant: 800-1700 ng/mL Liver transplant: 600-1000 ng/mL	Room Temperature
218.	CYFRA 21-1 (Cytokeratin 19 Fragment)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Less than 2.37 ng/mL	Room Temperature
219.	CYSTINE QUALITATIVE URINE	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Not Established	Keep the container in a cool place (Refrigerator). It must be delivered to the section before 10 am
220.	CYTOMEGALOVIRUS Ab IGG	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<0.50 U/mL Negative for CMV IgG-specific antibodies ≥ 0.5 to < 1.0 U/mL Gray zone ≥ 1.0 U/mL Positive for CMV IgG-specific antibodies	Room Temperature
221.	CYTOMEGALOVIRUS Ab IGM	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	< 0.7 COI Negative for CMV IgM ≥ 0.7 to < 1.0 Gray zone ≥ 1.0 COI Positive for CMV IgM	Room Temperature
222.	CYTOLOGY - PAP SMEAR	Cervical / Vaginal	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature. Circular scrap of cervical or is placed on a glass slide & immediately fixed in 96% Ethanol. Smear should be collected near the middle of the menstrual cycle
223.	CYST ASPIRATE, ROUTINE	Sterile Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
224.	CYTOLOGY SPECIMEN	Sterile Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
225.	CYTOLOGY-PAP SMEAR	1-Slide 2-Surpath Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
226.	CYTOMEGALOVIRUS IgG	Minimum 2 ml Any sample type	Immunochemistry 8 am- 3 pm	1-3 Working Days	Not Applicable	Room temperature
227.	CYTOMEGALOVIRUS IgM	Minimum 2 ml Any sample type	Immunochemistry 8 am- 3 pm	1-3 Working Days	Not Applicable	Room temperature
228.	D-DIMER LEVEL ,PLASMA	2.7 ml citrate blood "Blue Top" fill to mark	Hematology 24 hours/day	2-4 Hours	-Less than 0.5 ug/ml-FEU -Cutoff 0.5	Room temperature
229.	DEHYDROEPIANDROSTERON E SULPHATE SERUM (DHEA- S)	Minimum 2 ml Any sample type	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	<0.50 Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Under ice Sample must be obtained at 8 am, it must be delivered to the Immunology Laboratory before 10 am
230.	DIGOXIN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic range : 0.8 – 2.0 ng/mL Toxic Level : >2.0 ng/mL	Room Temperature
231.	DISC MATERIAL,INTERVETEBRAL (SMALL)	Buffered Formalin B	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
232.	DUODENAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
233.	DRUG SCREENING IN URINE	Spot Urine	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Negative	Room temperature
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234.	EAR SWAB/DISCHARGE CULTURE	Sterile tube with screw- cap; Or Swab with transport media x2 (one for Culture the other for Gram stain) Ear Swab specimen in a transport media for diagnosis of otitis external or tympanocentesis fluid (middle ear fluid) specimen for the diagnosis of otitis media	Microbiology 24 hours	Swab: 2-3 Days If Negative Discharge: 5 days	- No growth - Skin Normal Flora	Room temperature
235.	EAR/ AURAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
236.	ECHINOCOCCUS ANTIBODIES	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
237.	E.COLI 0157:H7, STOOL CULTURE	Fresh stool sample, collect in sterile container	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	3-5 Days If No Pathogens	Negative Culture for E.COLI 0157	Room temperature
238.	Estimating Glomerular Filtration Rate (eGFR)	Calculated Test combined with Creatinine test	Immunochemistry 24 hours/day	2-8 Hours		

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
239.	ELECTROLYTES SERUM LEVEL	3-5 ml Blood plain / Tube Red Top	Immunochemistry 24 hours/day	2-8 Hours	Not Applicable	Room temperature
240.	ENDO PREDICT	Paraffin Block	Pathology Sunday- Thursday 8:00am — 4:00pm	14 Days	Not Applicable	Room Temperature
241.	ENDOMETRIAL ABLATION (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
242.	ENDOMETRIAL BIOPSY/POLYP (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
243.	ENDOTRACHEALTUBE (ETT) CULTURE	Endotracheal tube, collect in sterile container	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	2-3 Days If Negative	No growth	Room temperature
244.	EOSINOPHIL COUNT, SPUTUM	sputum	Hematology 8 am- 3 pm	24hr/7day	Not Applicable	Room temperature
245.	EPIDIDYMAL CYST/<5CM MASS (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
246.	EPIGLOTTIS BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
247.	EPSTEIN-BARR VIRUS IGG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Only Tuesdays	One Week	Immune:Positive	Room temperature
248.	EPSTEIN-BARR VIRUS IGM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Only Tuesdays	One Week	Negative	Room temperature
249.	ERYTHROCYTE SEDIMENTATION RATE	EDTA blood tube "Lavender Top" fill to mark	Hematology 8 am- 3 pm	24hr/7day	Male: 0-15 mm/1hr Female :0-20 mm/1hr	Room temperature
250.	ERYTHROPOIETIN	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Days	2.59-18.50	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
251.	ESOPHAGEAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
252.	ESTROGEN RECEPTOR	Block or in 10% neutral buffered formalin	Pathology 8 am-4 pm	2-3 Days	Not Applicable	Room temperature
253.	EXTRACTABLE NUCLEAR ANTIGEN	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
254.	EXTREMITY, AMPUTATION (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
255.	EYE SWAB/DISCHARGE CULTURE + GRAM STAIN	Sterile tube with screw- cap; Or Swab with transport media x2 (one for Culture the other for Gram stain) Conjunctival scraping / corneal scraping, Conjunctival Swab, eye swab in transport medina. small ocular tissue placed in sterile container with sterile saline	Microbiology Swabs :2-3 Days If Negative	Swabs :2-3 Days If Negative 10 Days For Scrapping	No growth	Room temperature - Two swabs should be sent to have sufficient Specimen to perform both gram stain & culture.
256.	EYEBALL ENUCLEATION (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
257.	EYELID BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature



No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
258.	FACTOR II ASSAY	Citrated blood "Blue Top"" fill to mark	Hematology Send out test 8 am- 3 pm	7 Days	Not Applicable	Call laboratory Extension 1743 before blood withdrawal. Patients with indwelling lines, proper flushing of the line must be done before specimen collection.
259.	FACTOR IX ASSAY	Citrated blood "Blue Top"" fill to mark	Hematology Send out test 8 am- 3 pm	7 Days	Not Applicable	Call laboratory Extension 1743 before blood withdrawal. Patients with indwelling lines, proper flushing of the line must be done before specimen collection
260.	FACTOR V ASSAY	Citrated blood "Blue Top"" fill to mark	Hematology Send out test 8 am- 3 pm	7 Days	Not Applicable	Call laboratory Extension 1743 before blood withdrawal. Patients with indwelling lines, proper flushing of the line must be done before specimen collection
261.	FACTOR VIII ASSAY	Citrated blood "Blue Top"" fill to mark	Hematology Send out test 8 am- 3 pm	7 Days	Not Applicable	Call laboratory Extension 1743 before blood withdrawal. Patients with indwelling lines, proper flushing of the line must be done before specimen collection
262.	FACTOR VIII ASSAY C	Citrated blood "Blue Top"" fill to mark	Hematology Send out test 8 am- 3 pm	7 Days	Not Applicable	Call laboratory Extension 1743 before blood withdrawal. Patients with indwelling lines, proper flushing of the line must be done before specimen collection
263.	FALLOPIAN TUBE, CONTRACEPTIVE (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
264.	FALLOPIAN TUBE, ECTOPIC (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
265.	FERRIC CHLORIDE,URINE	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	One Hours	Not Established	Room Temperature
266.	FERRTIN LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
267.	Fecal immunochemical test	Fresh stool sample in a clean container	Immunochemistry 24 hours/day	2-8 Hours	Up To 100 ng/mL	Room Temperature
268.	FIBRINOGEN, PLASMA LEVEL	Citrated blood "Blue Top"" fill to mark	Hematology 24 hours/day	4-8 Hours	200-400 mg /dl	Room temperature. Patients with indwelling lines, proper flushing of the line must be done before specimen collection"
269.	FLC KAPPA	Minimum 1 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	2.37-20.73 mg/L	Room Temperature
270.	FLC LAMBDA	Minimum 1 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	4.23-27.69 mg/L	Room Temperature
271.	FIBROID <5CM (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
272.	FIBROID >10CM (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
273.	FIBROID 5-10 CM (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
274.	FILTERED, IRRADIATED SINGLE DONER PLATELET	2 blood grouping EDTA tubes if first time recipient	Blood Bank 24 Hours/7 Days	30 Minutes	Not Applicable	Room Temperature
275.	FISTULA SWAB CULTURE	Fistula swab in transport media	Microbiology 8 am- 5 pm	2-3 Days If Negative	Not Applicable	Room temperature
276.	FOLATE LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	3.89-26.8 ng/ml	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
277.	FOLLICLE STIMULATING HORMONE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	State day of menstrual cycle. Steroid therapy may influence result.
278.	FOOD ALLERGY SCREEN	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
279.	FOUNDATION ONE	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	14 Days	Not Applicable	Room Temperature
280.	Fraction of fetal hemoglobin	Minimum 0.5 ml HEPARINIZED SYRINGE	Immunochemistry 24 hours/day	2-8 Hours	Adult:Less Than 1.0%	Room Temperature
281.	FREE LIGHT CHAIN KAPPA,LAMBDA & RATIO	Minimum 1 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	See each test individually	Room Temperature
282.	FREE PROSTATIC SPECIFIC ANTIGEN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	$\label{eq:FreePSA:0.008-0.72 ng/mL;} Free/Total\ Ratio: > 0.18\ ng/mL$	Room Temperature
283.	FREE T3 , LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	2.0-4.4 pg/mL	Room Temperature
284.	FREE T4 , LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	0.93-1.7 ng/dL	Room Temperature
285.	FREE TESTOSTERONE , SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Male:4.25-30.40 Female :0.04-4.20	Room temperature
286.	FRESH FROZEN PLASMA /UNIT	Call Blood Bank Extension. 1710	Blood Bank	2 Hours	Not Applicable	Call Blood Bank

