

King Hussein Cancer Center

**Department of Pathology & Laboratory Medicine (DPLM)** 

# DPLM Alphabetical Tests List & Collection Requirements

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**Department of Pathology & Laboratory Medicine** 

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# **<u>Chapter One:</u>** DPLM Directory

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Blood Bank Supervisor	1102				
Blood Bank Donation Area	1738				
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**<u>Chapter Two:</u>** Alphabetical Tests List & Collection Requirements

<u>#</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	E	F
<u>G</u>	H	Ī	<u>J</u>	<u>K</u>	<u>L</u>	<u>M</u>
N	<u>0</u>	<u>P</u>	Q	<u>R</u>	<u>S</u>	<u>T</u>
$\underline{\mathbf{U}}$	$\underline{\mathbf{V}}$	W	<u>Y</u>	<u>Z</u>		

No.	Test Name	Abbreviatio	on Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
1.	7-amino-actinomycin D (Cell viability Solution)	7-AAD	<ul> <li>The specimens in flow include the below:</li> <li>• Peripheral blood (PB): EDTA, lithium heparin, and acid citrate dextrose (ACD).</li> <li>• Bone marrow (BM): EDTA, lithium heparin, and acid citrate dextrose (ACD).</li> <li>• Body fluids (pleural fluid, ascitic fluid, pericardial fluid vitreous fluid and cerebrospinal fluid): Fluids shall be collected as per standard medical practice. For CSF, special precautions should be taken, it should be processed within an hour or two. If delay in the processing is anticipated, CSF should be collected in RPMI media with bovine serum (contact lab).</li> <li>• Fine needle aspirates (FNA) from lymph nodes (LN) and other lesions: Transported in RPMI media to the laboratory (contact lab for the RPMI media).</li> <li>• Fresh tissue samples: Transported in RPMI media or sterile saline-soaked gauze at removal, and kept moist throughout transport to the laboratory (contact lab for the RPMI media).</li> </ul>	Hematopathology – Flow cytometry Sunday to Thursday: 8:00 am-4:00 pm Otherwise: Contact the Lab.	1 working day	Viability should be at least 80%.	-Fresh blood and bone marrow up to 48 hrs. at room temperature. -Collect tissue / FNA in RPMI media and send immediately.
2.	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.
3.	25 Hydroxy Vitamin D3	VIT D	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	deficiency ≤ 20 ng/mL Insufficient < 30 ng/mL Normal ≥ 30 ng/mL	Room Temperature

No.	Test Name	Abbreviatio	on Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
4.	17-Hydroxyprogesterone	17-OHP	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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	Abbreviatio	on Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
5.	5-Hydroxyindole Acetic Acid	5-HIAA	24hr urine collection	<b>Immunology</b> 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 I0am.
6.	5-Nucleotidase,Serum Level	-	Minimum 2-3 ml Blood "Plain Red Top Tube"	Immunolog y Send out test /contact the laboratory	1 – 3 working days	< 10 IU/L	Glass tube

No.	Test Name	Abbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
			A				
7.	Acetaminophen (Paracetamol)	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	2 Days	Ref. Range :Therapeutic Level: 10-30, Toxic Conc. : More Than 200ug/mL	Room temperature
8.	Acetone, Screen	Ace	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Negative	Room Temperature
9.	Adjusted calcium	Adj Ca	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	Not orderable test listed in calcium adjusted panel, chem-14 & Chem-20 profiles.
10.	Acetylcholine Receptor (MUSCL ACHR) Binding Ab	AChR	2 ml Serum	Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature.
11.	Acid Fast Bacillus Culture + AFB Stain	AFB	<ol> <li>Tissue, skin, Tissue should be submitted in 2 to 3 mL sterile saline</li> <li>Blood: 3-5 Heparin tubes (green tip)</li> <li>Sterile Body fluids except CSF: ≥ 15 mL as much fluid as possible;</li> <li>Bone marrow: ≥ 10 mL sterile screw cap container</li> <li>Or 5 Heparin tubes (green tip)</li> <li>Lower respiratory tract (TRAP/Sputum/BAL) : ≥ 3 mL</li> <li>Urine: ≥ 40 ml</li> <li>CSF: 2-3 mL</li> <li>&gt;2ml first morning sputum, not saliva in sterile container</li> </ol>	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 A	Abbreviatio	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
12.	Acid Fast Bacillus Stain	AFB	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
13.	Activated Partial Thromboplastin Time	РТТ	Citrated blood "Blue Top"" fill to mark	Hematology 24 hours/day	4-8 Hours	27.1-41.8 sec Therapeutic range (72-103)	Room temperature
14.	Adenovirus, IgG	AdV	2 ml Serum	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
15.	Adenovirus, IgM	AdV	2 ml Serum	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
16.	Adenovirus, Stool	AdV	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.	<b>Microbiology</b> 24 hours/day	2-4 Hours	Negative	Room temperature
17.	Adrenocorticotropic Hormone (ACTH)	АСТН	EDTA "Fill to Mark" (Lavender)- Under ICE	Immunochemistry 8am-10 am	2-8 Hours	7.2 63.3 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.

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
18.	Anti-Diuretic Hormone	ADH	Minimum 2-3 ml Blood " Plain Red Top Tube" Minimum 2 ml EDTA blood tube "Lavender Top" fill to mark	Immunology Send out test /contact the laboratory	1-2 Weeks	Ref. Range : 1.1 - 4.5 pg./ml	Under ice
19.	Albumin, Level	Alb	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
20.	Albumin, Body Fluids	Alb	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
21.	Aldolase Level	ALDOA	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 Immunochemistr y section before 10 am
22.	Alkaline Phosphatase	ALP	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
23.	Alkaline Phosphatase Isoenzymes	ALP-ISO	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
24.	Alanine Aminotransferase	ALT	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunochemistry</b> 24 hours/day	2-8 Hours	Not Applicable	Room temperature
25.	Albumin , Body Fluids	ALB BF	1-3 ml fluid	<b>Immunochemistry</b> 24 hours/day	8-24 Hours	Not Applicable	Room temperature

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
26.	Albumin, Serum Level	ALB	3-5 ml Blood plain / Tube Red Top	Immunochemistry 24 hours/day	2-8 Hours	Not Applicable	Room temperature
27.	Aldolase , Serum Level	ALDOA	3-5 ml Blood plain / Tube Red Top	<b>Immunochemistry</b> 8 am-9 am	One Week	Not Applicable	Under ice Sample must be obtained at 8 am, it must be delivered to the Immunochemistr y section before 10 am
28.	Aldosterone	ALD	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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.
29.	ALK (IMMUNOHISTOIMMUNOCHEM ISTRY )	ALK -IHC	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
30.	Alkaline Phosphatase	ALK	3-5 ml Blood plain / Tube Red Top	<b>Immunochemistry</b> 24 hours/day	2-8 Hours	Not Applicable	Room temperature

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
31.	Alpha-1-Antitrypsin	AAT	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> Send out test /contact the laboratory	3-5 Working Days	Adult: 90-200 mg/dl Child: Less than month: 124-348 1-6 months:111- 297 7-24months:95- 251 More than months:110- 280 mg/dl	Room temperature
32.	Alpha-Feto Protein , Serum Level	AFP	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	$\leq$ 7.0 ng/mL	Room Temperature
33.	Alanine Aminotransferase	ALT	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
34.	AMIKACIN Peak		Minimum 1 ml Blood Lithium Heparin (LightGreen) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic range : 20 - 25 Toxic Level : >35	Room Temperature
35.	AMIKACIN Trough		Minimum 1 ml Blood Lithium Heparin (LightGreen) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Therapeutic range : 5 - 10 Toxic Level : >10	Room Temperature
36.	Ammonia ,Plasma	NH3	EDTA blood tube "Lavender Top" fill to mark/ Under ice	Immunochemistry 24 hours/day	One Hours	< or =30 mcmol/L	Keep on ice
37.	Amylase In 24HR Urine Collection	AMY urine	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)
38.	Amylase Level	AMY	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

No.	Test Name A	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
39.	Amylase (Urine)	AMY	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
40.	Amylase ,Body Fluid	AMY BF	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
41.	Anti-Insulin Antibody	AIA	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunolo</b> gy Send out test /contact the laboratory	3-5 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.
42.	Anti-Hepatitis-A Total Ab Quantitative	HAV	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<ul> <li>≥1.20 COI Negative for HAV-specific antibodies</li> <li>≥ 0.8 to &lt; 1.2 COI Gray zone</li> <li>&lt; 0.80 COI Positive for HAV-specific antibodies</li> </ul>	Room Temperature
43.	Anaerobic Swab Culture	-	Aspirating abscess fluid with sterile syringe and needle and then injecting the aspirated material into anaerobic transport swab.	<b>Microbiology</b> 8 am- 5 pm	5-7 Days If Negative	- No growth after seven days incubation	Room temperature, send immediately
44.	Anal Biopsy / Polyp	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room temperature

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
45.	Anal Fissure / Fistula	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room temperature
46.	Androstenedione, Serum Level	ASD	Minimum 2-3 ml Blood " Plain Red Top Tube"	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.
47.	Angiotensin Converting Enzyme	ACE	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range : 8-52 U/L	Room temperature
48.	Antibody Elution	-	EDTA blood tube "Lavender Top " fill to mark	Blood Bank 8 am- 5 pm	24 Hours	Not Applicable	Room temperature
49.	Antibody Identification	-	Call Blood Bank Extension. 1710	<b>Blood Bank</b> 24 hours/day	8-24 Hours	Not Applicable	Room temperature
50.	Antibodies Titer	-	EDTA blood tube "Lavender Top " fill to mark	Blood Bank 8 am- 5 pm	24 Hours	Not Applicable	Room temperature
51.	Antiacetyle Choline Receptor Antibody	AChR AB	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:10	Room temperature
52.	Anti-Cardiolipin AB, IgG	ACA IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	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
53.	Anti-Cardiolipin Ab, IgM	ACA IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 8 am- 3 pm	3-5 Working Days	Negative: less than or equal 15 Positive: more than 15.0 MPL/mL	Room temperature

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
54.	Anti-Cyclic Citrullinated Peptide	ССР	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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
55.	Anti-Deoxyribonuclear Antibodies	Anti-DNA Ab	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
56.	Anti Endomysial Antibody IgA	EMA IgA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
57.	Anti Endomysial Antibody IgG	EMA IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
58.	Anti Entamoeba Histolytica Ab	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
59.	Anti-GAD Antibody	GAD	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
60.	Anti Gliadin Antibody IgG	AGA Igg	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Normal: less than 12 U/ml Elevated: more than 12	Room temperature

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
61.	Anti Gliadin Antibody, IgA	AGA IgA	Minimum 2-3 ml Blood " Plain Red Top Tube"	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
62.	Anti-Glomerular Basement Membrane Anti Body	anti-GBM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
63.	Anti-Intrinsic FACTOR Antibodies	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative: less than 6 Positive: more than or equal 6	Room temperature
64.	Anti-Islet Cells Antibody	ICA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
65.	Anti-Liver Kidney Microsomal-1 Antibody	LKM-1	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
66.	Anti-Mitochondrial Antibodies	AMA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
67.	Anti-Neuronal Nuclear Antibodies, Serum	ANNA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
68.	Anti Neutrophelic Cytoplasmic Antibody	ANCA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
69.	Anti-Nuclear Antibodys	ANA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Titer: less than 1:80	Room temperature

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
70.	Anti-Ovarian Antibodies, Serum	AOA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range : Titer: less than 1:20	Room temperature
71.	Anti-Parietal Cell Antibodies	APCA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:20	Room temperature
72.	Anti-Phospholipid Antibodies, Igm	APLAs IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	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
73.	Anti-Phospholipid Antibodies, Igg	APLAs IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	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
74.	Anti-Saccharomyces Ab	ASCA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunolo gy Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:20	Room temperature
75.	Anti-Skin Antibodies Indirect	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
76.	Anti-Smooth Muscle Antibodies	ASMA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:20	Room temperature
77.	Anti Streptolysin O Titer	ASO	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
78.	Anti-Thyroglobulin Antibodies	TgAb	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	$\leq$ 115 IU/mL	Room Temperature

