UPMC Presbyterian Shadyside Automated Testing Laboratories
Department of Pathology
2022 Reference Ranges

Test	Reference Range	Units
Serum/Plasma		
AKI Risk Score (Acute Kidney Index)	Less than 0.3	No units
Albumin	0 D: 2.9-5.5 1 M: 3.8-5.4 15Y: 3.4-5.0	g/dL
Alkaline Phosphatase	0 D: less than 310 1 M: less than 360 1 Y: less than 290 10Y: less than 400 15Y: 38-126	IU/L
ALT (Alanine Aminotransferase)	**Male**: 17-63 **Female**: 14-54	IU/L
Ammonia	1M to 14 Y: 12-38 15Y: 9-33	µmol/L
AST(Aspartate Aminotransferase)	15-41	IU/L
Amylase	Less than 65	IU/L
Anion Gap	7-15	mmol/L
Bilirubin, Direct	0.1 – 0.5	mg/dL
Bilirubin, Total	0D: 1-12 1M: 0.2-1.3 15Y: 0.3-1.5	mg/dL
BUN(Blood Urea Nitrogen)	0D: 6-18 15Y: 8-26	mg/dL
Creatinine	0D: 0.1 - 0.6 10Y: 0.2 - 1.1 15Y: 0.5-1.4	mg/dL
Calcium	0D: 7-12 1M: 8.8-10.8 15Y: 8.4-10.2	mg/dL
Chloride	98-107	mmol/L
eGFR	< 60 can indicate chronic kidney disease <15 can indicate chronic kidney failure	mL/min/1.73m²
CO_2 (Carbon Dioxide)	21-31	mmol/L
Covid 19 Antibody	Non-Reactive-This sample does not contain anti-SARV-Co V -2 IgG antibodies	
	Equivocal-Anti SARS-COV-2 IgG antibody status cannot be determined. Reactive-This sample likely contains anti-SARS-CoV-2 IgG antibodies	
Glucose	70-99 - Fasting Less than 1M: 40-99 Random 70-139	mg/dL
Glucose Tolerance, Gestational 50 g Screen	< 135 cutoff	mg/dL

Test	Reference Range	Units
Glucose Tolerance, Gestational 100g 3 Hr	Fasting: 65-94	mg/dL
	1 hr: <180	mg/dL
	2 hr: <150	mg/dL
	3 hr: <140	mg/dL
Glucose Tolerance, 75 g, 2 hr	Fasting:<100	mg/dL
	2 hr: <140	mg/dL
Magnesium	0D: 1.2-2.6 7D: 1.6-2.6 2Y: 1.6-2.2 15Y: 1.6-2.3	mg/dL
Phosphorus	0 – 14D: 5.4 – 10.4 15D – 11M: 4.5 – 8.2 1Y – 4 Y: 4.2 – 6.7 5Y – 12Y: 3.9 – 5.8 13Y – 15Y: **Female**: 3.0 – 5.8; **Male**: 3.3 -6.1 16Y – 18Y: 3.0 - 4.8 19Y: 2.5 – 4.6	mg/dL

Test	Reference Range	Units
Serum/Plasma		
Potassium	0D: 3.7-5.9 1M: 4.1-5.3 1Y: 3.4-4.7 15Y: 3.5-5.0	mmol/L
Sodium	136-146	mmol/L
Uric Acid	0D: 2.0-5.5 15Y: 2.5-7.5 17Y: 2.5-6.2 35Y: 2.5-7.0 45Y: 2.5-7.5	mg/dL
GTP (gamma glutamyl transferase)	**Male** - 0D:less than 121 1Y: less than 45 15Y: less than or equal to 65 **Female** - 0D: less than 121 1Y: 45 15Y: less than or equal to 40	IU/L
Total Protein	0D: 4.4-7.6 1M: 5.1-7.3 1Y:6.0-8.0 15Y: 6.3-7.7	g/dL
Lipase	15-70	U/L
Total CPK (creatine phosphokinase)	Less than or equal to 200	IU/L
CK-MB	0-5	ng/mL
Lactate (plasma)	0.5-2.2	mmol/L
LDH (lactate dehydrogenase)	0D: less than 450 1M: less than 250 1Y: less than 171	IU/L
Iron	**Male**: 45-182 **Female**: 28-170	ug/dL
Transferrin	202-336	mg/dL
TIBC	250-420	ug/dL
Ferritin	10-282	ng/mL
Folate	Greater than 5.0	ng/mL
RBC Folate	293-809	ng/mL
Vitamin B12	211-911	pg/mL
high-sensitivity Troponin I	Normal: less than 18	ng/L
BNP (beta natriuretic peptide)	Less than 100	pg/mL
CRP	Less than 0.75	mg/dL
hs-CRP (high sensitivity CRP)	Less than 0.748	mg/dL
Total βhCG	Less than 5.0	mIU/mL