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
287.	FROOM TEMPERATURE CYTOLOGY	1-Sterile Container 2-SLIDE 3-SURPATH CONTAINER	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
288.	FROOM TEMPERATURE, DEEP MASS,ROUTINE	1-Sterile Container 2-SLIDE 3-SURPATH CONTAINER	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
289.	FROZEN SCTION - ADDITIONAL BLOCKS (TEST316)	Fresh Sample	Pathology Sunday- Thursday 8:00am — 4:00pm	20-30 Minutes	Not Applicable	Room Temperature
290.	FROZEN SECTION FOR FIRST BLOCK (TEST315)	Fresh Sample	Pathology Sunday- Thursday 8:00am – 4:00pm	20-30 Minutes	Not Applicable	Room Temperature
291.	FROOM TEMPERATURE,SUPERFICIA L MASS,ROUTINE	1-Sterile Container 2-SLIDE 3-SURPATH CONTAINER	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
292.	FUNGAL CULTURE+KOH	Tissue, biopsy, skin, Tissue should be submitted in 2 to 3 mL sterile saline Hair: 10-12 hair at attached bases without normal saline. Skin scraping: very little amount in the bottom of the sterile cup without saline.	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary KOH: 2-4 Hours Culture: 3-5 Weeks If Negative	- KOH: No Fungal element Seen - Fungal Culture: Negative Culture For Fungus. Or No growth after four weeks of incubation	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
293.	FUNGAL CULTURE+KOH	Blood Volume: 5-10 ml each Container: blood culture bottles: For BACTEC system: one aerobic (Blue top) blood culture bottle and one anaerobic (orange top) blood culture bottle. For Versa TREK system: Adult and pediatric patients: one aerobic (purple top) blood culture bottle and one anaerobic (red top)blood culture bottle	Microbiology 24 hours, Recommended time; 8:00AM – 4:00 PM	Preliminary KOH: 2-4 Hours Fungal Culture- Blood: 14 day in BCS, If Negative	- KOH: No Fungal element Seen - Fungal Culture-Blood: Negative Culture For Fungus. Or No growth after 14 days of incubation	Room Temperature
294.	FUNGAL CULTURE+KOH	Sterile Body fluids except CSF: 5-10 mL as much fluid as possible CSF: > 2 mL in sterile screw cap container	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary KOH: 2-4 Hours Culture: 3-5 Weeks If Negative	 KOH: No Fungal element Seen Fungal Culture: Negative Culture For Fungus. Or No growth after four weeks of incubation 	Room Temperature
295.	FUNGAL CULTURE+KOH	Bone marrow: 5- 10 mL sterile screw cap container or in Blood culture bottles BACTEC system Or 5 Heparin tubes (green tip)	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary KOH: 2-4 Hours Culture: 3-5 Weeks If Negative	 KOH: No Fungal element Seen Fungal Culture: Negative Culture For Fungus. Or No growth after four weeks of incubation 	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
296.	FUNGAL CULTURE+KOH	Lower respiratory tract (TRAP/Sputum/BAL): ≥ 3 mL 5-10 mL is recommended	Microbiology 8 am- 5 pm	Preliminary KOH: 2-4 Hours Culture: 3-5 Weeks If Negative	 KOH: No Fungal element Seen Fungal Culture: Negative Culture For Fungus. Or No growth after four weeks of incubation 	Room Temperature
297.	FUNGAL CULTURE+KOH	Urine: 5-10 mL in sterile container ≥ 15 ml is recommended	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary KOH: 2-4 Hours Culture: 3-5 Weeks If Negative	 KOH: No Fungal element Seen Fungal Culture: Negative Culture For Fungus. Or No growth after four weeks of incubation 	Room Temperature
298.	FUNGAL ISOLATES FOR ID AND SENS	Isolated organism on culture media- sealed and BIOHAZARD labeled	Microbiology 8 am- 4 pm	4-6 Weeks: Filaments Fungi Isolates 5-7 Days Yeasts Isolates	No growth after four weeks of incubation	Room Temperature
299.	FUNGAL SMEAR BY KOH	(Refer to Fungal culture)	Microbiology 8 am- 5 pm	2-4 Hours	Not Applicable	Room temperature
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300.	GALACTOMANNAN	 Minimum 2-3 ml Blood " Plain Red Top Tube" Minimum 3 ml BAL 	Diagnostic Immunology Monday	1 week	Negative	Freeze immediately upon arrival
301.	GALL BLADDER (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-3 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
302.	Gamma-glutamyl Transferase (GGT)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
303.	GASTRECTOMY, PARTIAL (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
304.	GASTRECTOMY, TOTAL (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
305.	GASTRIC BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-3 Days	Not Applicable	Room Temperature
306.	GASTRIN SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Days	13-115 pg/ml	Under ice Patient should be fasting 12hrs. Sample must be obtained at 8 am, it must be delivered to the Immunology Laboratory before 10 am
307.	GENITAL SWAB CULTURE	Genital swab in transport media	Microbiology 8 am- 5 pm	3 Days If No Pathogens	Not Applicable	Room temperature
308.	GENTAMICIN CONCENTRATION RANDOM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 24 hours/day	1-2 Days	N/A	Room temperature
309.	GENTAMICIN CONCENTRATION, PEAK	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 24 hours/day	1-2 Days	Peak Level : 5-10	Room temperature
310.	GENTAMICIN CONCENTRATION, TROUGH	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 24 hours/day	1-2 Days	Trough Level : UP To 2	Room temperature
311.	GLUCOSE CSF	Measured test listed in CSF ANALYSIS, CHEMISTRY panel	Immunochemistry 24 hours/day	One Hours	Children: 60 - 80 mg/ dL Adults: 40 - 70 mg/ dL	Room Temperature
312.	GLUCOSE IN URINE	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	<15.0 mg/ dL	Room Temperature
313.	GLUCOSE,BODY FLUIDS	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	See Portal (For interpretation)	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
314.	GLUCOSE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Fasting: <110, Random: > or =1 year: 70-140 mg/dL, Diabetic: > 200 critical value: low <40 high >400	Room Temperature
315.	GLUCOSE TOLERANCE TEST 2 HR	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Impaired > or =200 mg/ dL critical value: low <40 high >400	Room Temperature
316.	GLUCOSE TOLERANCE TEST FASTING	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Normal: Less than 110 mg/dL Impaired : > or =126 mg/dL after an 8-hour fast critical value: low <40 high >400	Room Temperature
317.	GLUCOSE-6-PHOSPHATE DEHYDROGENASE	Whole Blood EDTA blood tube "Lavender Top" fill to mark	Immunochemistry 24 hours/day	2-8 Hours	7.9 – 16.3 U/gm.Hb	Room Temperature
318.	GLYCOHEMOGLOBIN (HBA1C)	2 ml or 4.5 ml EDTA blood tube "Lavender top" fill to mark	Hematology Working days only	8-24 Hours	Normal patient: (< 5.7 %) Pre-diabetic:(5.7-6.4)% Diabetic patient: (> 6.5%)	Room temperature
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319.	HB-ELECTROPHORESIS	1 ml Blood EDTA (purple tube)	Hematology 24 hours/day	7 Working Days	Not Applicable	Room temperature
320.	нсоз	Measured test listed in Arterial Blood Gas + Extended Critical Care Profiles	Immunochemistry 24 hours/day	One Hours	22 – 26 mmol/L	Should arrive the lab ASAP No more than 30 mint.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
321.	HDL CHOLESTEROL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Children: See portal. Males: > or =40 mg/dL Females: > or =50 mg/dL	Room Temperature
322.	HELICOBACTER PYLORI ANTIBODY IgA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
323.	HELICOBACTER PYLORI ANTIBODY IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
324.	HEMOSIDERIN, SPOT URINE	Random urine sample	Hematology 8 am-4 pm	1-2 Days	Not Applicable	Store in refrigerator or send immediately
325.	HEPATITIS-A VIRUS ANTIBODY, IGM	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<0.80 COI Negative for HAV IgM specific antibodies ≥ 0.8 to < 1.2 COI Gray zone ≥ 1.20 COI Positive for HAV IgM specific antibodies	Room Temperature
326.	HEPATITIS-B CORE Ab IGM	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<0.80 COI Negative for anti-HBc IgM ≥ 0.8 to < 1.2 COI Gray zone ≥ 1.20 COI Positive for anti-HBc IgM	Room Temperature
327.	HEPATITIS-B CORE Ab TOTAL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	≥1.20 COI Negative for anti-HBc ≥ 0.8 to < 1.2 COI Gray zone < 0.80 COI Positive for anti-HBc	Room Temperature
328.	HEPATITIS-B E Ab	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	\geq 1.20 COI Negative for anti-HBe \geq 0.8 to < 1.2 COI Gray zone < 0.80 COI Positive for anti-HBe	Room Temperature
329.	HEPATITIS-B E ANTIGEN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<0.80 COI Negative for HBeAg \geq 0.8 to < 1.2 COI Gray zone \geq 1.20 COI Positive for HBeAg	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
330.	HEPATITIS-B SURFACE Ab	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	< 10 IU/L Negative for anti-HBs ≥ 10 IU/L Positive for anti-HBs	Room Temperature
331.	HEPATITIS-B SURFACE ANTIGE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<0.80 COI Negative for HBsAg ≥ 0.8 to < 1.2 COI Gray zone ≥ 1.20 COI Positive for HBsAg	Room Temperature
332.	HEPATITIS B CORE ANTIBODY , TOTAL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am- 3 pm	1-3 Working Days	Not Applicable	Room temperature
333.	HEPATITIS-C VIRUS Ab	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<0.80 COI Negative for anti-HCV ≥ 0.8 to < 1.2 COI Gray zone ≥ 1.20 COI Positive for anti-HCV	Room Temperature
334.	HER-2/NEU	Block or 10% neutral buffered formalin	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature
335.	HERNIAL SAC (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
336.	HERPES SIMPLEX VIRUS I ANTIBODY , IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	One Week	Negative	Room temperature
337.	HERPES SIMPLEX VIRUS 1 ANTIBODY , IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	One Week	Immune:Positive	Room temperature
338.	HOMOCYSTEINE , CARDIAC RISK	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Male: 5.9-16 Female: 3.4-20.4	Immediate on ice Fasting specimen.
339.	HERPES SIMPLEX VIRUS II ANTIBODY , IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am- 3 pm	One Week	Immune:Positive	Room temperature
340.	HERPES SIMPLEX VIRUS II ANTIBODY, IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am- 3 pm	One Week	Negative	Room temperature
341.	HICKMAN SITE SWAB CULTURE	Hickman site swab in transport media	Microbiology 24 hours	2-3 Days If Negative	No growth	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
342.	HIGH VAGINAL SWAB (H.V.S) CULTURE+ GRAM STAIN	H.V.S swab in transport media	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	3 Days If No Pathogens	Normal Flora, Or No growth	Room temperature - Two swabs should be sent to have sufficient specimen to perform both gram stain & culture
343.	Human Epididymis protein 4 (HE4)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	< or =140 pmol/L	Room Temperature
344.	HUMAN IMMUNODEFICIENCY VIRUS ANTIBODY	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8am-3pm	1-3 Working Days	Not Applicable	Room temperature
345.	HUMAN IMMUNODEFICIENCY VIRUS Ag & Ab I/II	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<0.80 COI Negative for HIV-1 Ag and negative for anti-HIV-1/2 antibodies. ≥ 0.8 to < 1.2 COI Gray zone ≥ 1.20 COI Positive for HIV-1 Ag and/or for anti-HIV-1/2 antibodies.	Room Temperature
346. 347. 348.	HUMAN PAPILLOMA VIRUS (HPV)	Pap smear Cervical brush in liquid Paraffin embedded cervical tissue	Pathology 8 am-3 pm	2-4 Working Days	Not Applicable	Keep at room temperature
349.	HYSTERECTOMY NEOPLASTIC(LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
350.	HYSTERECTOMY NON- NEOPLASTIC (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
351.	HYSTERECTOMY(UTERUS) SIMPLE (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
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352.	IGG SUB CLASSES	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am- 9 am	3-5 Days	Not Applicable	Call laboratory ext. 1345 before blood withdrawal
353.	ILEAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
354.	IMMUNOFIXATION SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	1-2 Weeks	No Monoclonal Band Seen	Room temperature
355.	IMMUNOFIXATION 24HR URINE COLLECTION	24 hours urine collection	Diagnostic Immunology 8 am- 3 pm	1-2 Weeks	Monoclonal Band Seen	Store in refrigerator Sample must be delivered to the Immunology Laboratory before 10 am.
356.	IMMUNOGLOBULIN A	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
357.	IMMUNOGLOBULIN D	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am-9 am	3-5 Days	Not Applicable	Call laboratory ext. 1345 before blood withdrawal
358.	IMMUNOGLOBULIN E	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
359.	IMMUNOGLOBULIN G	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
360.	IMMUNOGLOBULIN M	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
361.	IMMUNOHISTOIMMUNOCHE MISTRY SPECIAL 1	Block or 10% neutral buffered formalin	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature
362.	IMMUNOHISTOIMMUNOCHE MISTRY SPECIAL 2	Block or 10% neutral buffered formalin	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature
363.	IMMUNOHISTOIMMUNOCHE MISTRY ROUTINE FOR EACH AB	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
364.	INDIA INK (CRYPTOCOCCUS)	CSF, tissue, body fluid, pus, sputum, Broncho alveolar lavage ,TRAP suspected to have Cryptococcus spp. collect in sterile container	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	4-8 hours	No encapsulated yeast cells seen	Room temperature
365.	INHALANT ALLERGY PANEL- IGE	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
366.	INHIBIN A & B	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Under ice. Sample must be collected on 3rd day of cycle.
367.	INSULIN-LIKE GROWTH FACTOR 1(IGF-1)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	See portal.	Keep on ice
368.	INSULIN ASSAY. SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	8-24 Hours	random: 2.6-24.9 , Fasting : 2.6-10.0	Under ice 12 Hrs. fasting required. Sample must be collected at 8 am and sent to the Immunology Laboratory before 10 am.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
369.	Interleukin-6 (IL-6)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	< or =7.0 pg/mL	Room Temperature
370.	INTESTINE, SMALL, SEGMENT (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
371.	IRON LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
372.	IRON STUDY (Total iron-binding capacity (TIBC), Iron, & Transferrin saturation (TSAT))	3-5 ml Blood plain / Tube Red Top	Immunochemistry 24 hours/day	8-24 Hours	Not Applicable	Room temperature
373.	Iron study Contains (Total iron-binding capacity (TIBC), Iron, UIBC & Transferrin saturation (TSAT))	Minimum 3 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	See each test individually	Room Temperature
374.	IRON, URINE	Random urine sample	Immunochemistry 8 am-4 pm	1-3 Working Days	Not Applicable	Store in refrigerator or send immediately
375.	ISO-HEMAGGLUTININ	EDTA or Plain Tube	Blood Bank 8:00am – 5:00pm	One Day	Not Applicable	Room temperature
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376.	JOINT BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
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377.	KAPPA/LAMBDA SURFACE ANTIGENS	2-4.5 ml Marrow in Lavender top tube or EDTA blood tube "Lavender top" fill to mark	Pathology 8 am- 3 pm	8-24 Hours	Not Applicable	Fresh blood or marrow aspirate or maximum 48 hrs at room temperature
378.	KAPPA/LAMBDA RATIO	Measured test listed in FREE LIGHT CHAIN KAPPA,LAMBDA & RATIO panel	Immunochemistry 24 hours/day	2-8 Hours	0.22 - 1.74	Room Temperature
379.	KIDNEY BIOPSY ROUTINE (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
380.	KETONE IN URINE	Urine: ≥ 10 mL in sterile container	Microbiology 24 hours/day	2-4 Hours	Negative	Room temperature, send within one hour of collection
381.	KIDNEY FUNCTION TEST Contains (Creatinine, Urea, Uric acid, K, Na, & CL)	Minimum 3 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	See each test individually	Room Temperature
382.	KIDNEY, NEPHRECTOMY NEOPLASTIC (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
383.	KIDNEY, NEPHRECTOMY NON-NEOPLASTIC (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
384.	KI67 (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
385.	LACTATE DEHYDROGENASE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Children: See portal Adult: 122-222 U/L	Room Temperature
386.	LACTIC ACID	Collect blood in sodium fluoride and Potassium oxalate one tube "Fill to mark"	Immunochemistry 24 hours/day	One Hour	Not Applicable	Keep under Ice Must be delivered/ received by hand.
387.	LAMOTROGINE (LAMICTAL)	2-3 ml Serum Room Temperature	Diagnostic Immunology Send out test /contact the laboratory	2 Days	Normal: 3-14 Toxic:>15	Room Temperature
388.	LARYNGEAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
389.	LDH IN BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	• Pleural: - Transudate: <200 U/L - Exudate: >200 U/L • Synovial: <240 U/L See Portal (For interpretation)	Room Temperature
390.	LDH ISOENZYME	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-10 am	One Week	Not Established	Room Temperature
391.	LDL CHOLESTEROL	Calculated test listed in lipid profile panel	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
392.	LEAD POISONING	Whole Blood EDTA blood tube "Lavender Top" fill to mark	Immunochemistry 24 hours/day	One Week	0 – 70 mcg/L	Room Temperature
393.	LEFT NEPHRESTOMY CULTURE	Urine collected from nephrostomy tube through a syringe. Volume: ≥ 5 mL in sterile container	Microbiology 24 hours/day	2-3 Days If Negative	No growth	Room temperature, send within one hour of collection
394.	LEGIONELLA ANTIGEN , URINE	Urine: ≥ 10 mL in sterile container	Microbiology 24 hours/day	2-4 Hours	Negative	- Room temperature / Store at refrigerator if delayed