No.	Test Name A	bbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
79.	Anti-SARS-Cov-2 Spike	SARS- CoV-2	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 $\geq 0.80 \text{ U/mL}$ Positive for anti SARS CoV 2 S	Room Temperature
80.	Anti-Thrombin Iii Activity	ATIII	SODIUM CITRATE TUBE "Blue Top" fill to mark	Immunochemistry 24 hours/day	2-8 Hours	80-120 %	Room Temperature
81.	Anti-Thyroid Microsomal Antibodies	ТРО	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range: Titer: less than 1:100	Room temperature
82.	Anti-Thyroid Peroxidase Antibodies	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Ref. Range : 0-5.61 IU/ml	Room temperature
83.	Anti-Tissue Transglutaminase IGG &IGA	anti-tTG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
84.	Appendix	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room temperature
85.	Arterial blood gas plus extended critical care profile	ABG	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
86.	Aspartate Aminotransferase	AST	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
87.	Aspirate Fluid Culture (Aerobic +Anaerobic+ Gram Stain)	-	<ul> <li>Volume: &gt; 3 mL in sterile container</li> <li>Or Volume: 8-10 mL in Blood culture Aerobic bottles + 8-10 mL in Anaerobic bottle.</li> </ul>	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 A	Abbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
			B				
88.	Bacterial Isolate For ID And Sensitivity	-	Isolated organism on culture media- sealed and BIOHAZARD labeled	<b>Microbiology</b> 8 am- 4 pm	3-5 Days	Not Applicable	Room Temperature
89.	Beta-2-Microglobulin	B2M	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
90.	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
91.	Bicarbonate	нсоз	Minimum 1 ml Blood Lithium Heparin (LightGreen) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	21-28 mmol/L	Room Temperature
92.	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
93.	Bilirubin Direct	DBIL	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

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
94.	Bilirubin Total Level	TBL	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
95.	Bilirubin Total, Body Fluid	BIL BF	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
96.	Bladder Biopsy	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room temperature
97.	Bladder: Radical Cystectomy	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room temperature
98.	Bladder Tumor Tur	TURBT	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room temperature

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
99.	Blood Culture-Hickman-White Lumen (Aerobic + Anaerobic)	-	Volume: Blood fill volumes in each bottle : Dptimal: 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	<b>Microbiology</b> 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 A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
100.	Blood Culture-Hickman-Red/Brown Lumen (Aerobic + Anaerobic)	-	Volume: Blood fill volumes in each bottle : Dptimal: 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	<b>Microbiology</b> 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	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
101.	Blood Culture-Hickman-Blue Lumen (Aerobic + Anaerobic)	-	<ul> <li>Volume: Blood fill volumes in each bottle :</li> <li>Optimal: 8-10 mL</li> <li>Minimum blood volumes in each bottle: <ul> <li>Versa TREK: 1 - 5 ml</li> <li>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</li> </ul></li></ul>	<b>Microbiology</b> 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 A	bbreviatio	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
102.	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 anaerobic (red top)blood culture bottle	<b>Microbiology</b> 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	<ul> <li>Send to</li> <li>Microbiology lab after collection immediately</li> <li>Keep at room temperature,</li> </ul>

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
103.	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 anaerobic (red top)blood culture bottle	<b>Microbiology</b> 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,
104.	Blood Culture-Cvp-Red/Brown Lumen (Aerobic + Anaerobic)	-	<ul> <li>Volume: Blood fill volumes in each bottle :</li> <li>Optimal: 8-10 mL</li> <li>Minimum blood volumes in each bottle: <ul> <li>Versa TREK: 1 - 5 ml</li> <li>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.</li> </ul></li></ul>	<b>Microbiology</b> 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 A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
105.	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	<b>Microbiology</b> 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	<ul> <li>Send to</li> <li>Microbiology lab after collection immediately</li> <li>Keep at room temperature,</li> </ul>
106.	Blood Culture-Cvp-Blue Lumen (Aerobic + Anaerobic)	-	<ul> <li>Volume: Blood fill volumes in each bottle :</li> <li>Optimal: 8-10 mL</li> <li>Minimum blood volumes in each bottle: <ul> <li>Versa TREK: 1 - 5 ml</li> <li>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.</li> </ul></li></ul>	<b>Microbiology</b> 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 A	bbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
107.	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.	<b>Microbiology</b> 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	<ul> <li>Send to</li> <li>Microbiology lab after collection immediately</li> <li>Keep at room temperature,</li> </ul>
108	Blood Culture-Port-A-CATH (Aerobic + Anaerobic)	-	<ul> <li>Volume: Blood fill volumes in each bottle :</li> <li>Optimal: 8-10 mL</li> <li>Minimum blood volumes in each bottle: <ul> <li>Versa TREK: 1 - 5 ml</li> </ul> </li> <li>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</li> </ul>	<b>Microbiology</b> 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 A	bbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
109.	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	<b>Microbiology</b> 24 hours	5-7 Days If Negative.	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days incubation	<ul> <li>Send to</li> <li>Microbiology lab after collection immediately</li> <li>Keep at room temperature,</li> </ul>
110.	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	<b>Microbiology</b> 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	<ul> <li>Send to</li> <li>Microbiology lab after collection immediately</li> <li>Keep at room temperature,</li> </ul>

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
111.	Blood Film	-	EDTA blood tube "Lavender Top" fill to mark	Hematology Working days only	8-24 Hours	Not Applicable	Room temperature
112.	<b>Blood Film For Parasites</b>	-	EDTA blood tube "Lavender Top" fill to mark	Hematology 8 am- 3 pm	8-24 Hours	Not Applicable	Room temperature
113.	Blood Group & Rh Type	ABO + Rh typing	2 ml or 4.5 ml EDTA blood tube "Lavender Top " fill to mark	<b>Blood Bank</b> 24 hours/day	2 - 24 Hours	Not Applicable	Room temperature
114.	BMT-Blood Group And Rh Type	BMT- ABO + Rh typing	EDTA blood tube "lavender top" >2 ml	Blood Bank 24 hours/day	2 - 24 Hours	Not Applicable	Room temperature
115.	BMT/DONOR RECIPIENT ABO And CROSS MATCH	-	EDTA blood tube "lavender top" >2 ml	Blood Bank 24 hours/day	2 - 24 Hours	Not Applicable	Room temperature
116.	<b>Blood Irradiation</b>	-	Call Blood Bank Extension. 1710	<b>Blood Bank</b> 24 hours/day	8-24 Hours	Not Applicable	Room temperature
117.	Blood Unit, Crossmatch & Dispense	CROSSM ATCH	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
118.	Body Fluid / Wbc/ Rbc / Diff	-	3 ml fluid	<b>Hematology</b> 24 hours/day	8-24 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges.	Room temperature
119.	Body Fluid/ Secretion, Routine Cytology	-	Sterile Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room temperature
120.	Bone Biopsy	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room temperature
121.	Bone Marrow Aspiration	-	Collect in EDTA tube "Lavender Top Tube"	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
122.	Bone Marrow Aspirate And Biopsy	-	Biopsy: Buffered Formalin Aspiration: EDTA Tube Peripheral Blood Sample	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room temperature
123.	<b>Bone Marrow Biopsy</b>	BM	Bone marrow biopsy (in buffer formalin)	<b>Pathology</b> 8 am-4 pm	2-3 Days	Not Applicable	Room temperature
124.	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	<b>Microbiology</b> 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
125.	Bone Marrow Needle Core Biopsy, Including Reticulin Stain	-	Biopsy: Buffered Formalin Peripheral Blood Sample	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
126.	BRAF (Immunohistoimmunochemistry)	-	Paraffin Block	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
127.	Brain Tumor	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
128.	Breast Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
129.	Breast With Axillary Clearance (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
130.	Breast, Reductive (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
131.	Breast, Simple Mastectomy (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
132.	Breast Mass With Axillary Tail	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name A	bbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
133.	Bronchial Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
134.	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
135.	Brucella Antibodies	-	Minimum 2-3 ml Blood Plain " Red Top Tube"	Immunology 8 am- 3 pm	1-3 Working Days	Negative	Room temperature
136.	Brucella Antibodies	2ME	Minimum 2-3 ml Blood Plain " Red Top Tube"	Immunolo gy Send out test /contact the laboratory	1-3 Working Days	Negative	Room temperature
137.	BRUCELLA Igg	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	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.
138.	BRUCELLA Igm	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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.
139.	Buccal/Mouth Biopsy/Palate (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room temperature
140.	Busulfan (BSF)	BSF	Minimum 1 ml Blood Lithium Heparin (LightGreen) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	600-1025 ng/ml. Critical High:1025 ng/ml Critical Low:600 ng/ml	Room Temperature

No.	Test Name A	bbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
			C				
141.	Calcium Adjusted Panel (Calcium, Albumin And Adjca)	AdjCa	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Hours	Not Applicable	Room Temperature
142.	C-1 Esterase Inhibitor	C1-INH	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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.
143.	Calcitonin Serum Level	Ctn	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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.
144.	Calcium, Level	СА	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	9 - 10.5 mg/dl (0 - 18) years 8.8 - 10.2 mg/dl (18 - 99 ) Year	Not orderable test listed in calcium adjusted panel, chem-14 & chem-20 profiles.
145.	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

No.	Test Name A	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
146.	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)
147.	Cancer Antigen 15-3,Serum Level	CA 15-3	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	$\leq$ 34.5 U/mL	Room Temperature
148.	Cancer Antigen 125	CA 125	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	$\leq$ 35 U/mL	Room Temperature
149.	Cancer Antigen 19-9 Serum Level	CA19-9	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
150.	C- Anti Neotrophelic Cytoplasmic Ab	c-ANCA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Days	Ref. Range : Titer: less than 1:20	Room temperature
151.	C-MYC (Immunohistoimmunochemistry )	С-МҮС	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
152.	Carbamazepine (Tegretol)	CBZ	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
153.	Carcinoembryonic Antigen	CEA	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	$\begin{array}{l} \text{Smoker:} \leq 5.5 \text{ ng/mL} \\ \text{Non-Smoker:} \leq 3.8 \\ \text{ng/mL} \end{array}$	Room Temperature

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
154.	. Catecholamine, Total, 24hr		24hr urine collection	Immunolo gy 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 A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
155.	Cbase(Ecf)/SBE	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	Not orderable test listed in Arterial blood gas plus extended critical care profile.
156.	Chemistry Profile-14	Chem-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
157.	Chemistry Profile-20	Chem-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
158.	Catheter Tip Culture	-	Catheter tip, collect in sterile container	Microbiology 8 am- 5 pm	2-3 Days If Negative	Not Applicable	Room temperature
159.	Ceruloplasmin Serum Level	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology 8 am- 3 pm	3-5 Working Days	Male: 15-30 Female: 16-45	Room temperature
160.	Cervix, Cone (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room temperature
161.	Cervix, Punch, Polyp (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room temperature
162.	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 <i>Neisseria</i> gonorrhea isolated	Room temperature - Two swabs should be sent to have sufficient specimen to perform both gram stain & culture
163.	Ch50 (Complement Hemolytic Activity-50)	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	1-2 Weeks	Titer: 1:40 -1:80	Under ice
164.	CHLAMYDIA ANTIBODY Igg	CT- IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature

No.	Test Name Al	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
165.	CHLAMYDIA ANTIBODY IgM	CT- IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
166.	Complement-3	С3	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunolo</b> <b>gy</b> Send out test /contact the laboratory	3-5 Working Days	Adult: 90- 180 Child: 90-180 Less than 3 months: 60- 150 4-6 months: 70-180 mg/dl	Room temperature
167.	Complement-4	C4	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunolo</b> <b>gy</b> Send out test /contact the laboratory	3-5 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	Abbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
168	8. Cortisol Free 24hr Urine Collection	a CORT urine	24hr urine collection	<b>Immunolo</b> gy 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

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
169.	Chloride Level	CL	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
170.	Chloride Spot Urine	-	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	32 – 290 mmol/L	Room Temperature
171.	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)
172.	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
173.	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
174.	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	Patient should be fasting for 12 hrs. at least. Room temperature.
175.	C-Kit (Cd117)	CD117	Block or 10% neutral buffered formalin	Pathology 8 am-4 pm	1-2 Days	Not Applicable	Room temperature
176.	CLOSTRIDIUM DIFFICILE TOXIN A/B	CDT	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.	<b>Microbiology</b> 24 hours	2-4 Hours	Negative	Room temperature
177.	Colon + Lymph Node Dissection (Large)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Abbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
178.	Colon, Mucosal Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
179.	Colon, Right Hemicoloctomy (Large)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
180.	Colon, Segment (Medium)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
181.	Cold Agglutinins Titer	-	3-5 ml Blood Plain " Red Top Tube"	Blood Bank 8 am- 5 pm	24 Hours	Not Applicable	Room temperature
182.	Complete Blood Count With Differential	-	EDTA blood tube "Lavender Top" fill to mark	Hematology 24 hours/day	2 – 4 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room temperature
183.	Concentration Prorocedur-Stool Analysi	-	Stool sample in a clean container	Microbiology 24 hours	12-24 Hours	No ova or parasite seen	Room temperature
184.	Conjunctival Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
185.	Consultation Bone Marrow Aspiration	-	Aspiration Slides, Peripheral Blood Sample & Report	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
186.	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
187.	Consultation Bone Marrow Biopsy	-	PARAFFIN BLOCK, SLIDES &REPORT	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
188.	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
189.	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
190.	Consultation Pathology Consultation, Second Opinion (Without Markers)	-	Buffered formalin or blocks + slides+ report	<b>Pathology</b> 8 am-4 pm	2-5 Days	Not Applicable	Send physician order

No.	Test Name	Abbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
191.	Consultation(Pathology Review)	-	1-Slides 2-Blocks 3-Report	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
192.	Coomb's Test, Indirect	ІСТ	EDTA blood tube "Lavender Top " fill to mark or 3-5 ml Blood plain/ tube Red Top	<b>Blood Bank</b> 24 hours/day	8-24 Hours	Not Applicable	Room temperature
193.	Coomb's Test Direct	DAT	EDTA blood tube "Lavender Top " fill to mark	Blood Bank 24 hours/day	1 Hours	Not Applicable	Room temperature
194.	Copper Level	CU	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
195.	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
196.	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 deliver ed to the section before 10 am
197.	Cortisol Total Study-T-120	CORT	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
198.	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
199.	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

No.	Test Name	Abbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
200.	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
201.	Cortisol(AM)	CORT 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
202.	Cortisol(PM)	CORT 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
203.	Cortisol total 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
204.	C-Reactive Protein	CRP	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
205.	Creatine Kinase Total	СК	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)
206.	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
207.	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
208.	Coxsackie A Igg Serum Level	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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.

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
209.	C-Peptide , Serum Level	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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
210.	Creatinine 24hr Ur	Cr	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
211.	<b>Creatinine Body Fluid</b>	-	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
212.	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)
213.	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
214.	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
215.	Cross Match Blood	-	Two blood group EDTA tubes if no blood group result on LIS EDTA blood tube "lavender top" >2 ml	Blood Bank 24 hours/day	2 Hour	Not Applicable	Room temperature
216.	Cryoprecipitate/Unit	Cryo	Call Blood Bank Extension. 1710		2 Hours	Not Applicable	Call Blood Bank

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
217.	Cryptococcus Antigen , CSF/Serum	CRAG	1ml CSF or 5 ml whole blood "plain tube" without gel.	<b>Microbiology</b> 24 hours/day	4-8 Hours	Negative	<ul> <li>Keep CSF specimen at Room temperature</li> <li>Request Fungal culture - CSF if Cryptococcus Antigen test is positive</li> </ul>
218.	Cryptosporidium Parvum, Stool	C. parvum	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.	<b>Microbiology</b> 24 hours/day	2-4 Hours	Negative	Room temperature
219.	CSF Analysis, Chemistry	-	Minimum 0.5 ml CSF in Falcon tube	Immunochemistry 24 hours/day	One Hours	See each test individually	Room Temperature
220.	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
221.	Cto2	-	Measured test listed in Arterial Blood Gas + Extended Critical Care Profile	Immunochemistry 24 hours/day	One Hours	NA	Not orderable test listed in Arterial blood gas plus extended critical care profile.
222.	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.	<b>Microbiology</b> 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

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
223.	CSF Latex Agglutination	-	1 ml CSF in a sterile container	<b>Microbiology</b> 24 hours/day	2-4 Hours	<ul> <li>- H. influenzae: Negative</li> <li>- STRP. B: Negative</li> <li>- S. pneumonia: Negative</li> <li>- N. meningitidis: Negative</li> <li>- N. meningitidis: Negative</li> <li>- E. coli: Negative</li> </ul>	Room temperature - CSF culture must be requested with this test, because our Policy state that CSF culture performed in conjunction with bacterial antigen tests.
224.	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.	<b>Microbiology</b> 24 hours	21 Days If Negative Preliminary Result, Gram Stain When Positive (Within 1 Hr. Of Detection)	<ul> <li>Negative culture for Brucella, or</li> <li>No growth after 21 days incubation</li> </ul>	Use blood culture bottles. Room temperature
225.	Cyclosporine Level	-	Whole Blood EDTA tube "Lavender Top" fill to mark	Immunochemistry 24 hours/day	1-3 Hours	The rapeutic 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 : $\geq$ 375.0 ng/mL	Room Temperature
226.	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

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
227.	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
228.	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
229.	Cytomegalovirus Ab IgG	CMV, 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
230.	Cytomegalovirus Ab IgM	CMV, IgM	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	<ul> <li>&lt; 0.7 COI Negative for CMV IgM</li> <li>≥ 0.7 to &lt; 1.0 Gray zone</li> <li>≥ 1.0 COI Positive for CMV IgM</li> </ul>	Room Temperature
231.	Cytology - PAP Smear	РАР	Cervical / Vaginal	<b>Pathology</b> 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

No.	Test Name A	bbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
232.	Cyst Aspirate, Routine	-	Sterile Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
233.	Cytology Specimen	-	Sterile Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
234.	Cytology-PAP Smear	РАР	1-Slide 2-Surpath Container	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
			D				
235.	D-Dimer Level ,Plasma	D-DIM	2.7 ml citrate blood "Blue Top" fill to mark	<b>Hematology</b> 24 hours/day	2-4 Hours	-Less than 0.5 ug/ml- FEU -Cutoff 0.5 <0.50	Room temperature
236.	Dehydroepiandrosterone Sulphate Serum (DHEA-S)	DHEA-S	Minimum 2 ml Any sample type	<b>Immunology</b> 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 obtained at 8 am, it must be delivered to the Immunology Laboratory before 10 am
237.	Digoxin	DGX	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
238.	Disc Material, Intervetebral (Small)	-	Buffered Formalin B	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
239.	Duodenal Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
240.	Drug Screening In Urine	-	Spot Urine	Immunolo gy Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
			E				
241.	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	<b>Microbiology</b> 24 hours	Swab: 2-3 Days If Negative Discharge: 5 days	- No growth - Skin Normal Flora	Room temperature
	Ear/ Aural Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
242.	Echinococcus Antibodies	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
243.	E.Coli 0157:H7, Stool Culture	E.COLI	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

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
244.	Estimating Glomerular Filtration Rate	eGFR	Calculated Test combined with Creatinine test	Immunochemistry 24 hours/day	2-8 Hours		Not Orderable, listed in Chem- 14 and chem-20. Valid for >18 years old.
245.	Electrolytes Serum Level	-	3-5 ml Blood plain / Tube Red Top	<b>Immunochemistry</b> 24 hours/day	2-8 Hours	Not Applicable	Room temperature
246.	Endo Predict	-	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	14 Days	Not Applicable	Room Temperature
247.	Endometrial Ablation (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
248.	Endometrial Biopsy/Polyp (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
249.	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
250.	Eosinophil Count, Sputum	-	sputum	Hematology 8 am- 3 pm	24hr/7day	Not Applicable	Room temperature
251.	Epididymal Cyst/<5cm Mass (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
252.	Epiglottis Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
253.	Epstein-Barr Virus Igg	EBV IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> Only Tuesdays	One Week	Immune: Positive	Room temperature

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
254.	EBER Probe (Epstein-Barr Virus Early RNA) , By In Situ Hybridization (ISH)	ISH	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
255.	Epstein-Barr Virus IgM	EBV IgM	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> Only Tuesdays	One Week	Negative	Room temperature
256.	Erythrocyte Sedimentation Rate	ESR	EDTA blood tube "Lavender Top" fill to mark	Hematology 24 hours/day	2 – 4 Hours	Male: 0-15 mm/1hr Female :0-20 mm/1hr	Room temperature
257.	Erythropoietin	ЕРО	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Days	2.59-18.50	Room temperature
258.	Esophageal Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
259.	Estrogen Receptor	Е	Block or in 10% neutral buffered formalin	<b>Pathology</b> 8 am-4 pm	2-3 Days	Not Applicable	Room temperature
260.	Extractable Nuclear Antigen	ENA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
261.	Extremity, Amputation (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
262.	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	<b>Microbiology</b> Swabs :2-3 Days If Negative	Swabs :2-3 Days If Negative10 Days For Scrapping	No growth	Room temperature - Two swabs should be sent to have sufficient Specimen to perform both gram stain & culture.

No.	Test Name	Abbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
263.	Eyeball Enucleation (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
264.	Eyelid Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
			F				
265.	Factor II Assay	F-II	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.
266.	Factor IX Assay	F- IX	Citrated blood "Blue Top"" fill to mark	<b>Hematology</b> 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

#### Turn **Special** Collection Reference **Test Name** Abbreviation Performed Around No. **Requirements** Range Handling Time Call laboratory Extension 1743 before blood withdrawal. Hematology 7 Days Patients with 267. Factor V Assay Citrated blood "Blue Top"" fill to mark Send out test Not Applicable F-V indwelling lines, 8 am- 3 pm proper flushing of the line must be done before specimen collection Call laboratory Extension 1743 before blood withdrawal. Hematology Patients with 7 Days Factor VIII Assay 268. Citrated blood "Blue Top"" fill to mark Send out test Not Applicable indwelling lines, **F-VIII** 8 am- 3 pm proper flushing of the line must be done before specimen collection Call laboratory Extension 1743 before blood withdrawal. Hematology Patients with 7 Days 269. Factor VIII Assay C Citrated blood "Blue Top"" fill to mark Send out test Not Applicable indwelling lines, -8 am- 3 pm proper flushing of the line must be done before specimen collection Pathology Fallopian Tube, Contraceptive Room 270. **Buffered Formalin** Sunday- Thursday 2-4 Days Not Applicable -(Small) Temperature 8:00am - 4:00pm

No.	Test Name A	bbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
271.	Fallopian Tube, Ectopic (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
272.	Ferric Chloride ,Urine	FeCl3	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	One Hours	Not Established	Room Temperature
273.	Ferritin Level	FER	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
274.	Fecal Calprotectin (FCAL)	FCAL	Fresh stool sample in a clean container	Immunochemistry 24 hours/day	2-8 Hours	Normal : < 80 µg/g Gray-zone follow-up within 4-6 weeks: 80-160 µg/g Elevated: > 160 µg/g	Room Temperature
275.	Fecal Immunochemical Test	FIT	Fresh stool sample in a clean container	Immunochemistry 24 hours/day	2-8 Hours	Up To ng/mL	Room Temperature
276.	Fibrinogen, Plasma Level	Fgn	Citrated blood "Blue Top"" fill to mark	<b>Hematology</b> 24 hours/day	4-8 Hours	187 – 394 mg /dl	Room temperature. Patients with indwelling lines, proper flushing of the line must be done before specimen collection"
277.	Flc Kappa	FLC (ĸ)	Minimum 1 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	2.37-20.73 mg/L	Not orderable test listed in FREE LIGHT CHAIN KAPPA, LAMBDA & RATIO.
278.	Flc Lambda	FLC λ	Minimum 1 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	4.23-27.69 mg/L	Not orderable test listed in FREE LIGHT CHAIN KAPPA, LAMBDA & RATIO.

