

CCL-QRG 006 Critical Care Laboratories Reportable/Reference Ranges, Critical Values, Sample Type and Stability Chart

Specimen Rejection Criteria: Samples that are clotted, QNS, old or otherwise found unsatisfactory will be rejected, orders credited, and the caregiver notified.

Analyte	Reportable Range	Normal (Reference) Range	Critical Value Range	Acceptable Sample Type	Sample Stability
pH	6.800 - 7.720	arterial: 7.350 - 7.450 venous: 7.320 - 7.420	<7.200 and >7.600	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin.	30 Min Room Temp. Do not put the sample on ice.
pCO2	14.5 - 135.0 mmHg	arterial: 35.0 - 45.0 mmHg venous: 38.0 - 48.0 mmHg	<25.0 and >60.0 mmHg	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin.	30 Min Room Temp. Do not put the sample on ice.
PO2	27 - 515 mmHg	arterial: 80.0 - 100.0 mmHg venous: 35.0 - 45.0 mmHg	arterial only: <50 mmHg	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin.	30 Min Room Temp. Do not put the sample on ice.
Na+	109 - 168 mmol/L	135 - 146 mmol/L	<120 and >160 mmol/L	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. Lithium heparin collection tube.	30 Min Room Temp. Do not put the sample on ice.
K+	1.36 - 12.1 mmol/L	3.50 - 5.30 mmol/L	<3.0 and >6.0 mmol/L	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. Lithium heparin collection tube.	30 Min Room Temp. Do not put the sample on ice.
iCAS	0.55 - 3.12 mmol/L	1.00 - 1.30 mmol/L	<0.75 and >1.40 mmol/L	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. Lithium heparin collection tube.	7 hrs at Room Temp. 48 hrs on ice.
Glu	30 - 650 mg/dL	70 - 99 mg/dL	<50 and >600 mg/dL	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. Lithium heparin collection tube.	30 Min Room Temp. Do not put the sample on ice.
Lact	0.36 - 24.0 mmol/L	arterial: 0.36 - 1.25 mmol/L venous: 0.90 - 1.70 mmol/L	N/A	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. Lithium heparin collection tube.	30 Min Room Temp.
tHb	4.8 - 20.8 g/dL	male: 14 - 18 g/dL female: 12 - 16 g/dL	≤6.0 and ≥20.0 g/dL	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin.	30 Min Room Temp.
O2Sat	15 - 100%	>95% Arterial <70% Venous	N/A	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin.	30 Min Room Temp. Do not put the sample on ice.
OxYHb	N/A	arterial: 96 - 97 % venous: 40 - 70 %	N/A	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. For Autopsy samples only - LithHep vac tube.	30 Min Room Temp. Do not put the sample on ice.
COHb	N/A	Non-smoker: <1.5 % smoker: 1.5 - 5.0 %	N/A	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. For Autopsy samples only - LithHep vac tube.	30 Min Room Temp. Do not put the sample on ice.
MeHb	N/A	<1.5 %	N/A	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. For Autopsy samples only - LithHep vac tube.	30 Min Room Temp. Do not put the sample on ice.
DxHb	N/A	<4.5 % Arterial 30 - 60% Venous	N/A	1. Syringe with Sodium Heparin 2. Capillary tube with Ca balanced Heparin. 3. For Autopsy samples only - LithHep vac tube.	30 Min Room Temp. Do not put the sample on ice.
ACT	80 - 600 seconds	102 - 142 seconds	N/A	greater than 2 mL in a NON heparinized Syringe. Do not send via tube system.	Test immediately after collection.
ISTAT CRT	0.2 – 20.0 mg/dL	Adult: 0.5-1.5 mg/dL	N/A	Full 4 mL or pediatric Lithium or Sodium heparin collection tube.	30 Min Room Temp.

Created: 3/15. Revised: 7/6/18

Procedure Reference: CCL-021 Blood Gas Analysis Using Siemens Rapidlab 1200 Analyzers, CCL-016 Corrected Report/Critical Value Reporting Policy - Exceptions to the Department Policy