Test	Reference Range	Units
Serum/Plasma		
AFP (alpha fetal protein)	0D: less than 170,000 1M: less than 400 3M: less than 30 6M: less than 20	ng/mL
CEA (carcinoembryonic antigen)	Less than 5	ng/mL
CA 15-3 (cancer antigen (breast) 15-3)	Less than 30	U/mL
CA 19-9 (cancer antigen (GI) 19-9)	Less than 33	U/mL
CA 125 (cancer antigen 125)	Less than 35	U/mL
Total PSA (prostate specific antigen)	0-4.0	ng/mL
Complement C3	79-152	mg/dL
Complement C4	16-38	mg/dL
Cortisol	Adults: 8am-10am: 5-21 4pm-6pm: 2-14 Post ACTH Stimulation Peak – greater than 20 Peak after IM injection – greater than 16 Child – AM: 0-7D: 2 – 15 8D- 12M: 3 – 23 1YR – 17YR: 6 – 22 ACTH Stimulation Baseline 60 Min 1M-12M 3-23 32-60 1Y – 6Y 6-25 22-40 6Y – 12Y 3-15 17-28 Tanner II-III Males 4-13 16-32 Females 4-16 16-32 Tanner IV-V Males 5-15 18-27 Females 6-15 18-35	µg/dL

Test	Reference Range	Units
Serum/Plasma		
FSH (follicle-stimulating hormone)	**Male** 2W:1.2-5.2 18M:0.2-3.0 19M: 0.3-1.9 8Y:0.7-1.7 10Y: 0.2-5.8 12Y: 0.2-10.3 15Y: 0.8-8.2 19Y: 1.5-14.3 *Tanner stages*: I:0.3-1.9 II:0.7-4.6 III: 1.2-10.4 IV: 15-40 V 10-40 **Female** 2W: 2.1-30.5 18M: 1.1-14.4 19M: 0.7-3.4 8Y: 0.-5.6 10Y: 0.7-7.3 12Y:1.0-9.2 15Y: 0.3-10.5 Follicular: 1.4-9.39 Midcycle peak: 6.2-17.2 Luteal: 1.1-9.2 Postmenopausal: 14.9-124.3 *Tanner stages*: I:0.5-2.4 II: 1.7-4.7 III: 2.5-7.0 IV: 1.3-7.4 V:1.0-9.2	mIU/mL
LH (luteinizing hormone)	**Male** Cord blood: 0.1-2.6 2W: 4.9-10.0 18M: 0.1-3.0 19M: 0.1-1.0 8Y: 0.1-0.8 10Y: 0.4-4.4 12Y: 0.3-4.8 15Y: 0.7-7.2 15Y: 0.7-7.2 19Y: 1.0-5.6 *Tanner stages:* I:0.1-0.4 II:0.-4.8 III:0.6-3.7 IV:0.6-7.2 V:1.5-7.0 **Female** Cord blood: 0.1-2.6 2W: 0.3-7.9 18M: 0.1-1.8 19M: 0.1-0.6 8Y: 0.1-0.2 10Y: 0.1-4.1 12Y: 0.3-29.4 15Y: 0.1-29.4 Follicular phase: 1.7-15.0 Midcycle peak: 21.9-56.6 Luteal phase: 0.6-16.3 Postmenopausal: 9.0-52.3 *Tanner stages:*I:0.1-0.2 II:0.3-4.1 III:0.2-4.1 IV:0.7-15.0 V:0.3-29.4	mIU/mL
Acetone	Negative	N/A
Estradiol	**Male**: 20-75 **Female**: 20-88	pg/mL
Haptoglobin	36-195	mg/dL