No.	Test Name	Abbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
279.	FLOW CYTOMETRY/MARKER- HEMEPATH (Leukemia/Lymphoma /MRD Immunophenotyping)	- -	<ul> <li>The specimens in flow include the below:</li> <li><u>Peripheral blood (PB)</u>: EDTA, lithium heparin, and acid citrate dextrose (ACD).</li> <li><u>Bone marrow (BM)</u>: EDTA, lithium heparin, and acid citrate dextrose (ACD).</li> <li><u>Body fluids</u> (pleural fluid, ascitic fluid, pericardial fluid vitreous fluid and cerebrospinal fluid): Fluids shall be collected as per standard medical practice. For CSF, special precautions should be taken, it should be processed within an hour or two. If delay in the processing is anticipated, CSF should be collected in RPMI media with bovine serum (contact lab).</li> <li><u>Fine needle aspirates (FNA)</u> from lymph nodes (LN) and other lesions: Transported in RPMI media).</li> <li><u>Fresh tissue samples:</u> Transported in RPMI media or sterile saline-soaked gauze at removal, and kept moist throughout transport to the laboratory (contact lab for the RPMI media).</li> </ul>	Hematopathology– Flow cytometry Sunday to Thursday: 8:00 am-4:00 pm Otherwise: Contact the Lab.	2 working days Note: New leukemia cases are reported verbally within 2-4 hours.	Not applicable – Hematopathologists interpret the results based on the case and sample type.	-Fresh blood and bone marrow up to 48 hrs. at room temperature. -Collect tissue / FNA in RPMI media and send immediately
280.	Fibroid <5cm (Medium)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
281.	Fibroid >10cm (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
282.	Fibroid 5-10 Cm (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
283.	Filtered, Irradiated Single Donor Platelet	-	2 blood grouping EDTA tubes if first time recipient	Blood Bank 24 Hours/7 Days	1 Hour	Not Applicable	Room Temperature
284.	Fistula Swab Culture	-	Fistula swab in transport media	Microbiology 8 am- 5 pm	2-3 Days If Negative	Not Applicable	Room temperature

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
285.	Folate Level	FolA	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
286.	Follicle Stimulating Hormone	FSH	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.
287.	Food Allergy Screen	sIgE	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
288.	Foundation One	-	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	14 Days	Not Applicable	Room Temperature
289.	Fraction Of Fetal Hemoglobin	HbF	Minimum 0.5 ml HEPARINIZED SYRINGE	Immunochemistry 24 hours/day	2-8 Hours	Adult:Less Than 1.0%	Room Temperature
290.	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
291.	Free Prostatic Specific Antigen	PSA	Minimum 1 ml Blood Lithium Heparin (Light Green) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Free PSA : 0.008 – 0.72 ng/mL ; Free/Total Ratio: > 0.18 ng/mL	Room Temperature
292.	Free T3, Level	T3	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
293.	Free T4 , Level	T4	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
294.	Free Testosterone , Serum Level	FRTST	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Male:4.25-30.40 Female :0.04-4.20	Room temperature
295.	Fresh Frozen Plasma /Unit	FFP	Call Blood Bank Extension. 1710	Blood Bank	2 Hours	Not Applicable	Call Blood Bank

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
296.	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
297.	Froom Temperature, Deep Mass, Routine	-	1-Sterile Container 2-SLIDE 3-SURPATH CONTAINER	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
298.	Frozen Section - Additional Blocks (Test 316)	-	Fresh Sample	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	20-30 Minutes	Not Applicable	Room Temperature
299.	Frozen Section For First Block (Test 315)	-	Fresh Sample	Pathology Sunday- Thursday 8:00am – 4:00pm	20-30 Minutes	Not Applicable	Room Temperature
300.	Froom Temperature ,Superficial Mass, Routine	-	1-Sterile Container 2-SLIDE 3-SURPATH CONTAINER	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
301.	Full RBCs Phenotype	-	EDTA blood tube "lavender top" >2 ml	<b>Blood Bank</b> 8 am – 5 pm	24 – 72 Hours	Not Applicable	Room temperature

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
302.	Fungal Culture+KOH	-	<b>Tissue, biopsy, skin,</b> 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	<ul> <li>KOH: No Fungal element Seen</li> <li>Fungal Culture:</li> <li>Negative Culture For Fungus. Or</li> <li>No growth after four weeks of incubation</li> </ul>	Room Temperature
303.	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	<ul> <li>KOH: No Fungal element Seen</li> <li>Fungal Culture- Blood:</li> <li>Negative Culture For Fungus. Or</li> <li>No growth after 14 days of incubation</li> </ul>	Room Temperature

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
304.	Fungal Culture+KOH	-	<b>Sterile Body fluids except CSF:</b> 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	<ul> <li>KOH: No Fungal element Seen</li> <li>Fungal Culture:</li> <li>Negative Culture For Fungus. Or</li> <li>No growth after four weeks of incubation</li> </ul>	Room Temperature
305.	Fungal Culture+KOH	-	<b>Bone marrow:</b> 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	<ul> <li>KOH: No Fungal element Seen</li> <li>Fungal Culture:</li> <li>Negative Culture For Fungus. Or</li> <li>No growth after four weeks of incubation</li> </ul>	Room Temperature
306.	Fungal Culture+KOH	-	Lower respiratory tract (TRAP/Sputum/BAL) : ≥ 3 mL 5-10 mL is recommended	<b>Microbiology</b> 8 am- 5 pm	Preliminary KOH: 2-4 Hours Culture: 3-5 Weeks If Negative	<ul> <li>KOH: No Fungal element Seen</li> <li>Fungal Culture:</li> <li>Negative Culture For Fungus. Or</li> <li>No growth after four weeks of incubation</li> </ul>	Room Temperature

#### Turn **Special** Collection Reference **Test Name** Performed No. Abbreviation Around **Requirements** Handling Range Time - KOH: No Fungal element Seen Preliminary Microbiology Urine: KOH: 2-4 24 hours, - Fungal Culture: Hours Room 307. **Fungal Culture+KOH** 5-10 mL in sterile container Recommended Negative Culture For Temperature Culture: time: 8:00AM -Fungus. Or 3-5 Weeks If $\geq$ 15 ml is recommended 4:00 PM Negative No growth after four weeks of incubation 4-6 Weeks: Filaments Isolated organism on culture media-Fungi Isolates **Fungal Isolates For ID And** No growth after four Microbiology Room 308. sealed and BIOHAZARD labeled 8 am- 4 pm weeks of incubation Temperature Sensitivity 5-7 Days Yeasts Isolates Microbiology Room 309. (Refer to Fungal culture) **Fungal Smear By KOH** 2-4 Hours Not Applicable temperature 8 am- 5 pm Minimum 2-3 ml Blood " Plain Freeze ٠ Immunology 310. Galactomannan Red Top Tube" 1 week Negative immediately GM Monday Minimum 3 ml BAL upon arrival • Pathology Room 311. Gall Bladder (Small) **Buffered Formalin** Sunday- Thursday 2-3 Days Not Applicable -Temperature 8:00am - 4:00pm Refer to Chapter Four: List of Age / Minimum 1 ml Blood Lithium Heparin **Gamma-Glutamyl Transferase** Immunochemistrv Gender/ Circalunar Room 312. GGT 2-8 Hours (Light Green) or (GGT) 24 hours/day Rhythm Dependent Temperature Plain (Tube Red Top) **Reference Ranges** Pathology Room 313. **Gastrectomy**, Partial (Large) **Buffered Formalin** Sunday- Thursday 3-5 Days Not Applicable -Temperature 8:00am – 4:00pm

No.	Test Name A	bbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
314.	Gastrectomy, Total (Large)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
315.	Gastric Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
316.	Gastrin Serum Level	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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
317.	Genital Swab Culture	-	Genital swab in transport media	Microbiology 8 am- 5 pm	3 Days If No Pathogens	Not Applicable	Room temperature
318.	Gentamicin Concentration Random	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 24 hours/day	1-2 Days	N/A	Room temperature
319.	Gentamicin Concentration, Peak	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 24 hours/day	1-2 Days	Peak Level : 5-10	Room temperature
320.	Gentamicin Concentration, Trough	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 24 hours/day	1-2 Days	Trough Level : UP To 2	Room temperature
321.	Glucose CSF	Glu- 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
322.	Glucose In Urine	U-Glu	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	<15.0 mg/ dL	Room Temperature
323.	Glucose, Body Fluids	Glu – BF	1-3 ml Body Fluid in clean Falcone tube/ Urine cup	Immunochemistry 24 hours/day	2-8 Hours	See Portal (For interpretation)	Room Temperature
324.	Glucose	Glu	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

No.	Test Name	Abbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
325.	Glucose Tolerance Test 2 HR	GTT	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
326.	Glucose Tolerance Test Fasting	GTT	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
327.	Glucose-6-Phosphate Dehydrogenase	G6PD	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
328.	Glycohemoglobin (Hba1c)	HBA1C	2 ml or 4.5 ml EDTA blood tube "Lavender top" fill to mark	<b>Hematology</b> 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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329.	Haptoglobulin	Нр	Minimum 1 ml Blood Lithium Heparin (LightGreen) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	30.0-200.0 mg/dL	Room Temperature
330.	Hb-Electrophoresis	-	1 ml Blood EDTA (purple tube)	Hematology 24 hours/day	7 Working Days	Not Applicable	Room temperature
331.	HDL Cholesterol	HDL	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	Not orderable test listed in Lipid profile should be fasting 12 hrs.at least.