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
395.	LEGIONELLA PNEUMOPHILA ANTIBODY, IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	3-5 Working Days	Negative	Room temperature
396.	LEGIONELLA PNEUMOPHILA ANTIBODY, IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
397.	LEISHMANIA ANTIBODY , SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
398.	LINGUAL (TONGUE) BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
399.	LINGULA BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
400.	LIP BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
401.	LIPASE IN BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Drainage fluid: 175 - 450 U/L See Portal (For interpretation)	Room Temperature
402.	LIPASE LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	12-61 U/L	Room Temperature
403.	LIPID PROFILE-1 Contains(Triglyceride, Cholesterol, HDL, & LDL)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	See each test individually	Room Temperature
404.	LITHIUM LEVEL	Minimum 1 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Range: 0.6-1.2 Toxic level:> 2.0 mmol/L	Room Temperature
405.	LIVER FUNCTION TEST Contains (ALT, AST, ALP, Albumin, Total protein, Bilirubin Direct, & Bilirubin Total)	Minimum 3 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	See each test individually	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
406.	LIVER, NEEDLE OR WEDGE BIOPSY (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
407.	LUMP (SOFT TISSUE MASS) 5-10CM (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
408.	LUMP (SOFT TISSUE MASS)<5CM (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
409.	LUMP (SOFT TISSUE MASS)>10CM (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
410.	LUNG BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
411.	LUNG, LOBECTOMY (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
412.	LUNG, TOTAL RESECTION (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
413.	LUPUS ANTICOAGULANT	Citrate blood "Blue Top" fill to mark	Hematology Send out test 8 am- 3 pm	3-5 Days	Not Applicable	Call laboratory Extension 1743 before blood withdrawal
414.	LUTEINIZING HORMONE	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	State day of menstrual cycle. Steroid therapy may influence result.
415.	LYMPH NODE BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
416.	LYMPH NODE, SENTINEL (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
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417.	MAGNESIUM	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
418.	MAGNESIUM,24H URINE	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	51-269 mg/24 hr	Room Temperature
419.	MAGNESIUM,SPOT URINE	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	Magnesium/Creatinine Ratio: > or =0.035 mg/mg	Room Temperature
420.	MANDIBLE/ MAXILLA DISSECTION (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
421.	MEASLES IGG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Only Thursdays	One week	Immune:Positive	Room temperature
422.	MEASLES IGM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
423.	METANEPHRINES 24HR URINE COLLECTION	24 hours urine collection	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	2-10 mg/24hrs	Store in refrigerator.to the special container every time you use the bathroom for the next 24 hours On day 2, urinate into the container in the morning again when you wake up Label the container with your name, the date, the time of completion, and return it as instructed. Acute stress and vigorous exercise may affect the test results. Foods that can increase urinary catecholamine's include coffee, tea, bananas, chocolate, cocoa, citrus fruits, and vanilla. Avoid these for several days prior to the test. Certain drugs can also affect test results. Your health care provider may tell you to stop taking certain medicines before the test. Never stop taking medicine without first talking to your doctor. Sample must delivered to the Immunology Laboratory before 10 am
424.	METHOTREXATE LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	24 hours after dose: <10 mcmol/L 48 hours after dose: <1 mcmol/L 72 hours after dose : <0.1 mcmol/L	Room Temperature
425.	MICROALBUMIN,URINE	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Less than 20 mg/L	Room Temperature
426.	MICROALBUMINURIA,SPOT URINE	5-10 ml Random urine sample	Immunochemistry 24 hours/day	One Week	Not Applicable	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
427.	MICROALBUMINURIA,24HRS URINE LEVEL	24 hours Urine collection container kept cool	Immunochemistry 8 am-10 am	One Week	0 – 30 mg/24hrs	Keep the container in a cool place (Refrigerator). It must be delivered to the section before 10 am
428.	Mycophenolic acid (MPA)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic range:1.0-3.5 mcg/mL Critical High: >4.0 mcg/mL	Room Temperature
429.	MLH1 (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
430.	MONOSPECIFIC COOMBS TEST	2 ml or 4.5 ml EDTA blood tube "Lavender Top " fill to mark	Blood Bank 24 hours/day	1 Hour	Not Applicable	Room temperature
431.	MSH2 (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
432.	MSH6 (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
433.	MUCOSAL BIOPSY, ANY SITE (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
434.	MUMPS IGG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Only Thursdays	One week	Immune:Positive	Room temperature
435.	MUMPS IGM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
436.	MUSCLE BIOPSY, ROUTINE (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
437.	MYCOPLASMA ANTIBODY , IgG, SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
438.	MYCOPLASMA ANTIBODY , IgM, SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
439.	MYOGLOBIN,SPOT URINE	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Negative	Room Temperature
			Pathology			
440.	NASAL MUCOSAL BIOPSY (SMALL)	Buffered Formalin	Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
441.	NASAL SWAB CULTURE (SCREENING TEST)	Nasal swab in transport media Insert a sterile swab into the nose until resistance is met at the level of the turbinate's (approximately 2-3 cm into the nose). Rotate the swab against the nasal mucosa and leave in place for 10-15 seconds, and then place it in transport medium.	Microbiology 24 hours/day	2-3 Days If No Pathogens	Normal Flora, Or No growth	Room temperature
442.	NASAL TUMOR, BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
443.	NASAL WASH CULTURE	Nasal wash, collect in sterile container	Microbiology 24 hours/day	2-3 Days If No Pathogens	Not Applicable	Room temperature
444.	NASOPHARYNGEAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
445.	NERVE BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
446.	NEONATAL SCREENING	Blood Drops 4 on Card	Immunochemistry 8 am-10 am	One Week	Negative	Room temperature Call laboratory Extension 1345/3272 before blood withdrawal
447.	NITRITE ,URINE	Urine sample in sterile container	Microbiology 24 hours/day	1-2 Hours	Not Applicable	Room temperature, send within one hour of collection
448.	NITROBLUE TETRAZOLIUM TEST	Minimum 2-3 ml Blood " Plain Red Top Tube"	Hematology Send out test /contact the laboratory	3-5 Days	Not Applicable	Room temperature
140	OMENTAL BLODGY (CMALL)	Duffered Fermal'	Pathology	2.4 Days	Not Applicable	Decree Transporture
449.	OMENTAL BIOPSY (SMALL)	Buffered Formalin	Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
450.	OMENTECTOMY	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
451.	ONCOTYPE DX	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
452.	OSMOLALITY	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	275-295 mOsm/kg	Room Temperature
453.	OSMOLALITY URINE	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	150-1150 mOsm/kg	Room Temperature
454.	OVARIAN BIOPSY, SMALL WEDGE (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
455.	OVARIAN MASS/ CYST 5- 10CM (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
456.	OVARIAN MASS/CYST <5CM (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
457.	OVARIAN MASS/CYST >10CM (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
458.	OXALATE 24HR URINE	24 hours Urine collection container kept cool	Immunochemistry 8 am-10 am	One Week	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges please refer to page (99)	Keep the container in a cool place (Refrigerator). It must be delivered to the section before 10 am
459.	OXALATE,SPOT URINE	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Not Established	Room Temperature
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460.	PANCREAS, WHIPPLE'S (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
461.	PANCREATIC FLUID CULTURE (AEROBIC+ANAEROBIC+GRA M CULTURE)	Aseptically aspirated Pancreatic fluid, collected in sterile container ≥ 3 ml Or use blood culture bottles (BACTEC or Versa TREK) (at least 5-10ml) each, send part of specimen in a sterile container for gram stain (> 5 ml)	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 Days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room Temperature. Transport Immediately