Test	Reference Range	Units
Serum/Plasma		
Prealbumin	0M: 7-39 1M: 8-34 6M: 12-36 1Y: 8-34 4Y: 12-30 6Y: 12-42 20Y: 18-38	mg/dL
IgA (SHY) Immunoglobulin A	0D:0-8 1M: 2-27 4M: 4-63 7M: 15-72 13M: 15-97 25M: 15-144 37M: 15-241 5Y: 15-161 7Y: 21-195 9Y: 59-301 12Y: 401-218 14Y: 82-453	mg/dL
IgG (SHY) Immunoglobulin G	0D: 605–1374 1M: 184–641 4M: 55–765 7M: 214-1055 13M: 330–1133 25M: 505–1280 37M: 559–1116 5Y: 499–1198 7Y: 580–1256 9Y: 484–1309 12Y: 577–1322 14Y: 751–1560	mg/dL
IgM (SHY) immunoglobulin M	0D: 1–20 1M: 8–49 4M: 9–73 7M: 8–95 13M: 11–99 25M: 22–94 37M: 22–99 5Y: 17–86 7Y: 21-120 9Y: 15-103 12Y: 8-133 14Y: 40-274	mg/dL

Test	Reference Range	Units
Serum/Plasma		
Progesterone	Males: 0.0 – 1.2 Females: Follicular phase: 0.32–4.77 Luteal phase: 7.9–87.9 Mid Luteal: 18.0–87.9 Pregnancy: 1st trimester: 27.0–141.0 2nd trimester: 51.0–438.0 3rd trimester: 165.0–765.0	nmol/L
Prolactin	Males: 0.6–19 Females: 0.6–20	ng/mL
Testosterone (SHY)	Males: 10.00–42.00 Females: less than 2.8	nmol/L
Thyroglobulin	3.0-40.0	ng/mL
Thyroglobulin antibody	Less than 20	IU/mL
Total T3 (PUH) Triiodothyronine	**Female**: 0D: 0.48-1.77 1M: 0.73-2.21 1Y: 1.26-2.16 6Y: 1.10-1.95 11Y: 1.04-1.84 16Y: 1.01-1.51 18Y: 0.60-1.81 **Male**: 0D: 0.51-1.84 1M: 1.03-2.29 1Y: 0.93-2.13 6Y: 1.04-1.98 11Y: 0.88-1.76 16Y: 0.86-1.76 18Y: 0.60-1.81	ng/mL
Total T4 (Thyroxine)	0D: 1.0-38.9 5D: 3.0-20.0 14D: 1.7-9.1 147D: 0.8–8.2 25M: 0.7–5.7 20Y: 0.30–5.0	µg/dL
Free T4 (analog-PUH)	Euthyroid: 0.89-1.76 Hypothroid: less than 0.89 Hyperthyroid: greater than 1.78 Females Normal Range Median *1st Trimester:* 0.78-1.48 1.28 *2nd Trimeste*r: 0.78-1.48 1.00 *3rd Trimester:* 0.68-1.41 0.95	ng/dL
T3 Uptake (SHY)	22.5-37.0	No units
Serum/Plasma		

Test	Reference Range	Units
TSH (Thyroid Stimulating Hormone)	0D: 1.0-38.9 5D: 3.0-20.0 14D: 1.7-9.1 147D: 0.8–8.2 25M: 0.7–5.7 20Y: 0.30–5.0	µIU/mL
Acetaminophen	Therapeutic: 10 – 20 Hepatotoxic: 4 hours post ingestion: greater than 150	µg/mL
Salicylate (SHY)	Therapeutic: 15-30	mg/dL
Carbamazepine	4.0-12.0	µg/mL
Digoxin	1.0-2.0	ng/mL
Gentamicin	Peak: 6.0-10.0 Trough: 0.5-2.0	µg/mL
Lithium	0.6-1.5	mmol/L
Methotrexate	None established	umol/L
Phenobarbitial	10.0-40.0	µg/mL
Phenytoin (Dilantin)	0D: 6-14 1Y: 10-20	µg/mL
Free Phenytoin	1.0-2.0	µg/mL
Tobramycin (SHY)	Peak: 6.0-10.0 Trough: 0.5-2.0	µg/mL
Valproic Acid	Peak: 50-150	µg/mL
Free Valproic Acid	Peak: 4.8-17.3	ug/ml
Vancomycin	Trough: 10-20	µg/mL
Vancomycin **VNAUC 1**	>80	ug/ml
Vancomycin **VNAUC2**	>30	ug/ml
VLDL (very low density lipoprotein)	Less than or equal to 40	mg/dL
Osmolality	281-307	mOsm/Kg

