

**CRITICAL RESULTS TABLES**

**Appendix 1. CRITICAL RESULTS FOR ADULT AND PEDIATRICS (≥ 12 MONTHS)**

UCI Health Performing Laboratory Locations: 1. Orange, 2. Irvine and 3. Laguna Hills, Yorba Linda, CIACC, Costa Mesa

Tests (CRITICAL RESULTS FOR ADULT AND PEDIATRICS ≥ 12 MONTHS)	Critical Low Value	Critical High Value
Acid Fast Stain <sup>1</sup>	-----	First positive smear
Amniotic Fluid Gram stain <sup>1,2</sup> Amniotic Fluid culture <sup>1</sup>	-----	Positive
Blood culture Gram stain <sup>1</sup>	-----	Positive
Blood parasite smear (Malaria and others) <sup>1</sup>		First positive smear
Calcium <sup>1,2,3</sup>	≤ 6.0 mg/dL	≥13.0 mg/dL
Carbon Dioxide (CO <sub>2</sub> ) <sup>1,2,3</sup>	-----	≥ 50 mEq/L
COVID-19 (SARS-CoV-2) from the SCFR order (Inpatient orders only) <sup>1,2</sup>	-----	Detected
C-Reactive Protein (for Ophthalmology locations only) <sup>1,2</sup>		>0.7 mg/dL
CSF Cryptococcal Antigen <sup>1,2</sup>	-----	Positive
CSF Direct Fungal Exam (DFE) <sup>1</sup> CSF Gram stain <sup>1,2</sup> CSF culture <sup>1</sup>	-----	Positive
ESR (for Ophthalmology locations only) Ages >14 years <sup>1,2</sup>	-----	Male >15 mm/hr Female >20 mm/hr
ESR (for Ophthalmology locations only) Ages 0 to 14 years <sup>1,2</sup>	-----	Male >10 mm/hr Female >10 mm/hr
Fungal blood culture <sup>1</sup>		Positive
Glucose (1 hr post glucola) <sup>1</sup> OB patients only	-----	> 200 mg/dL
Glucose (blood) <sup>1,2,3</sup>	≤ 54 mg/dL	≥ 400 mg/dL
Glucose (CSF) <sup>1,2</sup>	≤ 40 mg/dL	≥ 300 mg/dL
Hematocrit <sup>1,2,3</sup>	<21%	≥ 62%
Hemoglobin <sup>1,2,3</sup>	<7.0 gm/dL	≥ 21 gm/dL
Herpes simplex virus PCR (CSF and/or NICU) <sup>1</sup>		Detected
Low Molecular Weight Heparin (LMWH) <sup>1,2</sup>	-----	≥2.0 IU/mL
Magnesium <sup>1,2,3</sup> [For Labor and Delivery patients] <sup>1</sup>	≤ 1.0 mg/dL -----	≥ 5.0 mg/dL [≥ 8.0 mg/dL]
Malaria EIA <sup>1,2</sup>		Positive

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<b>Tests (CRITICAL RESULTS FOR ADULT AND PEDIATRICS ≥ 12 MONTHS)</b>	<b>Critical Low Value</b>	<b>Critical High Value</b>
Mycobacterium tuberculosis complex PCR <sup>1</sup>	-----	First positive result
Nucleated cells (CSF) <sup>1,2</sup>	-----	> 5 cells present
Partial Thromboplastin Time (PTT) <sup>1,2</sup>	-----	≥90.0 seconds
pH <sup>1,2</sup>	≤ 7.2	≥ 7.6
Platelet Count <sup>1,2,3</sup>	≤20,000/mm <sup>3</sup>	>10 <sup>6</sup> /mm <sup>3</sup>
Pneumococcal antigen (CSF or urine) <sup>1,2</sup>		Positive
Potassium <sup>1,2,3</sup>	≤ 2.8 mEq/L	≥6.0 mEq/L
Prothrombin time (PT) <sup>1,2</sup>	-----	> 4.0 INR
Sodium <sup>1,2,3</sup>	≤ 120 mEq/L	≥160 mEq/L
Streptococcus agalactiae (GBS) PCR <sup>1</sup>		Positive
Troponin I, High Sensitivity <sup>1,2</sup>		≥ 500 ng/L
Unfractionated Heparin <sup>1,2</sup>	-----	≥0.8 IU/mL
WBC (blood) <sup>1,2</sup>	≤ 1000/mm <sup>3</sup>	≥50,000/mm <sup>3</sup>
<b>Therapeutic drug levels</b>		
Acetaminophen <sup>1,2</sup>	-----	>150 mcg/mL
Amikacin <sup>1</sup>	-----	Peak >35.0 mcg/mL Trough ≥8.0 mcg/mL
Carbamazepine <sup>1,2</sup>	-----	>15.0 mcg/mL
Cyclosporine <sup>1</sup>	-----	>450 ng/mL
Digoxin <sup>1,2</sup>	-----	>2.1 ng/mL
Dilantin <sup>1,2</sup>	-----	>20.0 mcg/mL
Everolimus <sup>1</sup>	-----	>15 ng/mL
Gentamicin <sup>1,2</sup>	-----	Peak >12.0 mcg/mL Trough >2.0 mcg/mL
Lead <sup>1</sup>	-----	≥20 mcg/dL (for ≥16 yrs old) ≥10 mcg/dL (for <16 yrs old)
Lithium <sup>1,2</sup>	-----	≥1.5 mEq/L
Pentobarbital <sup>1</sup>	-----	>5 mcg/mL
Phenobarbital <sup>1,2</sup>	-----	>50 mcg/mL
Salicylate <sup>1,2</sup>	-----	>30 mg/dL