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
332.	Helicobacter Pylori Antibody IgA	H.pylori Ab- IgA	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunolo gy Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
333.	Helicobacter Pylori Antibody IgG	H.pylori Ab- IgG	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunolo gy Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
334.	Hemosiderin, Spot Urine	-	Random urine sample	Not in hematology	NA	NA	NA
335.	Hepatitis-A Virus Antibody, IgM	HAV	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
336.	Hepatitis-B Core Ab IgM	НьсАр	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 $\ge 0.8$ to $< 1.2$ COI Gray zone $\ge 1.20$ COI Positive for anti-HBc IgM	Room Temperature
337.	Hepatitis-B Core Ab Total	HbcAb	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
338.	Hepatitis-B E Ab	HbeAb	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-Hbe ≥ 0.8 to < 1.2 COI Gray zone < 0.80 COI Positive for anti-Hbe	Room Temperature

No.	Test Name A	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
339.	Hepatitis-B E Antigen	HbeAg	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 ≥ 0.8 to < 1.2 COI Gray zone ≥ 1.20 COI Positive for HbeAg	Room Temperature
340.	Hepatitis-B Surface Ab	HbsAb	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
341.	Hepatitis-B Surface Antige	HbsAg	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
342.	Hepatitis B Core Antibody , Total	HbcAb	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am- 3 pm	1-3 Working Days	Not Applicable	Room temperature
343.	Hepatitis-C Virus Ab	HCV	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
344.	Her-2/NEU	HER-2	Block or 10% neutral buffered formalin	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature
345.	Hernial Sac (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
346.	HERPES SIMPLEX VIRUS I ANTIBODY , IgM	HSV	Minimum 2-3 ml Blood "Plain Red Top Tube"	Immunology 8 am- 3 pm	One Week	Negative	Room temperature
347.	HERPES SIMPLEX VIRUS 1 ANTIBODY , Igg	HSV	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology 8 am- 3 pm	One Week	Immune:Positive	Room temperature
348.	Homocysteine , Cardiac Risk	Hcys	Minimum 2-3 ml Blood " Plain Red Top Tube"	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.
349.	HERPES SIMPLEX VIRUS II ANTIBODY , Igg	HSV	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8 am- 3 pm	One Week	Immune:Positive	Room temperature

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
350.	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
351.	Hickman Site Swab Culture	-	Hickman site swab in transport media	Microbiology 24 hours	2-3 Days If Negative	No growth	Room temperature
352.	High Vaginal Swab (H.V.S) Culture+ Gram Stain	H.V.S	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
353.	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
354.	Human Growth Hormone Randor	n HGH	Minimum 1 ml Blood Lithium Heparin (LightGreen) or Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Girls 0-10 years: 0.120 - 7.79 Girls 11-17 years : 0.123 - 8.05 Women 21-77 years : 0.126 - 9.88 Boys 0-10 years: 0.094 - 6.29 Boys 11-17 years : 0.077 - 10.8 Men 20-79 years : <= 2.47	Room Temperature Patient should be fasting for 8 hrs. at least. Room temperature. It must be delivered to the section before 11 am.
355.	Human Immunodeficiency Virus Antibody	HIV	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunochemistry 8am-3pm	1-3 Working Days	Not Applicable	Room temperature

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
356.	Human Immunodeficiency Virus Ag & Ab I/Ii	HIV	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
357.			Pap smear		2.4		Keep at room temperature
358.	Human Papilloma Virus (HPV)	HPV	Cervical brush in liquid	Pathology 8 am-3 pm	2-4 Working Days	Not Applicable	
359.			Paraffin embedded cervical tissue	D (1 1			
360.	Hysterectomy Neoplastic(Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
361.	Hysterectomy Non-Neoplastic (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
362.	Hysterectomy(Uterus) Simple (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
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363.	IgG Sub Classes	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunochemistry</b> 8 am- 9 am	3-5 Days	Not Applicable	Call laboratory ext. 1345 before blood withdrawal
364.	Ileal Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
365.	Immunofixation Serum	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology 8 am- 3 pm	1-2 Weeks	No Monoclonal Band Seen	Room temperature

No.	Test Name	Abbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
366.	Immunofixation 24hr Urine Collection	-	24 hours urine collection	<b>Immunology</b> 8 am- 3 pm	1-2 Weeks	Monoclonal Band Seen	Store in refrigerator Sample must be delivered to the Immunology Laboratory before 10 am.
367.	Immunoglobulin A	IgA	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
368.	Immunoglobulin D	IgD	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunochemistry</b> 8 am-9 am	3-5 Days	Not Applicable	Call laboratory ext. 1345 before blood withdrawal
369.	Immunoglobulin E	IgE	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
370.	Immunoglobulin G	IgG	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
371.	Immunoglobulin M	IgM	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.	Immunohistoimmunochemistry Special 1	-	Block or 10% neutral buffered formalin	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature
373.	Immunohistoimmunochemistry Special 2	-	Block or 10% neutral buffered formalin	Pathology 8 am-4 pm	1-3 Working Days	Not Applicable	Room temperature

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
374.	Immunohistoimmunochemistry Routine For Each Ab	-	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
375.	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
376.	Inhalant Allergy Panel-Ige	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
377.	Inhibin A & B	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	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 3 <sup>rd</sup> day of cycle.
378.	Insulin-Like Growth Factor 1(Igf-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.	Patient should be fasting 8 hrs.at least. Keep on ice
379.	Insulin-Like Growth Factor Binding Protein 3 (IGFBP-3)	IGFBP-3	Minimum 1 ml Blood Lithium Heparin (LightGreen) or Plain (Tube Red Top)	Immunochemistry 8am-11 am	2-8 Hours	See portal.	Patient should be fasting 8 hrs. at least. Keep on ice
380.	Insulin Assay. Serum	INSL	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> 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 A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
381.	Interleukin-6 (IL-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
382.	Intestine, Small, Segment (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
383.	Iron Level	Fe	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
384.	Iron Study (Total Iron-Binding Capacity (TIBC), Iron, & Transferrin Saturation (TSAT))	TIBC TSAT	3-5 ml Blood plain / Tube Red Top	<b>Immunochemistry</b> 24 hours/day	8-24 Hours	Not Applicable	Room temperature
385.	Iron Study Contains (Total Iron-Binding Capacity (TIBC), Iron, UIBC & Transferrin Saturation (TSAT))	TIBC UIBC 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
386.	Iron, Urine	-	Random urine sample	<b>Immunochemistry</b> 8 am-4 pm	1-3 Working Days	Not Applicable	Store in refrigerator or send immediately
387.	Iso-Hemagglutinin	-	EDTA or Plain Tube	<b>Blood Bank</b> 8:00am – 5:00pm	One Day	Not Applicable	Room temperature
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388.	Joint Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Abbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
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389.	Kappa/Lambda Surface Antigens	-	2-4.5 ml Marrow in Lavender top tube or EDTA blood tube "Lavender top" fill to mark	<b>Pathology</b> 8 am- 3 pm	8-24 Hours	Not Applicable	Fresh blood or marrow aspirate or maximum 48 hrs at room temperature
390.	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
391.	Kidney Biopsy Routine (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
392.	Ketone In Urine	-	<b>Urine:</b> $\geq$ 10 mL in sterile container	<b>Microbiology</b> 24 hours/day	2-4 Hours	Negative	Room temperature, send within one hour of collection
393.	Kidney Function Test Contains (Creatinine, Urea, Uric Acid, K, Na, & Cl )	KFT	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
394.	Kidney, Nephrectomy Neoplastic (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
395.	Kidney, Nephrectomy Non- Neoplastic (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
396.	KI67 (Immunohistoimmunochemistry )	-	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
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No.	Test Name	Abbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
397.	Lactate Dehydrogenase	LDH	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
398.	Lactic Acid	LA	Collect blood in sodium fluoride and Potassium oxalate one tube "Fill to mark"	<b>Immunochemistry</b> 24 hours/day	One Hour	Not Applicable	Keep under Ice Must be delivered/ received byhand.
399.	Lamotrogine (Lamictal)	-	2-3 ml Serum Room Temperature	Immunology Send out test /contact the laboratory	2 Days	Normal: 3-14 Toxic:>15	Room Temperature
400.	Laryngeal Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
401.	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
402.	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
403.	LDL Cholesterol	LDL	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	Not orderable test listed in Lipid profile should be fasting 12 hrs.at least.
404.	Lead Poisoning	LP	Whole Blood EDTA blood tube "Lavender Top" fill to mark	Immunochemistry 24 hours/day	One Week	0-70  mcg/L	Room Temperature
405.	Left Nephrestomy Culture	-	Urine collected from nephrostomy tube through a syringe. Volume: ≥ 5 mL in sterile container	<b>Microbiology</b> 24 hours/day	2-3 Days If Negative	No growth	Room temperature, send within one hour of collection

No.	Test Name Ab	breviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
406.	Legionella Antigen , Urine	-	Urine: $\geq 10 \text{ mL}$ in sterile container	<b>Microbiology</b> 24 hours/day	2-4 Hours	Negative	- Room temperature / Store at refrigerator if delayed
407.	LEGIONELLA PNEUMOPHILA ANTIBODY, IgG	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology 8 am- 3 pm	3-5 Working Days	Negative	Room temperature
408.	LEGIONELLA PNEUMOPHILA ANTIBODY, IgM	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
409.	Leishmania Antibody , Serum	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
410.	Lingual (Tongue) Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
411.	Lingula Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
412.	Lip Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
413.	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
414.	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
415.	Lipid Profile-1 Contains(Triglyceride, Cholesterol, HDDL & 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	Patient should be fasting for 12 hrs.at least.
416.	Lithium Level	Li	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

No.	Test Name Ab	obreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
417.	Liver Function Test Contains (ALT, AST, ALP, Albumin, Total Protein, Bilirubin Direct, & Bilirubin Total )	LFT	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
418.	Liver, Needle Or Wedge Biopsy (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
419.	Lump (Soft Tissue Mass) 5-10cm (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
420.	Lump (Soft Tissue Mass)<5cm (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
421.	Lump (Soft Tissue Mass)>10cm (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
422.	Lung Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
423.	Lung, Lobectomy (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
424.	Lung, Total Resection (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
425.	Lupus Anticoagulant	LAC	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
426.	Luteinizing Hormone	LH	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.
427.	Lymph Node Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
428.	Lymph Node, Sentinel (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
			M				
429.	Magnesium	MG	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
430.	Magnesium,24h Urine	MG	24 hours Urine collection container kept cool	Immunochemistry 24 hours/day	2-8 Hours	51-269 mg/24 hr	Room Temperature
431.	Magnesium ,Spot Urine	MG	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	Magnesium/Creatinin e Ratio: > or =0.035 mg/mg	Room Temperature
432.	Mandible/ Maxilla Dissection (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
433.	Measles IgG	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Only Thursdays	One week	Immune:Positive	Room temperature
434.	Measles IgM	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
435.	Metanephrines 24hr Urine Collection		24 hours urine collection	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

No.	Test Name A	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
436.	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
437.	Microalbumin ,Urine	-	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Less than 20 mg/L	Room Temperature
438.	Microalbuminuria ,Spot Urine	-	5-10 ml Random urine sample	<b>Immunochemistry</b> 24 hours/day	One Week	Not Applicable	Room temperature
439.	Microalbuminuria,24hrs Urine Level	ACR	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
440.	Mycophenolic acid (MPA)	МРА	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
441.	MLH1 (IMMUNOHISTOIMMUNOCHEM ISTRY)	-	Paraffin Block	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
442.	MONOSPECIFIC COOMBS TEST	-	2 ml or 4.5 ml EDTA blood tube "Lavender Top" fill to mark	<b>Blood Bank</b> 24 hours/day	1 Hour	Not Applicable	Room temperature
443.	MSH2 (IMMUNOHISTOIMMUNOCHEM ISTRY)	MSH2	Paraffin Block	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
444.	MSH6 (Immunohistoimmunochemistry)	-	Paraffin Block	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
445.	Mucosal Biopsy, Any Site (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
446.	Mumps IgG	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunology</b> Only Thursdays	One week	Immune:Positive	Room temperature

No.	Test Name A	bbreviatio	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
447.	Mumps IgM	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
448.	Muscle Biopsy, Routine (Medium)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
449.	MYCOPLASMA ANTIBODY , Igg, SERUM	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
450.	MYCOPLASMA ANTIBODY , IgM, SERUM	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
451.	Myoglobin ,Spot Urine	MB	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Negative	Room Temperature
			N				
452.	Nasal Mucosal Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
453.	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.	<b>Microbiology</b> 24 hours/day	2-3 Days If No Pathogens	Normal Flora, Or No growth	Room temperature
454.	Nasal Tumor, Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
455.	Nasal Wash Culture	-	Nasal wash, collect in sterile container	<b>Microbiology</b> 24 hours/day	2-3 Days If No Pathogens	Not Applicable	Room temperature

No.	Test Name A	Abbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
456.	Nasopharyngeal Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
457.	Nerve Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
458.	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
459.	Nitrite ,Urine	-	Urine sample in sterile container	<b>Microbiology</b> 24 hours/day	1-2 Hours	Not Applicable	Room temperature, send within one hour of collection
460.	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
461.	Neuron Specific Enolase	NSE	Minimum 1 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	2-8 Hours	Up To 16.30	Room Temperature
			0				
462.	Omental Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
463.	Omentectomy	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
464.	Oncotype DX	-	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	14 working Days	Not Applicable	Room Temperature