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
462.	PARATHYROID HORMONE	Minimum 1 ml Blood Lithium Heparin (Light Green) or EDTA "Fill to Mark" (Lavender)- Under ICE	Immunochemistry 8 am-10 am	2-8 Hours	15-65 pg/mL	Patient Fasting at least 8 hrs, Collect Venous Blood In Edta Tube, Sample Must Be Kept Cold And Transported On Ice Immediately To The Lab, Sample Must Arrive At Laboratory Before 10 am, Patient Must Not Be Taken Medication Or Diet Rich In Calcium Or Phosphorous. Must be delivered/ received by hand.
463.	PARVOVIRUS , IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
464.	PARVOVIRUS , IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
465.	PATHOLOGY-UNDER ICE SECTION	Fresh sample/tissue	Pathology 8 am-4 pm	Immediately	Not Applicable	Room Temperature
466.	PDGFR	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
467.	PDL-1 (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
468.	PERIANAL SWABCULTURE FOR ESBL (SCREENING)	Perianal swab in transport media Gently insert the swab beyond the anal sphincter, rotate it, remove it, and place it in transport media.	Microbiology 24 hours/day	2-3 Days If No Pathogens	Negative for ESBL producing organism	Room Temperature. If A Delay In Transport Or Processing Is Anticipated (Beyond One Hour), The Swab Should Be Kept At 4c.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
469.	PERIANAL SWAB CULTURE (SCREENING TEST)	Perianal swab in transport media Gently insert the swab beyond the anal sphincter, rotate it, remove it, and place it in transport media.	Microbiology 24 hours/day	2-3 Days If No Pathogens	Negative for multidrug resistant nonfermentative gram negative pathogens.	Room Temperature. If A Delay In Transport Or Processing Is Anticipated (Beyond One Hour), The Swab Should Be Kept At 4c.
470.	PERICARDIAL FLUID CULTURE (AEROBIC+ ANAEROBIC+GRAM STAIN)	Aseptically aspirated Pancreatic fluid, collected in sterile container ≥ 3 ml Or use blood culture bottles (BACTEC or Versa TREK) (at least 5-10ml) each, send part of specimen in a sterile container for gram stain (> 5 ml)	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 Days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room Temperature. Transport Immediately
471.	PERITONIAL FLUID (AEROBIC+ANAEROBIC CULTURE+ GRAM STAIN	Aseptically aspirated Pancreatic fluid, collected in sterile container ≥ 3 ml Or use blood culture bottles (BACTEC or Versa TREK) (at least 5-10ml) each, send part of specimen in a sterile container for gram stain (> 5 ml)	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 Days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room Temperature. Transport Immediately
472.	РН	Measured test listed in Arterial Blood Gas + Extended Critical Care Profile	Immunochemistry 24 hours/day	One Hours	7.35-7.45	Should arrive the lab ASAP No more than 30 mint.
473.	PH,BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Not Established See Portal (For interpretation)	Room Temperature
474.	PHENOBARBITAL, SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	2 Days	15-40 ,Toxic Level >50	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
475.	PHENYTOIN(EPANOTIN)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic: 10.0-20.0 mcg/mL Critical value: > 20.0 mcg/mL	Room Temperature
476.	PHOSPHORUS LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
477.	PHOSPHORUS 24H URINE	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	<1100 mg/24 hours	Keep the container in a cool place (Refrigerator)
478.	PHOSPHORUS TEST SPOT URINE	5-10 ml Midstream Random urine - 1st morning urine	Immunochemistry 24 hours/day	2-8 Hours	1st morning urine : 40-136 mg/dL	Room Temperature
479.	PLASMAPHERESIS	Call Blood Bank Extension. 1710	Blood Bank		Not Applicable	Call Blood Bank
480.	PLATELET COUNT, BLOOD	EDTA blood tube "Lavender Top" fill to mark	Hematology 8 am- 3 pm	24hr/7day	$150-400 \ x \ 10^3 \ / \ ul$	Room Temperature
481.	PLEURAL BIOPSY	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
482.	PLEURAL, FLUID (AEROBIC+ANAEROBIC) CULTURE+GRAM STAIN	Aseptically aspirated Pleural fluid, collected in sterile container ≥ 3 ml Or use blood culture bottles (BACTEC or Versa TREK) (at least 5-10ml) each, send part of specimen in a sterile container for gram stain (> 5 ml)	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 Days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room Temperature. Transport Immediately
483.	PMS2 (IMMUNOHISTOIMMUNOCH EMISTRY)	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
484.	POLYP <5CM, ANY SITE (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
485.	PORTA CATH SITE SWAB CULTURE	Swab in transport media	Microbiology 8 am- 5 pm	2-3 Days If Negative	Not Applicable	Room Temperature
486.	POTASSIUM	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	3.6 - 5.2 mmol/L Critical :<3.0,>6.0	Room Temperature
487.	POTASSIUM SPOT URINE LEVEL	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	12-129 mmol/L	Room Temperature
488.	POTASSIUM,24HR URINE	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	17-77 mmol/24 hours	Keep the container in a cool place (Refrigerator)
489.	PREALBUMIN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	19-38 mg/dL	Room Temperature
490.	Procalcitonin	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Healthy: <0.046 ng/mL Local Infection, sepsis not likely: <0.5 High risk of severe sepsis and/or septic shock: >2.0 Critical High: >2.0 ng/mL	Room temperature Sample should be arrive to lab ASAP-Fresh sample no more 2 hrs
491.	PRODUCT OF CONCEPTION (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
492.	Progastrin-releasing peptide (ProGRP)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	< 50 pg/ml	Room Temperature
493.	PROGESTERONE RECEPTOR	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
494.	PROGRAF (TACROLIMUS II)	Whole Blood EDTA tube "Lavender Top" fill to mark	Immunochemistry 24 hours/day	1-3 Hours	Therapeutic range: 5.0-15.0 ng/mL Toxic Level: > 25.0 ng/mL Critical: <1.5 ng/mL	Room Temperature
495.	PRO HUMAN B-TYPE NATRIURETIC PEPTIDE (ProBNP)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	≤ 125 pg/mL	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
496.	PROLACTIN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
497.	PROLACTIN TIME 120	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established	Room Temperature
498.	PROLACTIN TIME 30	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established	Room Temperature
499.	PROLACTIN TIME 60	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established	Room Temperature
500.	PROLACTIN TIME 90	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established	Room Temperature
501.	PROLACTIN ZERO TIME	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 8 am-11 am	2-8 Hours	Study test - Not Established	Room Temperature
502.	PROSTATE, BIOPSY TUR (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
503.	PROSTATE, SEXTANT (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
504.	PROSTATECTOMY, RADICAL (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
505.	PROSTATECTOMY, SIMPLE (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
506.	PROSTATIC SECRETIONS CULTURE	Prostatic secretion, collected in sterile container	Microbiology 8 am- 5 pm	3-5 Days If Negative	Not Applicable	Room Temperature, Send Immediately
507.	PROSTATIC SPECIFIC ANTIGEN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
508.	PROTEIN CSF	Measured test Listed in CSF ANALYSIS, CHEMISTRY panel	Immunochemistry 24 hours/day	One Hours	15.0 - 45.0 mg/dL	Room Temperature
509.	PROTEIN (SERUM)	3-5 ml Blood plain / Tube Red Top	Immunochemistry 24 hours/day	2-8 Hours	Not Applicable	Room Temperature
510.	PROTEIN IN BODY FLUIDS	1-3 ml fluid	Immunochemistry 24 hours/day	8-24 Hours	Not Applicable	Room Temperature
511.	PROTEIN SPOT URINE	5-10 ml Random urine sample	Immunochemistry 24 hours/day	2-8 Hours	Not Applicable	Room Temperature
512.	PROTEINASE 3 ANTIBODIES	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
513.	PROGESTERONE SERUM LEVEL	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
514.	PROTHROMBIN TIME	Citrate blood "Blue Top" fill to mark	Hematology 24 hours/day	4-8 Hours	11.7-15.3 sec	Room Temperature. Patients With Indwelling Lines, Proper Flushing Of The Line Must Be Done Before Specimen Collection