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Tests (CRITICAL RESULTS FOR ADULT AND PEDIATRICS ≥ 12 MONTHS)	Critical Low Value	Critical High Value
Sirolimus <sup>1</sup>	-----	>25 ng/mL: Liver Transplantation >15 ng/mL: Renal Transplantation
Tacrolimus <sup>1</sup>	-----	>20 ng/mL
Theophylline <sup>1,2</sup>	-----	>20.0 mcg/mL
Tobramycin <sup>1,2</sup>	-----	Peak >12.0 mcg/mL Trough >2.0 mcg/mL
Valproic acid <sup>1,2</sup>	-----	> 120 mcg/mL
Vancomycin <sup>1,2</sup>	-----	Peak >60.0 mcg/mL Trough >20.0 mcg/mL

## Appendix 2. CRITICAL RESULTS FOR INFANTS &lt;12 MONTHS

UCI Health Performing Laboratory Locations: 1. Orange, 2. Irvine and 3. Laguna Hills, Yorba Linda, CIACC, Costa Mesa

Tests (CRITICAL RESULTS FOR INFANTS <12 MONTHS)	Critical Low Value	Critical High Value
Albumin <sup>1,2,3</sup>	<2.0 g/dL	-----
ALT (SGPT) <sup>1,2,3</sup>		>100 IU/L
Ammonia <sup>1,2</sup>		>100 mcmol/L
Ammonia Nitrogen (arterial) <sup>1</sup>	-----	>150 ug/dL
Bicarbonate <sup>1,2</sup>	<14 mmol/L	>35 mmol/L
Bilirubin, Direct <sup>1,2,3</sup>	-----	>1.5 mg/dL
Bilirubin, Micro <sup>1,2</sup>		1 day: >6 mg/dL 2 days: >10 mg/dL 5 days – 12 mos: >15 mg/dL
Bilirubin, Total <sup>1,2,3</sup>	-----	>15 mg/dL
Blood culture <sup>1</sup>	-----	positive
Calcium, plasma <sup>1,2,3</sup>	<6.5 mg/dL	>12 mg/dL
Calcium, Ionized <sup>1,2</sup>	<b><u>Birth to 1 month old:</u></b> <0.95 mmol/L <b><u>&gt;1 month to ≤12 months old:</u></b> <0.87 mmol/L	<b><u>&gt;1 month to ≤12 months old:</u></b> >1.5 mmol/L
Carbon Dioxide (CO <sub>2</sub> ) <sup>1,2,3</sup>	<12 mEq/L	-----