No.	Test Name A	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
465.	Osmolality	Osmo	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
466.	Osmolality Urine	-	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	150-1150 mOsm/kg	Room Temperature
467.	Ovarian Biopsy, Small Wedge (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
468.	Osteocalcin Serum Level	OC	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	3.1 13.7 ng/ml	Room temperature
469.	Ovarian Mass/ Cyst 5-10cm (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
470.	Ovarian Mass/Cyst <5cm (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
471.	Ovarian Mass/Cyst >10cm (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
472.	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
473.	Oxalate,Spot Urine	-	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Not Established	Room Temperature
			P				
474.	Pancreas, Whipple's (Large)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Abbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
4775	Pancreatic Fluid Culture	-	Aseptically aspirated Pancreatic fluid, collected in sterile container $\geq 3$ ml	<b>Microbiology</b> 24 hours,	Preliminary Gram stain: 2-4 Hours	Aerobic: No Growth after 5 days incubation	Room Temperature.
475.	(Aerobic+Anaerobic+Gram Culture)		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)	Recommended time: 8:00AM – 4:00 PM	Culture: 5-7 Days If Negative	Anaerobic: No growth after 5 days incubation	Transport Immediately
476.	Parathyroid Hormone	РТН	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 Patient should be fasting for 8 hrs.at least and be delivered/ received by hand.
477.	PARVOVIRUS , IgG	CPV	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
478.	PARVOVIRUS , IgM	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature
479.	Pathology-Under Ice Section	-	Fresh sample/tissue	<b>Pathology</b> 8 am-4 pm	Immediately	Not Applicable	Room Temperature
480.	Platelet-derived growth factor receptors PDGFR	PDGFR	Paraffin Block	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
481.	PDL-1 (Immunohistoimmunochemistry)	PDL-1	Paraffin Block	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
482.	Perianal Swab culture 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.	<b>Microbiology</b> 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.
483.	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.	<b>Microbiology</b> 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.
484.	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

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
485.	Peritonial Fluid (Aerobic+Anaerobic	-	Aseptically aspirated Pancreatic fluid, collected in sterile container $\geq 3$ ml	<b>Microbiology</b> 24 hours,	Preliminary Gram stain: 2-4 Hours	Aerobic: No Growth after 5 days incubation	Room Temperature.
403.	Culture+ Gram Stain		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)	Recommended time : 8:00AM – 4:00 PM	Culture: 5-7 Days If Negative	Anaerobic: No growth after 5 days incubation	Transport Immediately
486.	РН	-	Measured test listed in Arterial Blood Gas + Extended Critical Care Profile	Immunochemistry 24 hours/day	One Hours	7.35-7.45	Not orderable test listed in Arterial blood gas plus extended critical care profile.
487.	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
488.	Phenobarbital, Serum	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	2 Days	15-40 ,Toxic Level >50	Room Temperature
489.	Phenytoin(Epanotin)	РНТ	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
490.	Phosphorus Level	Р	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
491.	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)
492.	Phosphorus Test Spot Urine	-	5-10 ml Midstream Random urine – 1 <sup>st</sup> morning urine	Immunochemistry 24 hours/day	2-8 Hours	1 <sup>st</sup> morning urine : 40-136 mg/dL	Room Temperature
493.	Plasmapheresis	-	Call Blood Bank Extension. 1710	Blood Bank		Not Applicable	Call Blood Bank
494.	Platelet Count, Blood	PLT	EDTA blood tube "Lavender Top" fill to mark	Hematology 24 hours/day	2-4 Hours	$150 - 400 \ x \ 10^3 \ / \ ul$	Room Temperature

No.	Test Name A	bbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
495.	Pleural Biopsy	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
496.	Pleural, Fluid (Aerobic+Anaerobic)	-	Aseptically aspirated Pleural fluid, collected in sterile container $\geq 3$ ml	<b>Microbiology</b> 24 hours,	Preliminary Gram stain: 2-4 Hours	Aerobic: No Growth after 5 days incubation	Room Temperature.
490.	Culture+Gram Stain		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)	Recommended time : 8:00AM – 4:00 PM	Culture: 5-7 Days If Negative	Anaerobic: No growth after 5 days incubation	Transport Immediately
497.	PMS2 (Immunohistoimmunochemistry)	-	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
498.	Polyp <5cm, Any Site (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
499.	Porta Cath Site Swab Culture	-	Swab in transport media	Microbiology 8 am- 5 pm	2-3 Days If Negative	Not Applicable	Room Temperature
500.	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
501.	Potassium Spot Urine Level	K	5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	12-129 mmol/L	Room Temperature
502.	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)
503.	Prealbumin	PAB	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
504.	Procalcitonin	РСТ	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 2hrs

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
505.	Product Of Conception (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
506.	Progastrin-Releasing Peptide (Progrp)	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
507.	Progesterone Receptor	PR	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
508.	Prograf (Tacrolimus II)	TAC	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
509.	Pro Human B-Type Natriuretic Peptide (Probnp)	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
510.	Prolactin	PRL	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
511.	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
512.	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
513.	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
514.	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
515.	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

No.	Test Name	Abbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
516.	Prostate, Biopsy Tur (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
517.	Prostate, Sextant (Medium)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
518.	Prostatectomy, Radical (Large)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
519.	Prostatectomy, Simple (Large)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
520.	Prostatic Secretions Culture	-	Prostatic secretion, collected in sterile container	<b>Microbiology</b> 8 am- 5 pm	3-5 Days If Negative	Not Applicable	Room Temperature, Send Immediately
521.	Prostatic Specific Antigen	PSA	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
522.	Protein CSF	PRT	Measured test Listed in CSF ANALYSIS, CHEMISTRY panel	Immunochemistry 24 hours/day	One Hours	15.0 - 45.0 mg/dL	Not orderable test listed in CSF chemistry analysis.
523.	Protein (Serum)	-	3-5 ml Blood plain / Tube Red Top	<b>Immunochemistry</b> 24 hours/day	2-8 Hours	Not Applicable	Room Temperature
524.	<b>Protein In Body Fluids</b>	-	1-3 ml fluid	<b>Immunochemistry</b> 24 hours/day	8-24 Hours	Not Applicable	Room Temperature
525.	Protein Spot Urine	-	5-10 ml Random urine sample	<b>Immunochemistry</b> 24 hours/day	2-8 Hours	Not Applicable	Room Temperature
526.	Proteinase 3 Antibodies	-	2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature

#### Turn **Special** Reference Collection **Test Name** Abbreviation Performed Around No. Requirements Range Handling Time Refer to Chapter Four: Immunolo List of Age / gy Send out Gender/ 3-5 Room test 527. Circalunar **Progesterone Serum Level** Р 2-3 ml Blood "Plain Red Top Tube" /contact Working Temperature Rhythm **P4** the Days Dependent laboratory Reference Ranges Room Temperature. Patients With Indwelling 12.4 -15.1 sec Lines, Proper Hematology 528. РТ **Prothrombin Time** Citrate blood "Blue Top" fill to mark 4-8 Hours 24 hours/day Flushing Of The Line Must Be Done Before Specimen Collection Preliminary Microbiology Gram stain: 24 hours, Pus aspirate in sterile container or 2 2-4 Hours Room 529. **Pus Culture + Gram Stain** swabs in transport media should be sent No growth Recommended Temperature to cover CS&GS Culture: time: 8:00AM -2-3 Days If 4:00 PM Negative Immunology Roo Send out test Minimum 3 ml in four different 530. Negative m 2-3 /contact the tubes (Available in kit) **Ouantiferon-TB Gold Plus** tem Weeks laboratory pera ture

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
			R				
531.	Rapid Plasma Reagin (RPR)	RPR	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology 8 am- 3 pm	1-3 Working Days	Negative	Room temperature
532.	<b>RBC</b> Folate	-	Minimum 2 ml EDTA blood tube "Lavender Top" fill to mark	Immunolo gy Send out test /contact the laboratory	One week	Normal: 192.1 – 577.1 Deficient: Less than 150	Room temperature
533.	Renin, Plasma Level	-	Minimum 2 ml EDTA blood tube "Lavender Top" fill to mark	<b>Immunolo</b> <b>gy</b> Send out test /contact the laboratory	1-2 Weeks	Low:Supine: 4.70, UPRIGHT:7. 5" High:S upine: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.
534.	Rheumatoid Factor	RF	Minimum 2-3 ml Blood " Plain Red Top Tube"	<b>Immunolo</b> gy 8 am- 3 pm	1-3 Working Days	Negative	Room temperature
535.	<b>RBC</b> Depletion	-	Call Blood Bank laboratory Extension 1710	Blood Bank		Not Applicable	Call Blood Bank laboratory
536.	Rectal Biopsy, Mucosal (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
537.	Rectal Biopsy, For Ganglion Cells(Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature

No.	Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
538.	Renin , Plasma Level	-	EDTA blood tube "Lavender Top" fill to mark	<b>Immunology</b> 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 Immunochemistr y 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.
539.	Reticulin Stain On Tissue	-	Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	1-2 Days	Not Applicable	Room Temperature
540.	Reticulocyte Count, Blood	-	EDTA blood tube "Lavender Top" fill to mark	<b>Hematology</b> 24 hours/day	4-8 Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Room temperature
541.	Rheumatoid Factor ( Rf )	-	Minimum 2-3 ml Blood "Plain Red Top Tube"	Immunology 8 am- 3 pm	1-3 Working Days	Not Applicable	Room temperature
542.	<b>Rh-Phenotyping</b>	-	EDTA blood tube "Lavender Top " fill to mark	Blood Bank 24 hours/day	2 Hours	Not Applicable	Room temperature
543.	Right Nephrostomy Urine Culture	-	Urine collected from nephrostomy tube through a syringe. Volume: ≥ 5 mL in sterile container	<b>Microbiology</b> 24 hours/day	2-3 Days If Negative	No growth	Room temperature, send within one hour of collection
544.	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)	Not orderable test should order with HE4 and CA125

No.	Test Name A	Abbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
545.	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.	<b>Microbiology</b> 24 hours/day	2-4 Hours	Negative	Room temperature
546.	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
547.	RUBELLA IgM, SERUM	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Negative	Room temperature
			S				
548.	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	<b>Microbiology</b> 24 hours,	1 hour	Negative	-Sent to Microbiology section ASAP
549.	Salivary Gland (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
550.	Scalp Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature

No.	Test Name A	Abbreviation	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
551.	Sclp.Bx	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-5 Days	Not Applicable	Room Temperature
552.	Scrotal Mass (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
553.	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
554.	Serum Protein Electrophoresis	SPEP	Minimum 2-3 ml Blood "Plain Red Top Tube"	Immunology 8 am- 3 pm	1-2 Weeks	No Monoclonal Seen	Room temperature
555.	Sex Hormone Binding Globulin	SHBG	2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Male:13-71 Female:18-114	Room Temperature
556.	sO2	-	Measured test listed in Arterial Blood Gas + Extended Critical Care Profile	Immunochemistry 24 hours/day	One Hours	>95 %	Not orderable test listed in Venous and Arterial blood gas plus extended critical care profile.
557.	Sodium Level	NA	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
558.	Sodium(Urine)		5-10 ml Midstream Random urine	Immunochemistry 24 hours/day	2-8 Hours	> 20 mmol/L	Room Temperature
559.	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)
560.	Special Stain	-	10% buffered formalin or fresh cytology or block.	Pathology 8 am-4 pm	1-2 Days	Not Applicable	Room temperature
561.	Splenectomy (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Abbreviatio	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
562.	Specific Gravity, Urine	SG	<b>Urine:</b> $\geq$ 10 mL in sterile container	<b>Microbiology</b> 24 hours	1-2 Hours	1.002 - 1.035	Room temperature, send within one hour of collection
563.	Sputum Culture + Gram Stain	-	>2ml first morning sputum, not saliva, collected in a sterile container1. 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
564.	Squamous Cell Carcinoma Antigen (SCC)	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
565.	Stool Analysis (Wet Preparation + Concentration +Permanent Stain)	-	Fresh stool sample in a clean container	<b>Microbiology</b> 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
566.	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
567.	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