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
515.	PUS CULTURE + GRAM STAIN	Pus aspirate in sterile container or 2 swabs in transport media should be sent to cover CS&GS	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 2-3 Days If Negative	No growth	Room Temperature
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516.	QuantiFERON-TB Gold Plus	Minimum 3 ml in four different tubes (Available in kit)	Diagnostic Immunology Send out test /contact the laboratory	2-3 Weeks	Negative	Room temperature
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517.	RAPID PLASMA REAGIN (RPR)	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	1-3 Working Days	Negative	Room temperature
518.	RBC FOLATE	Minimum 2 ml EDTA blood tube "Lavender Top" fill to mark	Diagnostic Immunology Send out test /contact the laboratory	One week	Normal: 192.1 – 577.1 Deficient: Less than 150	Room temperature
519.	RENIN,PLASMA LEVEL	Minimum 2 ml EDTA blood tube "Lavender Top" fill to mark	Diagnostic Immunology Send out test /contact the laboratory	1-2 Weeks	Low:Supine: 4.70, UPRIGHT:7.5" High:Supine:31.9, UPRIGHT:42.3pg/mL	Under ice 12 Hrs. fasting required. Sample must be collected at 8 am and sent to the Immunology Laboratory before 10 am.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
520.	RHEUMATOID FACTOR	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	-3 Working Days	Negative	Room temperature
521.	RBC DEPLETION	Call Blood Bank laboratory Extension 1710	Blood Bank		Not Applicable	Call Blood Bank laboratory
522.	RECTAL BIOPSY, MUCOSAL (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
523.	RECTAL BIOPSY,FOR GANGLION CELLS(SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
524.	RENIN , PLASMA LEVEL	EDTA blood tube "Lavender Top" fill to mark	Diagnostic Immunology Send out test /contact the laboratory	1 Week	Not Applicable	Immediate on ice, Sample must be obtained at 8 am, it must be delivered to the Immunochemistry Laboratory before 10 am, the patient must to be upright or lying down for a period of time 15-30 minutes ,prior to sample collection.
525.	RETICULIN STAIN ON TISSUE	Paraffin Block	Pathology Sunday- Thursday 8:00am — 4:00pm	1-2 Days	Not Applicable	Room Temperature
526.	RETICULOCYTE COUNT, BLOOD	EDTA blood tube "Lavender Top" fill to mark	Hematology 24 hours/day	4-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room temperature
527.	RHEUMATOID FACTOR (RF)	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	1-3 Working Days	Not Applicable	Room temperature
528.	RH-PHENOTYPING	EDTA blood tube "Lavender Top " fill to mark	Blood Bank 24 hours/day	2 Hours	Not Applicable	Room temperature
529.	RIGHT NEPHRESTOMY URINE CULTURE	Urine collected from nephrostomy tube through a syringe. Volume: ≥ 5 mL in sterile container	Microbiology 24 hours/day	2-3 Days If Negative	No growth	Room temperature, send within one hour of collection
530.	ROMA Score (Ovarian Malignancy Risk Algorithm)	Calculated Test combined with CA 125 & HE4 tests	Immunochemistry 24 hours/day	2-8 Hours	Premenopausal: <1.14 (low risk) Postmenopausal: <2.99 (low risk)	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
531.	ROTAVIRUS, STOOL	Fresh stool specimen in a clean container. Follow up on a previously positive antigen detection tests should be done not less than every 48 hours.	Microbiology 24 hours/day	2-4 Hours	Negative	Room temperature
532.	RUBELLA Ab IGG	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	< 10 IU/L Negative for anti-Rubella IgG ≥ 10 IU/L Positive for anti-Rubella IgG	Room Temperature
533.	RUBELLA IgM, SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
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534.	SARS-CoV-2 Rapid Antigen Test	Specimen Collection by RT nurse or physician: -Insert a sterile swab into the patient's nostril; swab the surface of the posterior nasopharynx. Withdraw the swab from the nasal cavity (nasopharyngeal swab) - Insert the swab into an extraction buffer fluid tube, close tightly -Sent to Microbiology section ASAP	Microbiology 24 hours,	1 hour	Negative	-Sent to Microbiology section ASAP

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
535.	SALIVARY GLAND (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
536.	SCALP BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
537.	SCLP.BX	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
538.	SCROTAL MASS (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
539.	SEROMA CULTURE AND GRAM STAIN	aspirating the fluid with sterile syringe and needle and then injecting the aspirated material into sterile container.	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 Days If Negative)	No growth	Room temperature
540.	SERUM PROTEIN ELECTROPHORESIS	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	1-2 Weeks	No Monoclonal Seen	Room temperature
541.	SEX HORMONE BINDING GLOBULIN	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Male:13-71 Female:18-114	Room Temperature
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542.	TRANSFERRIN,SERUM LEVEL	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	One Week	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
543.	TREPONEMA PALLIDUM HEMAGGLUTINATION	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	One Week	Negative	Room Temperature
544.	TSH RECEPTOR AUTO- ANTIBODIES	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Negative: less than 1.8 Grey zone: 1.8 – 2.0 Positive: more than 2.0	Room Temperature
545.	THEOPHYLLIN	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	10-20 μg/ml	Room Temperature
546.	Tobramycin	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Peak level: 5-10 μg/L Trough: 0.5-2 Toxic: peak > 10 Trough: >2	Room Temperature
547.	sO2	Measured test listed in Arterial Blood Gas + Extended Critical Care Profile	Immunochemistry 24 hours/day	One Hours	>95 %	Should arrive the lab ASAP No more than 30 mint.
548.	SODIUM LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	135-145 mmol/L Critical-Low: ≤120 Critical-High:≥160	Room Temperature
549.	SODIUM(URINE)	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	> 20 mmol/L	Room Temperature
550.	SODIUM,24HR URINE	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	41-227 mmol/24 hours	Keep the container in a cool place (Refrigerator)
551.	SPECIAL STAIN	10% buffered formalin or fresh cytology or block.	Pathology 8 am-4 pm	1-2 Days	Not Applicable	Room temperature
552.	SPLENECTOMY (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
553.	SPECIFIC GRAVITY, URINE	Urine: ≥ 10 mL in sterile container	Microbiology 24 hours	1-2 Hours	1.002 - 1.035	Room temperature, send within one hour of collection

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
554.	SPUTUM CULTURE + GRAM STAIN	>2ml first morning sputum, not saliva, collected in a sterile container I. Expectorated sputum: Have patient rinse MOUTH or gurgle with water and then to cough deeply to produce lower respiratory tract specimen (not postnasal fluid or saliva). Collect sputum in a sterile container. 2. Induced specimen: Have patient rinse mouth with water after brushing gums and tongue. With aid of nebulizer, have patient inhale about 25 ml of 3-10% normal saline. Collect sputum in sterile container. Collect via suction for pediatric patient unable to produce specimen.	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 2-3 Days If Negative 2-3 Days If No Pathogens	Normal Flora, Or No growth	Room temperature
555.	Squamous Cell Carcinoma Antigen (SCC)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	0.0 - 2.2 ng/mL	Room Temperature
556.	STOOL ANALYSIS (wet preparation + concentration +permanent stain)	Fresh stool sample in a clean container	Microbiology 24 hours/day	24 hours	Wet preparation: No ova or parasite seen Concentration: No ova or parasite seen Permanent stain: No ova or parasite seen	Room temperature
557.	STOOL ANALYSIS FOR EMPLOYEES	Fresh stool sample in a clean container	Microbiology 8 am- 5 pm	24 hours	No ova or parasite seen	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
558.	STOOL CULTURE FOR CAMPYLOBACTER	Fresh stool sample, collect in sterile container	Microbiology 8 am- 5 pm	3-5 Days If No Pathogens	Negative for Campylobacter spp	Room temperature
559.	STOOL CULTURE FOR VIBRIO CHOLERAE	Fresh stool sample, collect in sterile container	Microbiology 8 am- 5 pm	2-3 Days If No Pathogens	Negative culture for vibrio cholerae	Transport to the lab. as soon as possible not longer than 2 hours of passage.
560.	STOOL CULTURE FOR SALMONELLA AND SHIGELLA	Stool sample, collect in a sterile container Fresh, random diarrheal or soft sample	Microbiology 24 hours/day	2-3 Days If No Pathogens	Negative for Salmonella and Shigella	Room temperature. Transported immediately to the laboratory (within 30 minutes for Shigella, and within 1hour for Salmonella)
561.	STOOL FOR OCCULT BLOOD	Fresh stool sample in a clean container	Microbiology 24 hours/day	2-4 Hours	Negative	Room temperature. Food Guidelines: Patient should avoid eating Liver, beef or lamb. Melons, cantaloupe, turnips, cauliflower, radishes, broccoli, cucumbers, horseradish or
562.	STOOL PERMANENT STAIN SMEAR	Stool sample in clean container	Microbiology 24 hours/day	24 Hours	No ova or parasite seen	Room temperature
563.	STONE ANALYSIS URINE	Urinary calculi in Urine cup	Immunochemistry 8 am-10 am	One Week	NA	Room Temperature
564.	STREPTOCOCCUS PNEUMONIAE ANTIGEN IN URINE	Urine: ≥ 10 mL in sterile container	Microbiology 24 hours/day	2-4 Hours	Negative	Room temperature
565.	SUBUNGUAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
566.	SUPRA PUBIC URINE CULTURE	Urine sample aspirated through the bladder, collect in sterile container	Microbiology 24 hours	3-4 Days If Negative	No growth	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
567.	SYNOVIAL FLUID CULTURE (AEROBIC+ANAEROBIC+GRA M STAIN)	Aseptically aspirated synovial fluid, collected in sterile container ≥ 3 ml Or use blood culture bottles (BACTEC or Versa TREK) (at least 5-10ml) each, send part of specimen in a sterile container for gram stain (> 5 ml	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 Days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room temperature. Transport immediately
568.	SYNOVIAL MEMBRANE, BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
			T			
569.	TdT Nuclear Staining Antigen	2-4.5 ml blood or Marrow EDTA tube "Lavender top" fill to mark	Pathology 8 am- 3 pm	8-24 Hours	Not Applicable	Fresh blood or marrow aspirate or maximum 48 hrs. at room temperature
570.	TESTIS, BIOPSY BOTH (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
571.	TESTIS, BIOPSY ONE (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
572.	TESTIS, ORCHIDECTOMY (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
573.	TESTOSTERONE TOTAL, LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top) Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
574.	THERAPEUTIC PLASMA EXCHANGE	Call Blood Bank Extension. 1710	Blood Bank		Not Applicable	Call Blood Bank
575.	THEOPHYLIN SERUM LEVEL	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 24 hours/day send out	2 Days	Not Applicable	Room temperature
576.	THROAT SWAB CULTURE	1. Depress tongue with a tonguedepressor.2. Sample the posterior pharynx, tonsils, and inflamed areas with sterile culture swab; take care not to contaminate the swab with saliva.3. Insert the swab back into its packet and crush the transport medium vial in the transport container.	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	3-5 Days If No Pathogens	"Noβ-hemolytic Streptococcus isolated"	Room temperature, Transport to the laboratory as soon as possible.
577.	THROAT SWAB CULTURE FOR SCREENING	1. Depress tongue with a tonguedepressor.2. Sample the posterior pharynx, tonsils, and inflamed areas with sterile culture swab; take care not to contaminate the swab with saliva.3. Insert the swab back into its packet and crush the transport medium	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	2-3 Days If No Pathogens	-No growth or -Normal flora	Room temperature, Transport to the laboratory as soon as possible.