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<b>Tests (CRITICAL RESULTS FOR INFANTS &lt;12 MONTHS)</b>	<b>Critical Low Value</b>	<b>Critical High Value</b>
Chloride <sup>1,2,3</sup>	<80 mEq/L	>117 mEq/L
COVID-19 (SARS-CoV-2) <sup>1,2</sup>	-----	Detected
Creatinine <sup>1,2,3</sup>	-----	>2.0 mg/dL
Creatine phosphokinase (CK) <sup>1,2</sup>	-----	>1200 U/L
CSF culture or Gram stain <sup>1,2</sup>	-----	positive
ESR (Ophthalmology) TOPHT, TEYES, ZOPHT <sup>1,2</sup>	-----	>10 mm/hr
Fibrinogen <sup>1,2</sup>	< 100 mg/dL	-----
Gamma-Glutamyl Trans (GGT) <sup>1,2</sup>	-----	>300 U/L
Glucose (Blood) <sup>1,2,3</sup>	<45 mg/dL	>250 mg/dL
Hemoglobin <sup>1,2,3</sup>	<7.0 gm/dL	>22.0 gm/dL
Hematocrit <sup>1,2,3</sup>	<21 %	>65%
Lactate Dehydrogenase (LDH) <sup>1,2,3</sup>	-----	>3000 U/L
Lactic Acid, plasma <sup>1,2</sup>		>3.0 mmol/L
Lead <sup>1</sup>	-----	≥10 mcg/dL
Low Molecular Weight Heparin (LMWH) <sup>1,2</sup>	-----	≥2.0 IU/mL
Magnesium <sup>1,2,3</sup>	<1.2 mg/dL	> 3.0 mg/dL
Metabolic (Newborn) Screen <sup>1</sup>	-----	any positive
Nucleated cells (CSF) <sup>1,2</sup>	-----	>5 cells present
Osmolality <sup>1,2</sup>	-----	>300 mOsm/L
Base Excess Neonates (arterial or capillary) <sup>1</sup>	<-10 mEq/L	-----
pH <sup>1,2</sup>	<7.25	>7.60
pCO2 <sup>1,2</sup>	-----	>75 mm Hg
pO2 <sup>1,2</sup>	<50 mm Hg	>100 mm Hg
Phosphorous <sup>1,2,3</sup>	<3 mg/dL	> 8.0 mg/dL
Platelet Count <sup>1,2,3</sup>	≤50,000/mm <sup>3</sup>	> 1,000,000/mm <sup>3</sup>
Potassium <sup>1,2,3</sup>	<3.0 mEq/L	> 6.0 mEq/L
Prothrombin Time (PT) <sup>1,2</sup>	-----	> 4.0 INR
Partial Thromboplastin Time (PTT) <sup>1,2</sup>	-----	≥90.0 seconds
Sodium <sup>1,2,3</sup>	<125 mEq/L	> 150 mEq/L
Unfractionated Heparin <sup>1,2</sup>	-----	≥0.8 IU/mL
Urea Nitrogen <sup>1,2,3</sup>	-----	> 60 mg/dL
Uric Acid <sup>1,2</sup>	-----	>12 mg/dL
WBC Peripheral Blood <sup>1,2,3</sup>	≤2,000 mm <sup>3</sup>	≥35,000 mm <sup>3</sup>
% Bands <sup>1,2,3</sup>	-----	>25%

**CRITICAL RESULTS TABLES**

Test (CRITICAL RESULTS FOR INFANTS <12 MONTHS)	Critical Low Value	Critical High Value
<b>Therapeutic drug levels</b>		
Acetaminophen <sup>1,2</sup>	-----	>150 mcg/mL
Amikacin <sup>1</sup>	-----	Peak >30.0 mcg/mL Trough ≥10.0 mcg/mL
Carbamazepine <sup>1,2</sup>	-----	>15.0 mcg/mL
Cyclosporine <sup>1</sup>	-----	>450 ng/mL
Digoxin <sup>1,2</sup>	-----	>2.1 ng/mL
Dilantin <sup>1,2</sup>	-----	>20.0 mcg/mL
Gentamicin <sup>1,2</sup>	-----	Peak >12.0 mcg/mL Trough >2.0 mcg/mL
Lithium <sup>1,2</sup>	-----	≥1.5 mEq/L
Phenobarbital <sup>1,2</sup>	-----	>50 mcg/mL
Salicylate <sup>1,2</sup>	-----	>30 mg/dL
Sirolimus <sup>1</sup>	-----	>25 ng/mL: Liver Transplantation >15 ng/mL: Renal Transplantation
Tacrolimus <sup>1</sup>	-----	>7.5 ng/mL
Theophylline <sup>1,2</sup>	-----	>20.0 mcg/mL
Tobramycin <sup>1,2</sup>	-----	Peak >12.0 mcg/mL Trough >2.0 mcg/mL
Valproic acid <sup>1,2</sup>	-----	> 120 mcg/mL
Vancomycin <sup>1,2</sup>	-----	Peak >60.0 mcg/mL Trough <5.0 or > 15.0 mcg/mL

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Revised by: Tricia West

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Revised by: Claudia Whited, MA, MT(ASCP)

Date Revised: 7/29/11

Revised by: Tricia West, CLS

Date Revised: 7/29/11

Revised by: Victor Barte, CLS (MT)

Date Revised: 7/9/14

Revised by: Dee Jones

Date Revised: 7/7/16

Revised by: Surinder Dhillon

Date Revised: 11/29/16

Revised by: Shirley Tungpalan/ Joan Sahagun

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Revised by: Shirley Tungpalan

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Date Revised: 8/20/19

Revised by: Carol Eade-Viele

Date Revised: 8/29/19

Revised by: Shirley Belen

Date Revised: 3/20/20

Revised by: Melisand Mohseni

Date Revised: 6/15/20

Revised by: Marlon Sy

Date Revised: 7/6/20

Revised by: Marlon Sy

Date Revised: 12/5/23

Revised by: Melisand Mohseni

Date Revised: 12/26/25

Revised by: Mary Eugenio-Allen/Kyana Huerta-Ruiz-Garza