No.	Test Name A	bbreviatio	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
568.	Stool Culture For Vibrio Cholerae	-	Fresh stool sample, collect in sterile container	<b>Microbiology</b> 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.
569.	Stool Culture For Salmonella And Shigella	-	Stool sample, collect in a sterile container Fresh, random diarrheal or soft sample	<b>Microbiology</b> 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)
570.	Stool For Occult Blood	-	Fresh stool sample in a clean container	<b>Microbiology</b> 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
571.	Stool Permanent Stain Smear	-	Stool sample in clean container	<b>Microbiology</b> 24 hours/day	24 Hours	No ova or parasite seen	Room temperature
572.	Stone Analysis Urine	-	Urinary calculi in Urine cup	Immunochemistry 8 am-10 am	One Week	NA	Room Temperature
573.	Streptococcus Pneumoniae Antigen In Urine	-	<b>Urine:</b> $\geq 10 \text{ mL}$ in sterile container	<b>Microbiology</b> 24 hours/day	2-4 Hours	Negative	Room temperature
574.	Subungual Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
575.	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 A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
	Synovial Fluid Culture	-	As eptically aspirated synovial fluid, collected in sterile container $\ge 3$ ml	<b>Microbiology</b> 24 hours,	Preliminary Gram stain: 2-4 Hours	Aerobic: No Growth after 5 days incubation	Room temperature.
576.	(Aerobic+Anaerobic+Gram Stain)		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	Recommended time : 8:00AM – 4:00 PM	Culture: 5-7 Days If Negative	Anaerobic: No growth after 5 days incubation	Transport immediately
577.	Synovial Membrane, Biopsy (Small)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
			Τ				
578.	TDT Nuclear Staining Antigen	-	2-4.5 ml blood or Marrow EDTA tube "Lavender top" fill to mark	<b>Pathology</b> 8 am- 3 pm	8-24 Hours	Not Applicable	Fresh blood or marrow aspirate or maximum 48 hrs. at room temperature
579.	Testis, Biopsy Both (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
580.	Testis, Biopsy One (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
581.	Testis, Orchidectomy (Large)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
582.	Testosterone Total, Level	TTST	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
583.	Therapeutic Plasma Exchange	TPE	Call Blood Bank Extension. 1710	Blood Bank		Not Applicable	Call Blood Bank

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
584.	Theophylin Serum Level	ТН	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology 24 hours/day send out	2 Days	Not Applicable	Room temperature
585.	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.
586.	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.
587.	Throat Swab culture 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.
588.	Thrombin Time Plasma Level	TT	Citrate blood "blue Top" fill to mark	Hematology 8 am- 3 pm Send out test /contact the laboratory	3 – 5 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.

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
589.	Theophyllin	-	2-3 ml Blood " Plain Red Top Tube"	Immunolo gy Send out test /contact the laboratory	3-5 Working Days	10-20 µg/ml	Room Temperature
590.	Thyroglobulin	TG	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	Positive Anti-TG shows low to negative result of TG. Room Temperature
591.	Thyroid Microsomal Antibodies	-	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
592.	Thyroid Stimulating Hormone(TSH)	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
593.	Thyroid, Lobe/Nodule (Medium)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
594.	Thyroid, Total Thyroidectomy (Large)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
595.	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	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
596.	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 <u>without saline</u> 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	<ol> <li>Do not accept Foley catheter tip.</li> <li>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</li> </ol>
597.	Tissue/Surgical/Biopsy (Aerobic+Anaerobic Culture+ Gra Stain)	m -	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 –	Preliminary Gram stain: 2-4 Hours Culture: 5-7 days If	Aerobic: No Growth after 5 days incubation Anaerobic: No growth after 5 days	Room temperature. Transport immediately
598.	Tonsils (Small)	-	Buffered Formalin	4:00 PM Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	incubation Not Applicable	Room Temperature

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
599.	Tobramycin	-	2-3 ml Blood " Plain Red Top Tube"	Immunolo gy 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
600.	Total Catecholamine,24hr Urine	-	24 hours urine collection	Immunology Send out test /contact the laboratory	3-5 Days	Not Applicable	Store in refrigerator
601.	Total Iron Binding Capacity (TIBC)	TIBC	Calculated Test combined in Iron Study	Immunochemistry 24 hours/day	2-8 Hours	250-400 mcg/dL	Not orderable test listed in Iron study profile
602.	<b>Total Protein</b>	ТР	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
603.	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)
604.	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
605.	Toxoplasma Ab IgM	ΤΟΧΟ	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
606.	Transferrin Saturation (TSAT)	TSAT	Calculated Test combined in Iron Study	Immunochemistry 24 hours/day	2-8 Hours	20-50%	Not orderable test listed in Iron study profile.

No.	Test Name A	bbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
607.	Transferrin,Serum Level	TF	2-3 ml Blood " Plain Red Top Tube"	Immunolo gy Send out test /contact the laboratory	One Week	Not Applicable	Room Temperature
608.	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
609.	Treponema Pallidum Hemagglutination	-	2-3 ml Blood " Plain Red Top Tube"	Immunolo gy Send out test /contact the laboratory	One Week	Negative	Room Temperature
610.	Triglyceride Level	TG	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	Patient should be fasting for 12 hrs. at least. Room temperature.
611.	Triglycerides,Body Fluids	TG	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
612.	Troponin I	TnI	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
613.	TSH Receptor Auto-Antibodies	TSHR	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology Send out test /contact the laboratory	3-5 Working Days	Not Applicable	Room temperature
614.	Tubo-Ovarian Mass (Medium)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
615.	TSH Receptor Auto-Antibodies	TSH-R	2-3 ml Blood " Plain Red Top Tube"	Immunolo gy Send out test /contact the laboratory	3-5 Working Days	Negative: less than 1.8 Grey zone: 1.8 – 2.0 Positive: more than 2.0	Room Temperature
			U				
616.	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
617.	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
618.	Under Ice Section For First Subsequent Blocks Additional	-	Fresh Sample	Pathology Sunday- Thursday 8:00am – 4:00pm	20-30 Minutes	Not Applicable	Room Temperature
619.	Unsaturated Iron Binding Capacity (UIBC)	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	Not orderable test listed in Iron study profile.
620.	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)
621.	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

No.	Test Name A	bbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
622.	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
623.	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
624.	Ureter (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
625.	Ureteric Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
626.	Urethral Biopsy/Polyp (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
627.	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
628.	Uric Acid	UA	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
629.	Uric Acid 24hr Urine Collection	U-UA	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)
630.	Uric Acid(Urine)	U-UA	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	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
No.		Abbreviation		<b>Performed</b>			Room temperature, send within one hour of collection
			98			Others: Not seen	

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
632	Urine Culture	U-CUL	<b>Urine:</b> ≥ 10 mL in sterile container - midstream urine sample	<b>Microbiology</b> 24 hours/day	5-8	-No growth -Non significant growth	Room temperature, send within one hour of collection
633	Urine PH	U-PH	<b>Urine:</b> ≥ 10 mL in sterile container - midstream urine sample	<b>Microbiology</b> 24 hours/day	2-4 Hours STAT: 1 hour	Not Applicable	Room temperature, send within one hour of collection

No.	Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
634	Urine Protien Electropherisis	U-PRO	24 hours urine collection	<b>Immunology</b> 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

No.	Test Name A	bbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
635.	Urine, Sputum, Gastric Wash-Out etc.	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	1-2 Days	Not application	Room Temperature
			V				
636.	Vaginal Discharge Culture For Screening	-	Vaginal swab in transport media	<b>Microbiology</b> 24 hours/day	2-3 Days If No Pathogens	Negative for multidrug resistant nonfermentative gram negative pathogens.	Room temperature.
637.	Valproic Acid	VPA	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
638.	Vancomycin Concentration, Random	S- VAN	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
639.	Vancomycin Concentration, Trough	S- VAN	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
640.	Vancomycin Concentration, Peak	S- VAN	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
641.	Vanilymandelic Acid 24hr Urine	U-VA	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

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
642.	Vanilymandelic Acid Spot Urine	VMA	5-10 ml Midstream Random urine	Immunochemistry 8 am-10 am	One Week	Not Established	Keep the container in a cool place (Refrigerator).
643.	Varicella Zoster Virus IgG, Serum	VZV	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology 8 am- 3 pm	One Week	Positive	Room temperature
644.	Varicella Zoster Virus IgM, Serum	VZV	Minimum 2-3 ml Blood " Plain Red Top Tube"	Immunology 8 am- 3 pm	One Week	Negative	Room temperature
645.	V-ctO2	-	Measured test listed in Venous Blood Gas + Extended Critical Care Profile	Immunochemistry 24 hours/day	One Hours	NA	Not orderable test listed in <b>Venous blood</b> <b>gas plus</b> <b>extendedcritical</b> <b>care profile.</b> Should arrive the lab ASAPNo more than 30 mint.
646.	Venous Blood Gas Plus Extended Critical Care Profile	VBG	Minimum 0.5 ml HEPARINIZED SYRINGE – under ice	Immunochemistry 24 hours/day	One Hours	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Should arrive the lab ASAP No more than 30 mint
647.	Vibrio Cholerae, 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.	<b>Microbiology</b> 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

No.	Test Name A	bbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
648.	Viscosity	VISC	Minimum 5 ml Blood Plain (Tube Red Top)	Immunochemistry 24 hours/day	One Week	1 - 1.24 cP	Room temperature Fill 5ml Blood
649.	Vitamin B12 Level	VIT B12	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
650.	Voriconazole Level	VCZ	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
651.	Vulval Biopsy (Small)	-	Buffered Formalin	Pathology Sunday- Thursday 8:00am – 4:00pm	2-4 Days	Not Applicable	Room Temperature
652.	Vulvar Swab Culture For Screening	-	Swab collected from vulva (including labia, Bartholin glands) in transport media	<b>Microbiology</b> 24 hour∖day	3-5 Days	Negative for multidrug resistant nonfermentative gram negative pathogens.	<ol> <li>Clean the surface of the lesion with a sterile normal saline.</li> <li>Sample exudates or area of erythema with a swab</li> <li>Transport to the lab ASAP</li> </ol>
653.	Vulvectomy (Large)	-	Buffered Formalin	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	3-5 Days	Not Applicable	Room Temperature
			W				

No.	Test Name A	bbreviatior	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
654.	Wash/Lavage, Routine Cytology For Malignant Cells	-	Sterile Container	<b>Pathology</b> Sunday- Thursday 8:00am – 4:00pm	2-3 Days	Not Applicable	Room Temperature
655.	Washed RBC/Unit	-	Call Blood Bank Extension. 1710	Blood Bank	24 Hours	Not Applicable	Call Blood Bank
656.	WBC Differential Count	-	EDTA WHOLE BLOOD LAVENDOR TOP TUBE	<b>Hematology</b> 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
657.	Widal Test	-	2-3 ml Blood " Plain Red Top Tube"	Immunolo gy Send out test /contact the laboratory	3-5 Working Days	Negative	Room Temperature

No.	Test Name	Abbreviation	Requirements	Performed	Turn Around Time	Reference Range	Special Handling
658.	Wound Culture + Gram 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 culturing. d. Transport in aerobic	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
			Y				