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
578.	THROAT SWABCULTURE FOR NEISSERIA	1. Depress tongue with a tonguedepressor.2. Sample the posterior pharynx, tonsils, and inflamed areas with sterile culture swab; take care not to contaminate the swab with saliva.3. Insert the swab back into its packet and crush the transport medium vial in the transport container.	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	3-5 Days If No Pathogens	"No <i>N. gonorrhoeae</i> isolated" if requested	Room temperature, Transport to the laboratory as soon as possible.
579.	THROMBIN TIME PLASMA LEVEL	Citrate blood "blue Top" fill to mark	Hematology 8 am- 3 pm Send out test /contact the laboratory	3-4 Hours	28.9 – 38.1 sec Therapeutic range (72 - 103)	Keep in refrigerator
580.	THYROGLOBULIN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	3.5-77 ng/mL	Room Temperature
581.	THYROID MICROSOMAL ANTIBODIES	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
582.	THYROID STIMULATING HORMONE(TSH)	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	0.270-4.20 mcIU/mL	Room Temperature
583.	THYROID, LOBE/NODULE (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
584.	THYROID, TOTAL THYROIDECTOMY (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
585.	TIP OF HICKMAN CULTURE	Tip of Hickman catheter, collect in sterile container	Microbiology 24 hours/day	2-3 Days If No Pathogens	Not Applicable	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
586.	TIP OF CENTRAL LINE CULTURE	CATHETER – INTRAVENOUS: Distal 1.5- 2 inches of intravascular catheter, e.g. Hickman catheter, PICC line, Central Venous Pressure (CVP) catheters, etc., submitted in a Sterile screw-cap cup container without saline sterile as soon as possible. Transport the specimen to the laboratory immediately.	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	3 Days If Negative	No growth	 Do not accept Foley catheter tip. Do not accept catheter tips which arrive in saline or transport media. For ventricular-peritoneal shunts, peritoneal or spinal fluid is preferred to the catheter tip. If tip is submitted, culture it, but request submission of fluid
587.	TISSUE/SURGICAL/BIOPSY (AEROBIC+ANAEROBIC CULTURE+ GRAM STAIN)	Surgical tissue, bone, biopsy, and other specimens from areas which are sterile under normal conditions collected in a sterile container with 2-3 normal saline	Microbiology 24 hours, Recommended time: 8:00AM - 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 5-7 days If Negative	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	Room temperature. Transport immediately
588.	TONSILS (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	2-4 Days	Not Applicable	Room Temperature
589.	TOTAL CATECHOLAMINE,24HR URINE	24 hours urine collection	Diagnostic Immunology Send out test /contact the laboratory	3-5 Days	Not Applicable	Store in refrigerator
590.	TOTAL IRON BINDING CAPACITY (TIBC)	Calculated Test combined in Iron Study	Immunochemistry 24 hours/day	2-8 Hours	250-400 mcg/dL	Room Temperature
591.	TOTAL PROTEIN	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	6.2 - 8.2 g/dL	Room Temperature
592.	TOTAL PROTEIN,24HR UR	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	<229 mg/24 hours	Keep the container in a cool place (Refrigerator)

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
593.	TOXOPLASMA Ab IGG	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	< 1 IU/mL Negative for IgG antibodies to T. gondii ≥ 1 to < 3 IU/mL Grayzone ≥ 3 IU/mL Positive for IgG antibodies to T. gondii	Room Temperature
594.	TOXOPLASMA Ab IGM	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<0.80 COI Negative for IgM antibodies to T. gondii. ≥ 0.8 to < 1.0 COI Grayzone ≥ 1.00 COI Positive for IgM antibodies to T. gondii.	Room Temperature
595.	Transferrin Saturation (TSAT)	Calculated Test combined in Iron Study	Immunochemistry 24 hours/day	2-8 Hours	20-50%	Room Temperature
596.	TRAP CONTENT CULTURE + GRAM STAIN	Trap content collected in sterile container	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-4 Hours Culture: 2-3 Days If Negative	-No growth or -Normal flora	Room temperature
597.	TRIGLYCERIDE LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Children: See portal Adult: Normal: <150 mg/dL Borderline high: 150-199 mg/dL High: 200-499 mg/dL Very high: > or =500 mg/dL	Room Temperature
598.	TRIGLY CERIDES, BODY FLUIDS	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Not Established See Portal (For interpretation)	Room Temperature
599.	TROPONIN I	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Healthy: <0.16 ng/ml Critical High: >=0.3 ng/ml	Room Temperature
600.	TSH RECEPTOR AUTO- ANTIBODIES	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
601.	TUBO-OVARIAN MASS (MEDIUM)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
			U			
602.	ULCER CULTURE AND GRAM STAIN	Ulcer, collected in a sterile container	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	2-3 Days If Negative Preliminary Result, Gram Stain (Within 1- 2 Hours)	-No growth	Room temperature. Transport immediately
603.	UNDER ICE SECTION FOR FIRST UNDER ICE SECTION BLOCK	Fresh Sample	Pathology Sunday- Thursday 8:00am – 4:00pm	20-30 Minutes	Not Applicable	Room Temperature
604.	UNDER ICE SECTION FOR FIRST SUBSEQUENT BLOCKS ADDITIONAL	Fresh Sample	Pathology Sunday- Thursday 8:00am – 4:00pm	20-30 Minutes	Not Applicable	Room Temperature
605.	Unsaturated iron binding capacity (UIBC)	Measured Test combined in Iron Study	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
606.	UREA 24HR URINE	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	10000-35000 mg/24 hours	Keep the container in a cool place (Refrigerator)
607.	UREA BODY FLUID	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	Not Established See Portal (For interpretation)	Room Temperature
608.	UREA(URINE)	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
609.	UREA LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
610.	URETER (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
611.	URETERIC BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
612.	URETHRAL BIOPSY/POLYP (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
613.	URETHRAL DISCHARGE CULTURE+ GRAM STAIN	Urethral discharge, collected in sterile container	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	2-3 Days If No Pathogens	-No growth - No N. gonorrhoeae	Room temperature
614.	URIC ACID	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room Temperature
615.	URIC ACID 24HR URINE COLLECTION	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	<750 mg/24 hours	Keep the container in a cool place (Refrigerator)
616.	URIC ACID(URINE)	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	Uric acid/ creatinine ratio <0.75 mg/mg	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
617.	URINE ANALYSIS	Urine: ≥ 10 mL in sterile container - midstream urine sample	Microbiology 24 hours/day	2-4 Hours STAT: 1 hour	Color: Pale yellow/ Yellow/Dark Yellow Appearance: Clear Specific gravity: 1.003-1.035 pH: 5/6/7/8 Leukocyte esterase: Negative Nitrite: Negative Protein: Negative Glucose: Normal Ketones: Negative Bilirubin: Negative Urobilonogen: Normal Hemoglobin/Blood: Negative RBCs: 0-1/1-2/ 2-3 /HPF WBCs: 0-1/1-2/ 2-3 /HPF Epith.Cwll: Rare/ few/moderate Crystal: Not seen Casts: 0-2 /LPF Others: Not seen	Room temperature, send within one hour of collection