Test	Reference Range	Units
Cerebrospinal Fluid (CSF) Test	Reference Range	Units
CSF Glucose	40-75	mg/dL
CSF Lactate	0.9-2.8	mmol/L
CSF Protein	0D: 40-120 1M: 15-45	mg/dL
Urine Drugs of Abuse Test	Reference Range	Units
Benzodiazepines (SHY)	Negative	N/A
Amphetamines (SHY)	Negative	N/A
Benzoylecgonine (SHY) Cocaine Metab	Negative	N/A
Barbiturates (SHY)	Negative	N/A
Opiates (SHY)	Negative	N/A
Phencyclidine (SHY) PCP	Negative	N/A
6-Acetylmorphine (SHY)	Negative	N/A
Buprenorphine (SHY)	Negative	N/A
Oxycodone (SHY)	Negative	N/A
Methadone (SHY)	Negative	N/A
Cannabinoid (SHY) THC	Negative	N/A
Urine Test	Reference Range	Units
Urine Albumin	Less than 1.9	mg/dL
Albumin/Creatinine ratio	Less than 30	mg/g creatinine
Urine Urea Nitrogen	7000-160000	mg/24 hr
Urine Calcium	100-300	mg/24 hr
Urine Phosphorus	400-1300	mg/24 hr
Urine Uric Acid	250-750	mg/24 hr
Urine Sodium	40-220	mmol/24 hr
Urine Potassium	25-125	mmol/24 hr
Urine Amylase	Less than or equal to 30	IU/24 hr
Urine Creatinine	Female: 800-1500 Male: 1300-1800	mg/24 hr
Creatinine Clearance	Female: 88-128 Male: 97-137	mL/min
Urine/Serum ßhCG	Female: (non-pregnant) Negative Female: (pregnant) Positive Male: Negative	N/A
Urine Osmolality	50-1400	mOsm/Kg
Urine Total Protein	42-225	mg/24 hr

Test	Reference Range	Units
Urine Test	Reference Range	Units
Urine Color	Yellow	N/A
Urine Character	Clear	N/A
Urine Specific Gravity	1.016 - 1.022	N/A
Urine pH	5.0 - 8.0	N/A
Urine Protein	Negative	N/A
Urine Ketone	Negative	mg/dL
Urine Glucose	Negative	mg/dL
Urine KEtone	Negative	N/A
Urine Bilirubin	Negative	N/A
Urine Blood	Negative	N/A
Urine Urobilinogen	0.0 - 1.0	mg/dL
Urine Nitrite	Negative	N/A
Urine Leukocyte Esterase	Negative	N/A
Urine WBC's	0 - 5	Per HPF
Urine RBC's	0 - 4	Per HPF
Urine Epithelial Cells	0 - 5	Per HPF
Urine Bacteria	None seen	Per HPF
Urine Crystals	None seen	Per HPF
Hyaline Casts	0-2	Per LPF

Test	Reference Range	Units
Blood Gas (whole Blood Specimens)	Reference Range	Units
pH	Arterial: 7.35-7.45 Venous: 7.32-7.43	N/A
pCO_2 (Partial pressure of carbon dioxide)	Arterial: 35-45 Venous: 41-51	mm/Hg
pO_2 (Partial pressure of oxygen)	Arterial: 80-100 Venous: 30-50	mm/Hg
FO_2HB (Fraction of oxyhemoglobin)	Arterial: 95-99 Venous: 70-85	%
iCa (Ionized Calcium)	1.15-1.29	mmol/L
Glucose (whole blood)	less than 1M: 40-99	mg/dL
Sodium (whole blood)	136-146	mmol/L
Potassium (whole blood)	3.5-5.0	mmol/L
Lactate (whole blood)	0.5-1.6	mmol/L
COHb (Carboxyhemoglobin)	Non-Smokers: less than or equal to 2 Smokers: less than or equal to 10	%
MetHb (Methemoglobin)	0.0-1.5	%
tHb (total hemoglobin)	Female: 12.0-16.0 Male: 13.5-17.5	g/dL
HCO_3 (Bicarbonate)	Arterial: 22-26 Venous: 19-25	mg/L
Base Excess/Bass Deficient	0 +/- 2	N/A
O_2 saturation (oxygen saturation)	Arterial: 94-99 Venous: 70-80	%
a-vO_2 (arteriovenous oxygen difference)	4-6	VOL%
O_2 Content (oxygen content)	Arterial: 15-20 Venous: 12-17	VOL%
Creatinine (whole blood)	0.5-1.4	mg/dL
Chloride (whole blood)	98-107	mmol/L
Thrombelastograph	R: 5-10	minutes
	K:1-3	minutes
	Angle: 53-72	degree
	MA: 50-70	mm
Lipoprotein Reference Ranges for Adult Population (Age >/=20). National Cholesterol Education Program, ATP III Classification		
Triglyceride	Normal: less than 150 Borderline High: 150-199 High: 200-499 Very High: greater than or equal to 500	mg/dL
Total Cholesterol	Desirable: less than 200 Borderline High: 200-239 High: greater than or equal to 240	mg/dL
HDL	Low: less than 40 High: greater than or equal to 60	mg/dL