No.	Test Name	Abbreviatior	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
659.	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
660.	Yeast Susceptibility Testing	-	Yeast Isolate on solid media	Microbiology 8 am- 5 pm	3-5 Days	Not Applicable	Reflect test
661.	Ziehl- Neelsen On Tissue	-	Z Paraffin Block	Pathology Sunday- Thursday 8:00am – 4:00pm	1-2 Days	Not Applicable	Room Temperature
662.	Zinc Level	S-Zn	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
663.	Zinc Level 24hr Urine Collection	U-Zn	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

# **<u>Chapter Three:</u>** Immunochemistry Profiles (Seven)

1. Kidney Function Tests	s 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	
	Magnesium	Magnesium	
	Phosphorus	Phosphorus	
5. Lipid Profile	Glucose	Glucose	
Cholesterol	Albumin	Albumin	
Triglyceride		Adjusted Calcium	
HDL	6. Iron Study	eGFR	
LDL	Iron Serum Level	Bicarbonate	Albumin
	Total Iron Binding Capacity	Total Protein	Total Protein
		Bilirubin Total	Bilirubin Total
7. Calcium Panel	Transferrin Saturation Test	Bilirubin Direct	Bilirubin Direct
Albumin, Serum Level Adjusted Calcium	Unsaturated Iron Binding Capacity	Alkaline Phosphatase	Alkaline Phosphatase
Calcium, Serum Level		ALT	ALT
		AST	AST

# **<u>Chapter Four:</u>** List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges

## **Complete Blood Count**

	Male& Female 4 - 11x 10 <sup>3</sup> cells/µL
WBC Count	Children Age 8-13 years: 4.5 - 13.5x 10 <sup>3</sup> cells/µL
	Children Age 4-7 years: 5- 17x 10 <sup>3</sup> cells/µL
	Children Age 1-3 years: 5.5 - 17.5x 10 <sup>3</sup> cells/µL
	Male 4.35 – 6.5 10 <sup>6</sup> cells/µL
	Female 3.90 - 5.50 10 <sup>6</sup> cells/µL
<b>RBC</b> Count	Children Age 8-13 years: 4 - 5.4x 10 <sup>6</sup> cells/µL
	Children Age 4-7 years: 4 - 5.2x 10 <sup>6</sup> cells/µL
	Children Age 1-3 years: 3.4 - 5.2x 10 <sup>6</sup> 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
Hematocrit (PCV)	Male 40-54 %
	1

	Female 37-46 %
	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
	Children Age 8-13 years: 26 - 32pg
МСН	Children Age 4-7 years: 23 - 31pg
	Children Age 1-3 years: 23 - 31pg
	Adult 30 - 35 g/dl
МСНС	Children (1-13 years) 32 - 36g/dl
RDW	11.6-14.6 %
	Adult 40 - 65 %
Neutrophils (PMN)	Children Age 8-13 years: 35 - 65 %
	Children Age 4-7 years: 30 - 60 %
	Children Age 1-3 years: 22 - 46%
Bands	0-5 %

Lymphocytes	Adult 25- 40%	
	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 x 10 <sup>3</sup> / ul	
MPV	7.5 – 9.3 fl	

# **Body Fluid Analysis**

Body Fluids/total nucleated cells	Synovial Fluids: Both genders (0 – 200/µL	
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	

# <u>CSF Analysis</u>

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**

Test Name	Reference Range	
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 $\leq 5.3$ mIU/mL Post-menopausal at or below $\leq 8.3$ mIU/mL Men $\leq 2.6$ 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 Men, 20-60 years: 30-400 ng/mL	
Ferrtin Level	Women, 17 60 years: 13 150 ng/mL	
	Males: 18 years: 8-61 U/L	
Gamma-Glutamyl Transferase (GGT)	Females: 18 years: 5-36 U/L	
	Children: See portal	
Immunoglobulin A	Children: See portal.	
	Adult: 61-356 mg/dL Neonates : <1.5	
	Infants in 1st year of life: <15.0	
Lunua alabalia F	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 Children: See portal	
Immunoglobulin M	Adult: 37-286 mg/dL	
Iron Level	Males: 50-150 mcg/dL	
Iron Level	Females: 35-145 mcg/dL	
	Children: See portal	
	Adult:	
LDL Cholesterol	Desirable: <100 mg/dL Above Desirable: 100-129 mg/dL	
LDL Choiesteroi	Borderline high: 130-159 mg/dL	
	High: 160-189 mg/dL	
	Very high: $> \text{ or } = 190 \text{ mg/dL}$	
	Age (years)	
	< 40 years : 1.4 ng/mL	
Prostatic Specific Antigen	40-49 years: 2.0 ng/mL	
r rosune specific rinigen	50-59 years: 3.1 ng/mL	
	60-69 years: 4.1 ng/mL	
	≥ 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: $2.49-8.36\geq 50 years: 1.93-7.40 ng/mLHealthy premenopausal Females:20-49$ years: $0.084-0.481$ ng/mL $\geq 50$ years: $0.029-0.408$ ng/mL	
	pCO2 Male: 35-48 mmHg	
	Female: 32-45 mmHg       Total Hb     Male: 13.5-17.5 g/dL       Female: 12.0-16.0 g/dL	
	pO2 83-108 mm Hg	
	sO2 >95 %	
	cK+ 3.4-4.5 mmol/L	
	cNa+ 136-146 mmol/L	
Arterial Blood Gas Plus Extended Critical Care Profile	Ionized Calcium (Ca2+) 4.61 - 5.17 mg/dL	
Arteriai bioou Gas rius Extendeu Criticai Care rioine	cCl- 98-106 mmol/L	
	cGlucose 70-105 mg/dL	
	cLactate 0.5-1.6 mmol/L	
	FO2Hb 94-98 %	
	FCOHb 0.5-1.5 %	
	FMetHb 0.0-1.5 %	
	cBase(Ecf)/ SBE -2 to +2 mmol/L	
	HCO3– 22 – 26 mmol/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)		
Inhibin A & B	More than 75 yrs: 16.2 – 123           (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	

	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	
Venous Blood Gas Plus Extended Critical Care Profile	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 ald.	not calculated	
	<18 years old: not calculated >18 years:		
	Terms	GFR mL/min/1.73 m	
	Normal or high	90	
	Mildly decreased	60 to 89	
	Mildly to moderately	45 to 59	
eGFR	decreased		
	Moderately to severely	30-44	
	decreased		
		15.20	
	Severely decreased	15-29	

# **<u>Chapter Five:</u>** Transfusion Services (Blood Bank Products)

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

Product name	Requirements	Turnaround time	Special Handling	
Leukocyte reduced irradiated blood unit	<ul> <li>First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing.</li> <li>Non- First-time transfusion (History of Blood Group is on LIS): One EDTA sample.</li> </ul>	2–3 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	<ul> <li>First time transfusion (No blood Group on LIS): Two EDTA samples for Blood Group and Compatibility testing.</li> <li>Non- First-time transfusion (History of Blood Group is on LIS): One EDTA sample.</li> </ul>	24 hours	<10 C°	
Plasma Depleted	Two blood group EDTA tubes if no blood group result on LIS	24 hours	Room temperature	
<b>BLOOD IRRADIATION</b>	Call Blood Bank Extension. 1710	2 hour	Room temperature	

# **Chapter Six: Point of Care**

Test Name	Abbreviatio	n Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
Glucose, Rapid Test	Glu	<ul> <li>Acceptable sample size is (1.2 μl)</li> <li>Capillary whole blood (Finger Stick), venous whole blood, arterial whole blood, neonate heel stick and neonate arterial whole blood specimens.</li> <li>Venous whole blood/Arterial whole blood for Critically ill patients</li> <li>Whole blood specimens collected with heparin or Plain (Red top tube).</li> </ul>	Bedside- POC / 24 hours/day	Immediately after collection	FBS: < 110 mg/dl Random: 70 – 140 mg/dl Diabetic: > 200 mg/dl Critical values: < 40 & > 400 mg/dl	Use a safety sterile lancet to puncture the finer (One for each patient) Critical/unusual results should be confirmed before reporting
Hemoglobin, Rapid Test	Hb	<ul> <li>Capillary (Obtained by finger stick), anticoagulated venous or arterial whole blood (EDTA or Heparin, no fluoride) may be used for testing.</li> <li>Volume of sample: 10 μl of whole blood.</li> </ul>	Bedside- POC / 24 hours/day	Immediately after collection	Adult female: 12-16 g/dl Adult male: 13-18 g/dl Children: 8-13 years: 12 - 15 g/dl 4-7 years:10 -15 g/dl 1-3 years: 10-16 g/dl Critical values: < 8.0 & > 18.5 g/ g/dl	Use a safety sterile lancet to puncture the finer (One for each patient) Critical/unusual results should be confirmed before reporting
Point of Care, Respiratory Arterial Blood Gas+ Extended Critical Care Profile	POC, RT- ABG+ CCP	Minimum 65 µl dry, electrolyte balanced heparin syringe- under ice	Point of Care/ 24 hours/day	Immediately and within 15 minutes (with or without ice) and not more than 5 minutes for shunt study and elevated leukocyte or platelet count	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Care must be taken to avoid sample contamination by air Samples with more than 15 minutes at RT or under ice must be rejected Critical/unusual results should be confirmed before reporting

Test Name	Abbreviation	Collection Requirements	Performed	Turn Around Time	Reference Range	Special Handling
Point of Care, Respiratory Venous Blood Gas+ Extended Critical Care Profile	POC, RT- VBG+ CCP	Minimum 65 µl dry, electrolyte balanced heparin syringe- under ice	Point of Care/ 24 hours/day	Immediately and within 15 minutes (with or without ice) and not more than 5 minutes for shunt study and elevated leukocyte or platelet count	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Care must be taken to avoid sample contamination by air Samples with more than 15 minutes at RT or under ice must be rejected Critical/unusual results should be confirmed before reporting
Point of Care , Anesthesia Arterial Blood Gas+ Extended Critical Care Profile	POC, Anes- ABG + CCP	Minimum 65 µl dry, electrolyte balanced heparin syringe- under ice	Point of Care/ 24 hours/day	Immediately and within 15 minutes (with or without ice) and not more than 5 minutes for shunt study and elevated leukocyte or platelet count	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Care must be taken to avoid sample contamination by air Samples with more than 15 minutes at RT or under ice must be rejected Critical/unusual results should be confirmed before reporting

Test Name	Abbreviation	n Collection Requirements	Performed	Turn Around Time	<b>Reference Range</b>	Special Handling
Point of Care , Anesthesia Venous Blood Gas+ Extended Critical Care Profile	POC, Anes- VBG + CCP	Minimum 65 µl dry, electrolyte balanced heparin syringe- under ice	Point of Care/ 24 hours/day	Immediately and within 15 minutes (with or without ice) and not more than 5 minutes for shunt study and elevated leukocyte or platelet count	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Care must be taken to avoid sample contamination by air Samples with more than 15 minutes at RT or under ice must be rejected Critical/unusual results should be confirmed before reporting
RT, Arterial Blood Gas	RT- ABG	Minimum 160 μl, Sodium or Lithium heparinized syringe- under ice	Point of Care/ 24 hours/day	Immediately and within 15 minutes (with or without ice) and not more than 5 minutes for shunt study and elevated leukocyte or platelet count	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Care must be taken to avoid sample contamination by air Samples with more than 15 minutes at RT or under ice must be rejected Critical/unusual results should be confirmed before reporting
RT, Venous Blood Gas	RT- VBG	Minimum 160 µl, Sodium or Lithium heparinized syringe- under ice	Point of Care/ 24 hours/day	Immediately and within 15 minutes (with or without ice) and not more than 5 minutes for shunt study and elevated leukocyte or platelet count	Refer to Chapter Four: List of Age / Gender/ Circalunar Rhythm Dependent Reference Ranges	Care must be taken to avoid sample contamination by air Samples with more than 15 minutes at RT or under ice must be rejected Critical/unusual results should be confirmed before reporting