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
618.	URINE CULTURE	Urine: ≥ 10 mL in sterile container - midstream urine sample	Microbiology 24 hours/day	5-8	-No growth -Non significant growth	Room temperature, send within one hour of collection
619.	URINE pH	Urine: ≥ 10 mL in sterile container - midstream urine sample	Microbiology 24 hours/day	2-4 Hours STAT: 1 hour	Not Applicable	Room temperature, send within one hour of collection
620.	URINE PROTIEN ELECTROPHERISIS	24 hours urine collection	Diagnostic Immunology 8 am- 10 am	1-2 Weeks	No Monoclonal Seen	Store in refrigerator .On day 1, urinate into the toilet when you get up in the morning. Afterwards, collect all urine in a special container for the next 24 hours. On day 2, urinate into the container when you get up in the morning. Cap the container. Keep it in the refrigerator or a cool place during the collection period. Label the container with your name, the date, the time of completion, and return it as instructed. Collection of the first morning urine, which is the most concentrated, may be advised. The health care provider may advise you to stop taking certain medicines that could interfere with the test. Sample must be delivered to the Immunology Laboratory before 10 am
621.	URINE, SPUTUM, GASTRIC WASH-OUT etc.	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	1-2 Days	Not application	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
			V			
622.	VAGINAL DISCHARGE CULTURE FOR SCREENING	Vaginal swab in transport media	Microbiology 24 hours/day	2-3 Days If No Pathogens	Negative for multidrug resistant nonfermentative gram negative pathogens.	Room temperature.
623.	VALPROIC ACID	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic range: 50-100 Toxic Level: >100 mcg/mL	Room Temperature
624.	VANCOMYCIN CONCENTRATION, RANDOM	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	TROUGH: 10.0-20.0 mcg/mL PEAK : 20.0-45.0 mcg/mL	Room Temperature
625.	VANCOMYCIN CONCENTRATION, TROUGH	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic range :10.0-20.0 mcg/mL Toxic Level:>20 mcg/mL	Room Temperature
626.	VANCOMYCIN CONCENTRATION,PEAK	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic range :20.0-45.0 mcg/mL Toxic Level:>80 mcg/mL	Room Temperature
627.	VANILYMANDELIC ACID 24HR URINE	24 hours Urine collection container kept cool	Immunochemistry 8 am-10 am	One Week	0 - 13.6 mg/24hrs	Keep the container in a cool place (Refrigerator). It must be delivered to the section before 10 am
628.	VANILYMANDELIC ACID SPOT URINE	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Not Established	Keep the container in a cool place (Refrigerator).
629.	VARICELLA ZOSTER VIRUS IgG, SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	One Week	positive	Room temperature
630.	VARICELLA ZOSTER VIRUS IgM, SERUM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology 8 am- 3 pm	One Week	Negative	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
631.	V-ctO2	Measured test listed in Venous Blood Gas + Extended Critical Care Profile	Immunochemistry 24 hours/day	One Hours	NA	Should arrive the lab ASAP No more than 30 mint.
632.	Venous blood gas plus extended critical care profile	Minimum 0.5 ml HEPARINIZED SYRINGE – under ice	Immunochemistry 24 hours/day	One Hours	See Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Should arrive the lab ASAP No more than 30 mint
633.	VIBRIO CHOLERAE,STOOL CULTURE	1- Stool: 1-2 g, or 5 ml in clean container; 1)Do not collect from bedpan containing urine 2) Must be transported ASAP, not longer than 2 hours of passage 2- Rectal swabs It must show stool. It is less satisfactory than raw stool sample. Transport to the lab. ASAP.	Microbiology 8 am- 5 pm (Arrange with microbiology lab)	3-5 Days	Negative culture for Vibrio cholerae	Must be transported ASAP, not longer than 2 hours of passage
634.	VISCOSITY	Minimum 5 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Week	1 - 1.24 cP	Room temperature Fill 5ml Blood
635.	VITAMIN B12 LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	197-771 pg/mL	Room Temperature
636.	VORICONAZOLE LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic range :1.0-5.5 mcg/mL Trough level (ie, immediately before next dose) monitoring is recommended. Critical High :> 6.0 mcg/mL	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
637.	VULVAL BIOPSY (SMALL)	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
638.	VULVAR SWAB CULTURE FOR SCREENING	Swab collected from vulva (including labia, Bartholin glands) in transport media	Microbiology 24 hour∖day	3-5 Days	Negative for multidrug resistant nonfermentative gram negative pathogens.	Clean the surface of the lesion with a sterile normal saline. Sample exudates or area of erythema with a swab Transport to the lab ASAP
639.	VULVECTOMY (LARGE)	Buffered Formalin	Pathology Sunday- Thursday 8:00am — 4:00pm	3-5 Days	Not Applicable	Room Temperature
			W			
640.	WASH/LAVAGE, ROUTINE CYTOLOGY FOR MALIGNANT CELLS	Sterile Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
641.	WASHED RBC/UNIT	Call Blood Bank Extension. 1710	Blood Bank	24 Hours	Not Applicable	Call Blood Bank
642.	WBC DIFFERENTIAL COUNT	EDTA WHOLE BLOOD LAVENDOR TOP TUBE	Hematology 24hr/7 Days	4-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges please refer to page (94+96)	Room temperature
643.	Widal Test	2-3 ml Blood " Plain Red Top Tube"	Diagnostic Immunology Send out test /contact the laboratory	-5 Working Days	Negative	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
644.	WOUND CULTURE + GARM STAIN	Deep closed wounds: a. Decontaminate the site with saline and 70% alcohol b. Aspirate the loculated fluid or pus from the depth of postulator vesicular wounds and abscess with a sterile needle and syringe. c. If a material cannot be obtained with a needle and syringes, a swab must be used, either separate the wound margins with the thumb and forefinger of one hand (wearing sterile gloves) or make a small opening in a closed abscess with a scalpel blade before extending the tip of the swab deeply into the depth of the lesion with the other hand. Do not to touch the adjacent skin margins d. Transport in anaerobic transport media ASAP if anaerobes are suspected. Superficial open wounds: a. Clean open lesions thoroughly using sterile normal saline 0.9%.b. Aspirate the purulent fluid or pus from the depth of wound with a sterile needle and syringe. c. Open superficial wounds are not suitable for anaerobic culturing. d. Transport in aerobic transport media ASAP.	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	Preliminary Gram stain: 2-3 Hours Culture: 2-3 Days If Negative	-No growth	Room temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
			Y			
645.	YERSINIA, STOOL CULTURE	Stool: 1-2 g, or 5 ml in clean container 1)Do not collect from bedpan containing urine 2) Must be transported ASAP, not longer than 2 hours of passage 2- Rectal swabs It must show stool. It is less satisfactory than raw stool sample. Transport to the lab. ASAP.	Microbiology 24 hours, Recommended time: 8:00AM – 4:00 PM	3-5 Days	Negative culture for Yersinia spp.	Must be transported ASAP, not longer than 2 hours of passage
646.	YEAST SUSCEPTIBILITY TESTING	Yeast Isolate on solid media	Microbiology 8 am- 5 pm	3-5 Days	Not Applicable	Reflect test
647.	ZIEHL- NEELSEN ON TISSUE	Paraffin Block	Pathology Sunday- Thursday 8:00am — 4:00pm	1-2 Days	Not Applicable	Room Temperature
648.	ZINC LEVEL	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Week	70 – 120 mcg/dL	Room Temperature

No.	Test Name	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
649.	ZINC LEVEL 24HR URINE COLLECTION	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	One Week	300 – 800 mcg/24hrs	Keep the container in a cool place (Refrigerator). It must be delivered to the section before 10 am

Chapter Three: Immunochemistry Profiles (Seven)

1. Kidney Function Tes	ts 2. Chemistry Profile 14	3. Chemistry Profile 20	4. Liver Function Tests
Sodium (Na)	Sodium (Na)	Sodium (Na)	
Potassium (K)	Potassium (K)	Potassium (K)	
Chloride (Cl)	Chloride (Cl)	Chloride (Cl)	
Urea	Urea	Urea	
Creatinine	Creatinine	Creatinine	
Uric Acid	Uric Acid	Uric Acid	
	Calcium	Calcium	
7 I · · I D · 6•1	Magnesium	Magnesium	
5. Lipid Profile	Phosphorus	Phosphorus	
Cholesterol	Glucose	Glucose	
Triglyceride	Albumin	Albumin	
HDL		Adjusted Calcium	
LDL	6. Iron Study	eGFR	
	Iron Serum Level	Bicarbonate	Albumin
7. Calcium Panel		Total Protein	Total Protein
	Total Iron Binding Capacity	Bilirubin Total	Bilirubin Total
Albumin, Serum Level Adjusted Calcium	Transferrin Saturation Test	Bilirubin Direct	Bilirubin Direct
Calcium, Serum Level	Unsaturated Iron Binding Capacity	Alkaline Phosphatase	Alkaline Phosphatase
		ALT	ALT
		AST	AST

Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges

Complete Blood Count Ref. Range

	Male& Female 4 - 11x 10 ³ cells/μL
	Children Age 8-13 years: 4.5 - 13.5x 10 ³ cells/μL
	Children Age 4-7 years: 5- 17x 10 ³ cells/μL
	Children Age 1-3 years: 5.5 - 17.5x 10 ³ cells/μL
	Male $4.35 - 6.5 \ 10^6 \ cells/\mu L$
	Female $3.90 - 5.50 \ 10^6 \ cells/\mu L$
RBC Count	Children Age 8-13 years: 4 - 5.4x 10 ⁶ cells/μL
	Children Age 4-7 years: 4 - 5.2x 10 ⁶ cells/μL
	Children Age 1-3 years: 3.4 - 5.2x 10 ⁶ cells/μL
	Male 13.0 – 18.0 g/dl
	Female 12.0 – 16.0 g/dl
Hemoglobin	Children Age 8-13 years: 12 - 15 g/dl
	Children Age 4-7 years:10 -15 g/dl
	Children Age 1-3 years: 10-16 g/dl

	Male 40-54 %
	Female 37-46 %
Hematocrit (PCV)	Children Age 8-13 years: 35 – 49 %
	Children Age 4-7 years: 34 – 48 %
	Children Age 1-3 years: 34 – 48 %
	Adult 80-94 fl
MCV	Children Age 8-13 years: 80 - 94fl
	Children Age 4-7 years: 78 - 94fl
	Children Age 1-3 years: 76 - 92fl
	Adult 27 - 31 pg
МСН	Children Age 8-13 years: 26 - 32pg
	Children Age 4-7 years: 23 - 31pg
	Children Age 1-3 years: 23 - 31pg
МСНС	Adult 30 - 35 g/dl
	Children (1-13 years) 32 - 36g/dl
RDW	11.6-14.6 %
Neutrophils (PMN)	Adult 40 - 65 %
(Children Age 8-13 years: 35 - 65 %

	Children Age 4-7 years: 30 - 60 %
	Children Age 1-3 years: 22 - 46%
Bands	0-5 %
	Adult 25- 40%
Lymphocytes	Children Age 8-13 years: 23 - 53 %
	Children Age 4-7 years: 29 - 65%
	Children Age 1-3 years:37 - 73%
Monocytes	Adult 2 - 8%
•	Children (1-13 years) 2 - 11%
Eosinophils	0-4%
Basophils	0-1 %
Blasts	0%
Promyelocytes	0%
Myelocytes	0%
Metamyelocytes	0%
Platelet count	$150 - 400 \times 10^3 / \text{ ul}$
MPV	7.5 – 9.3 fl

Body Fluid Analysis Ref. Range

Body Fluids/total nucleated cells	Synovial Fluids: Both genders $(0 - 200/\mu L)$
WBC	Peritoneal/pleural/pericardial: Both genders (0-500/μL)
Neutrophils (Body Fluids)	Synovial:<25%
Lymphocytes (Body Fluids)	Variable
Monocytes (Body Fluids)	70%
Body Fluids/RBC	Synovial Fluids: Both gender <1 *10^6/L