Test	Reference Range	Units
LDL	Optimal: less than 100 Near Optimal/Above Optimal: 100-129 Borderline High: 130-159 High: 160-189 Very High: Greater than or equal to 190	mg/dL

Test	Reference Range	Units
Pediatric (2-19 years) Lipid Reference Ranges For Cardiovascular Disease Risk		
Total Cholesterol	Acceptable: Less than 170 Borderline High Risk: 170-199 High Risk: Greater than or equal to 200	mg/dL
LDL Cholesterol	Acceptable: Less than 110 Borderline High Risk: 110-129 High Risk: Greater than or equal to 130	mg/dL
HDL Cholesterol	Acceptable: Greater than 45 Borderline Risk: 40-45 High Risk: Less than 40	mg/dL
Triglyceride	Acceptable 0D-9Y: less than 75 Acceptable 10Y-19Y: less than 90 Borderline High Risk 0D-9Y: 75-99 Borderline High Risk 10Y-19Y: 90-129 High Risk 0D-9Y: greater than or equal to 100 High Risk 10Y-19Y: greater than or equal to 130	mg/dL

Test	Reference Range	Units
Hematology Test	Reference Range	Units
Hemoglobin	Female: 11.6-14.6 Male: 12.9-16.9	g/dL
Hematocrit	Female: 34.1-43.3 Male: 38.0-48.8	%
WBC	3.8-10.6	x 10E+9/L
RBC	Female: 3.73-4.89 Male: 4.13-5.57	x 10E+12/L
MCV	82.6-97.4	fL
MCH	27.8-33.4	pg
MCHC	32.7-35.5	g/dL
MPV	6.8-10.4	fL
RDW	11.8-15.2	%
Polys (neutrophils)	44-77	%
Bands (neutrophils)	0-5	%
Lymphs	13-44	%
Monos	4-13	%
Eos	0-6	%
Basos	0-1	%
Myelocytes	0	%
Metamyelocytes	0	%
Promyelocytes	0	%
ABS Poly	2.24-7.68	x 10E+09/L
ABS Lymphocytes	0.80-3.65	x 10E+09/L
ABS Moncytes	0.30-0.90	x 10E+09/L
ABS Eosinophils	0.00-0.40	x 10E+09/L
ABS Basophils	0.00-0.06	x 10E+09/L
ABS Bands	0.10-0.80	x 10E+09/L
ABS Myelocytes	0	x 10E+09/L
ABS Metamyelocytes	0	x 10E+09/L
ABS Promyelocytes	0	x 10E+09/L
ABS Blasts	0	x 10E+09/L
Reticulocytes	0.4-2.4	%
Absolute Reticulocytes	0.018-0.158	x 10E+12/L
Sedimentation Rate (ESR)	18Y: Female 0-40 Male 0-23 0D: Female 0-20 Male 0-18	mm/hr
Sickle Cell Screen	Negative	N/A
Monospot	Negative	N/A
Gastric Occult	Negative	N/A
Fluid Crystals	Negative	N/A

Test	Reference Range	Units
Synovial Fluid - Appearance	Yellow, Clear, or slightly cloudy	N/A
Synovial Fluid - RBC's	0-2000	/mm^3
Synovial Fluid - Nucleated Cells	13-180	/mm^3
Synovial Fluid - Neutrophils	0-25	%
Synovial Fluid - Lymphocytes	0-78	%
Synovial Fluid - Monocytes	0-71	%
Synovial Fluid - Mononuclear	0-26	%
Pleural - Nucleated Cells	1395-3734	/mm^3
Pleural - Macrophages	64-80	%
Pleural - Lymphocytes	18-36	%
Pleural - Neutrophils	0-1	%
Pleural - Mesothelial	0-2	%
Peritoneal Dialysate Fluid - RBC's	24 +/- 48	/ul
Peritoneal Dialysate Fluid - Nucleated Cells	36 +/- 48	/ul
Peritoneal Dialysate Fluid - Leukocytes	21 +/- 27	/ul
Peritoneal Dialysate Fluid - Neutrophils	18 +/- 16	%
Peritoneal Dialysate Fluid - Lympocytes	24 +/- 26	%
Peritoneal Dialysate Fluid - Monocytes	35 +/- 26	%
Peritoneal Dialysate Fluid - Eosinophils	7 +/- 7	%
Peritoneal Dialysate Fluid - Basophils	3 +/- 2	%
Cerebrospinal Fluid - Appearance	Clear	N/A
Cerebrospinal Fluid - Supernatant	Colorless	N/A
Cerebrospinal Fluid - RBC's	0-5	/mm^3
Cerebrospinal Fluid - Nucleated Cells	0-5	/mm^3
Cerebrospinal Fluid - Lymphocytes	63-99 (0.63-0.99)	%
Cerebrospinal Fluid - Monocytes	3-37 (0.03-0.37)	%
Cerebrospinal Fluid - Histiocytes	Rare	
Cerebrospinal Fluid - Neutrophils	0-2 (0.00-0.02)	%
BAL Fluid - Alveolar macrophages	greater than 85	%
BAL Fluid - Lymphocytes	10-15	%
BAL Fluid - Neutrophils	less than 3	%
BAL Fluid - Eosinophils	less than 1	%

No Definitive Reference Ranges determined for peritoneal, amnoitic and pericardial fluids

Test	Reference Range	Units
WBC Differential Count - Poly	1D: 32-62 1W: 28-43 1M: 19-39 6M:14-34 2Y: 12-34 6Y: 26-48 12Y: 31-61 17Y: 37-67 18Y: 44-77	%
WBC Differential Count - Bands	1D: 12-18 1W: 8-14 1M: 8-14 6M:6-12 2Y: 4-10 6Y: 2-8 12Y: 2-8 17Y: 2-8 18Y: 0-5	%
WBC Differential Count - Eos	1D: 0-3 1W: 0-3 1M: 0-3 6M: 0-3 2Y: 0-3 6Y: 0-3 12Y: 0-3 17Y: 0-3 18Y: 0-6	%
WBC Differential Count - Baso	1D: 0-2 1W: 0-2 1M: 0-2 6M:0-2 2Y: 0-2 6Y: 0-2 12Y: 0-2 17Y: 0-2 18Y: 0-1	%
WBC Differential Count - Lymphs	1D: 26-36 1W: 20-50 1M: 33-63 6M: 41-71 2Y: 45-75 6Y: 35-65 12Y: 28-48 17Y: 25-45 18Y: 13-44	%

Test	Reference Range	Units
WBC Differential Count - Monos	1D: 3-9 1W: 4-12 1M: 4-12 6M: 3-9 2Y: 2-8 6Y: 3-9 12Y: 3-9 17Y: 3-9 18Y: 4-13	%
Reticulocyte	Newborn: 3.0-7.0 1D: 1.0-4.6 6D: 0.1-1.9 50D: 0.4-2.8 85D: 0.4-2.4	%
Absolute Reticulocyte	Newborn: Unavailable 1D: Unavailable 6D: Unavailable 50D: Unavailable 85D: 0.018-0.158	x 10^{12}/L
Immature Reticulocyte Fraction	0.17-0.51	
Platelet	0D: 145-450 32D: 140-450 18Y: 156-369	x 10^{9}/L