CSF Analysis Reference Range

CSF /WBC	Adults 0-5 *10^6/L
CSF/ Neutrophils	Adults 0-6 %
CSF/ Lymphocytes	Adults 40-80 %
CSF/ Monocytes	Adults 15-45 %
CSF/ RBC	<1 *10^6/L

Other Age / Gender/ Circalunar Rhythm Dependent Reference Ranges

Prolactin	Males : 4.04-15.2 ng/mL Females: 4.79-23.3 ng/mL
	9 - 10.5 mg/dl (0 - 18) years
Adjusted calcium	8.8 - 10.2 mg/dl (18 -99) Year
FOLLICLE STIMULATING HORMONE	Male: ≤ 12.4 mIU/mL Normally Menstruating Females Follicular Phase: ≤ 12.5 mIU/mL Mid-Cycle Peak: ≤ 21.5 mIU/mL; Luteal Phase: ≤ 7.7 mIU/mL Post-menopausal Females: ≤ 134.8 mIU/mL
LUTEINIZING HORMONE	Normal Males: ≤ 8.6 mIU/mL Normally Menstruating Females: Follicular Phase: ≤ 12.6 mIU/mL Mid-Cycle Peak: ≤ 95.6 mIU/mL; Luteal Phase: ≤ 11.4 mIU/mL Postmenopausal Females: ≤ 58.5 mIU/mL
AMYLASE(URINE)	α-amylase/creatinine ratio Men: 58-283 U/g Women: 75-390 U/g
ALBUMIN, LEVEL	3.6 - 5.3 g/dl (0 - 18) Year 4 - 5.1 g/dl (18 -99) Year
BETA-2-MICROGLOBULIN	< 60 years 0.8-2.4 mg/L > 60 years ≤ 3.0 mg/L
BETA HUMAN CHORIONIC GONADOTROPIN (Beta-HCG)	Non-pregnant, pre-menopausal at or below ≤ 5.3 mIU/mL Post-menopausal at or below ≤ 8.3 mIU/mL Men ≤ 2.6 mIU/mL
BILIRUBIN TOTAL LEVEL	0.2 - 0.8 mg/dl (0 - 18) years 0.28 - 1.0 mg/dl (18 -99) Year
17-BETA-ESTRADIOL (E2)	Healthy men: 11.3-43.2 Healthy postmenopausal women: < 138 Healthy women Cycle Phase Follicular: 30.9 - 90.4 Ovulation: 60.4 - 533 Luteal: 60.4- 232 Healthy women Cycle Sub-Phase Early follicular: 20.5 - 62.8 Intermediate follicular: 26 - 79.8 Late follicular: 49.5 - 233 Ovulation: 60.4 - 602 Early luteal: 51.1 - 179

	Intermediate luteal: $66.5 - 305$ Late luteal: $30.2 - 222$	
FERRTIN LEVEL	Men, 20-60 years: 30-400 ng/mL	
	Women, 17 60 years: 13 150 ng/mL	
Commo chitamal Tuon fonosa (CCT)	Males: 18 years: 8-61 U/L Females: 18 years: 5-36 U/L	
Gamma-glutamyl Transferase (GGT)	Children: See portal	
	Children: See portal.	
IMMUNOGLOBULIN A	Adult: 61-356 mg/dL	
	Neonates: <1.5	
	Infants in 1st year of life: <15.0	
	Children aged 1-5 years : <60	
IMMUNOGLOBULIN E	Children aged 6-9 years : <90	
	Children aged 10-15 years : <200	
	Adults : <100	
IMMUNOGLOBULIN G	Children: See portal	
	Adult: 767-1590 mg/dL	
IMMUNOGLOBULIN M	Children: See portal	
	Adult: 37-286 mg/dL Males: 50-150 mcg/dL	
IRON LEVEL	Females: 35-145 mcg/dL	
	Children: See portal	
	Adult:	
	Desirable: <100 mg/dL	
LDL CHOLESTEROL	Above Desirable: 100-129 mg/dL	
	Borderline high: 130-159 mg/dL	
	High: 160-189 mg/dL	
	Very high: > or =190 mg/dL	
	Age (years)	
	< 40 years : 1.4 ng/mL	
PROSTATIC SPECIFIC ANTIGEN	40-49 years: 2.0 ng/mL 50-59 years: 3.1 ng/mL	
	60-69 years: 4.1 ng/mL	
	\geq 70 years: 4.4 ng/mL	
	Male: 0.20-1.40	
	Female Follicular :0.20-1.50	
PROGESTERONE SERUM LEVEL	Female Ovulation: 0.80-3.00	
	Female Luteal: 1.70-27.00	
	Postmenopause: 0.10-0.80"	
RETICULOCYTE COUNT, BLOOD	Adult_ 0.2-2%	

	Children 0.5 - 4% New born 2- 6%		
TESTOSTERONE TOTAL, LEVEL	Healthy Males: 20-49 years: 2.49-8.36 ≥ 50 years: 1.93-7.40 ng/mL Healthy premenopausal Females: 20-49 years: 0.084-0.481 ng/mL ≥ 50 years: 0.029-0.408 ng/mL		
	pCO2 Male: 35-4		
	Total Hb Female: 32-4 Total Hb Male: 13.5- Female: 12.0	17.5 g/dL	
	pO2 83-108 n	nm Hg	
	sO2 >95	•	
	cK+ 3.4-4.5 m	nmol/L	
	cNa+ 136-146 r	nmol/L	
Arterial blood gas plus extended critical care profile	Ionized Calcium (Ca2+) 4.61 - 5.17	7 mg/dL	
Good Francisco Control	cCl- 98-106 m	nmol/L	
	cGlucose 70-105 r	ng/dL	
	cLactate 0.5-1.6 m	nmol/L	
	FO2Hb 94-98		
	FCOHb 0.5-1.:	5 %	
	FMetHb 0.0-1.:		
	cBase(Ecf)/ SBE -2 to +2 n		
	HCO3- 22 – 26 n	nmol/L	
OXALATE 24HR URINE	Male Adult: 7.2- 44.1 Female Adult: 3.6- 28.8 Children: 12.6- 37.8 mg/24hrs		
MAGNESIUM	1.7 - 2.6 mg/dl (0 - 18) years 1.7 - 2.4 mg/dl (18 -99) Year		
PHOSPHORUS LEVEL	3.1 - 5.4 (0 - 18) years 2.5 - 4.5 (18 -99) Year critical value < 1.0 mg/dL		
Unsaturated iron binding capacity (UIBC)	Females: 135-392 mcg/dL Males: 125-345 mcg/dL		

UREA(URINE)	Female: 282 – 3486 mg/dl Male: 310 - 3300 mg/dl	
UREA LEVEL	Children: 15 - 38 mg/dl Male: 17.0 - 45.0 mg/dl Female: 12.0 - 36.0 mg/dl	
URIC ACID	Children: 2.5 - 5.9 mg/dl Male: 2.6 – 8.0 mg/dl Female: 2.2 - 6.4 mg/dl	
DEHYDROEPIANDROSTERONE SULPHATE SERUM (DHEA-S)	Female:µg/L 10 -14 yrs: 33.9 - 280 15 - 19 yrs: 65.1 -368 20 - 24 yrs: 148.0 - 407 25 - 34 yrs: 98.8 - 340 35 - 44 yrs: 60.9 - 337 45 - 54 yrs: 35.4 - 256 55 - 64 yrs:18.9 - 205 65 - 74 yrs: 9.4 - 246 More than 75 yrs: 12.0 - 154 Male:µg/L 10 -14 yrs: 24.4 - 247 15 - 19 yrs: 70.2 - 492 20 - 24 yrs: 211 - 492 25 - 34 yrs: 160 - 449 35 - 44 yrs: 88.9 - 427 45 - 54 yrs: 44.3 - 331 55 - 64 yrs:51.7 - 295 65 - 74 yrs: 33.6 - 249 More than 75 yrs: 16.2 - 123	
INHIBIN A & B	(0-4)days of LMP :5.46-28.16 , (5-10)days of LMP:7.87-34.54 (11-13)days of LMP :19.49-102.28 ,Day of ovulation:49.92-155.48 (15-17)days of LMP :35.93-132.68 ,(18-25)days of LMP :13.15-159.55 (26-28)days of LMP :7.28-89.95 , IVF peak level:354.2-1690 Postmenopausal : <3.88	
Venous blood gas plus extended critical care profile	V-PH 7.35-7.45 V-pCO2 42 – 50 mm Hg V-pO2 30 - 50 mm Hg	

	V-sO2	65 - 75%		
	V-HCO3-	23 – 27 mmol/L		
	cBase(Ecf)/ SBE	-2 to +2 mmol/L		
	cK+	3.4-4.5 mmol/L		
	cLactate	0.5-1.6 mmol/L		
	cNa+	136-146 mmol/L		
	FO2Hb	94-98 %		
	FCOHb	0.5-1.5 %		
	FMetHb	0.0-1.5 %		
	Ionized Calcium (Ca2)	4.61 - 5.17 mg/dL		
	cCl-	98-106 mmol/L		
	cGlucose	70-105 mg/dL		
	Total Hb	Male: 13.5-17.5 g/dL Female: 12.0-16.0 g/dL		
	<18 years old: not calculated >18 years:			
	710;	>10 years.		
eGFR	Terms	GFR mL/min/1.73 m		
	Normal or high	90		
	Mildly decreased	60 to 89		
	Mildly to moderately decreased	45 to 59		
	Moderately to severely decreased	30-44		
	Severely decreased	15-29		

Chapter Five: Transfusion Services (Blood Bank Products)

Product name	Requirements	Turnaround time	Special Handling
Blood Unit, Cross match & Dispense	 First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing. Non- First-time transfusion (History of Blood Group is on LIS): One EDTA sample. 	1 hour and 30 minutes	<10 C°
Cryoprecipitate unit	First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing.	2 Hours	Room temperature
Filtered Blood Unit And Dispense	 First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing. Non- First-time transfusion (History of Blood Group is on LIS): One EDTA sample. 	1 hour and 30 minutes	<10 C°
Filtered Irradiated Single Donor Platelets	First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing.	30 minutes	Room temperature

Product name	Requirements	Turnaround time	Special Handling
Fresh Frozen Plasma/Unit	First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing.	2 Hours	Room temperature
Leukocyte reduced irradiated blood unit	 First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing. Non- First-time transfusion (History of Blood Group is on LIS): One EDTA sample. 	2 Hours	<10 C°
Therapeutic Plasma Exchange	First time Exchange (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing.	Call blood bank	Call blood bank
Washed RBC/Unit	 First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing. Non- First-time transfusion (History of Blood Group is on 	24 hours	<10 C°
	LIS): One EDTA sample.		