Test	Reference Range	Units
Fibrinogen	1D: 192-374 3D: 283-401 1M: 82-383 1Y: 162-401 6Y: 199-409 11Y: 212-433 16Y: 211-518	mg/dL
D-dimer	Less than 0.50	ug/mL FEU
Closure Time	Collagen/ADP: 65-117 Collagen/EPI: 84-175	Seconds
INR	1D: 1.2-1.4 3D: 1.1-1.4 1M: 0.9-1.2 1Y: 0.9-1.2 6Y: 0.9-1.2 11Y: 1.0-1.3 16Y: 0.8- 1.2	N/A
Prothrobin Time (PT)	1D: 14.4-16.4 3D: 13.5-16.4 1M: 11.5-15.3 1Y: 12.1-14.5 6Y: 11.7-15.1 11Y: 12.7-16.1 16Y: 11.9-14.5	Seconds
Partial Thromboplastin Time (PTT)	1D: 34.3-44.8 3D: 29.5-42.2 1M: 35.1-46.3 1Y: 33.6-43.8 6Y: 31.8-43.7 11Y: 33.9-46.1 16Y: 22.6-34.3	Seconds
Thrombin Time (SHY)	14.5-18.4	Seconds
Aspirin Response	Non-therapeutic baseline: 550-700 Therapeutic response to aspirin: 350-549	ARU
Plavix Response	Normal Baseline range: 194-418	Base PRU
LMW Heparin	Call Pharmacy	lμ/mL
UF Heparin	Call Pharmacy	lμ/mL
Acetone	Negative	
Kleihauer Betke Fetal HGB	Less than 0.04	%
Kleihauer Betke Fetal Bleed	Less than 2.00	mL
Fetal APT Test	Negative	

Test	Reference Range	Units
White Blood Cell (WBC)	1D: 9.0-38.0 1W: 5.0-21.0 2W: 5.0-20.0 4W: 5.0-19.5 2M: 6.0-17.5 3M: 6.0-17.5 6M: 6.0-17.5 2Y: 5.0-17.0 6Y: 4.5-14.5 12Y: 4.5-13.0 18Y: 3.8-10.6	x 10^9 /L
Hemaglobin (HGB)	1D: 13.5-21.0 1W: 13.5-21.0 2W: 12.5-20.2 4W: 10.0-18.0 2M: 9.0-14.0 3M: 9.5-13.5 6M: 10.5-13.5 2Y: 11.5-13.5 6Y: 11.5-15.5 12Y: Female-12.0-16.0 Male-13.5-17.5 18Y: Female-11.6-14.6 Male-12.9-16.9	g/dL
Hematocrit (HCT)	1D: 42.0-60.0 1W: 42.0-66.0 2W: 39.0-63.0 4W: 31.0-55.0 2M: 28.0-42.0 3M: 29.0-41.0 6M: 33.0-39.0 2Y: 34.0-40.0 6Y: 35.0-45.0 12Y: Female-36.0-46.0 Male-37.0-49.0 18Y: Female-34.1-43.3 Male-38.0-48.8	%
Red Blood Cell (RBC)	1D: 3.9-6.60 1W: 3.90-6.30 2W: 3.60-6.20 4W: 3.00-5.40 2M: 2.70-4.90 3M: 3.10-4.50 6M: 3.70-5.30 2Y: 3.90-5.30 6Y: 4.00-5.20 12Y: Female-4.10-5.20 Male-4.50-5.30 18Y: Female-3.73-4.89 Male-4.13-5.57	x 10^{12} /L

Test	Reference Range	Units
Mean Corpuscular Volume (MCV)	1D: 98-118 1W: 88-126 2W: 86-124 4W: 85-123 2M: 77-115 3M: 74-108 6M: 70-86 2Y: 75-87 6Y: 77-95 12Y: 78-102 18Y: 82.6-97.4	fL
Mean Corpuscular Hemaglobin (MCH)	1D: 35-39 1W: 33-41 2W: 31-39 4W: 29-35 2M: 29-35 3M: 27-33 6M: 27-33 2Y: 25-31 6Y: 24-30 12Y: 38-32 18Y: 37.8-33.4	pg
Mean Corpuscular Hemaglobin Conc. (MCHC)	1D: 32-35 1W: 31-35 2W: 31-35 4W: 31-35 2M: 31-35 3M: 31-35 6M: 31-35 2Y: 31-35 6Y: 31-35 12Y: 31-36 18Y: 32.7-35.5	g/dL