

POC215 Blood Gas POC iSTAT (Cord, Venous, Mixed Venous)

BMC, FOX

Performing Location(s)

BMC, FOX

Specimen Type

Cord Blood (must be drawn by nursing) or venous blood.

Mixed venous must be drawn by Respiratory Therapy or Nursing.

Preferred Container

Heparin coated syringe or capillary, or Green top tube (prefer Dark Green top tube)

Alternate Container

Unheparinized syringe for POC immediate testing only

Volume Required

2.0 mL

Minimum Volume

0.5 mL

Transportation Needs

Performed as POC test at MIB as primary method.

As backup (Fox) deliver to the laboratory at room temp within 30 minutes.

Causes for Rejection

Mislabeled or unlabeled specimen Clotted Specimen

Specimen not analyzed within 30 minutes at room temperature or 60 minutes on ice. Specimen contaminated with Room Air (Bubbles in syringe or uncapped)

Reference Values

Hemoglobin Reference Ranges			
Population	Units	Reference Range	Low Critical Value
< 1 month	g/dL	13.0 - 19.0	< 7.0
1 month - 5 month	g/dL	11.0 - 17.0	< 7.0
5 month - 2 years	g/dL	11.0 - 14.0	< 7.0
2 years - 6 years	g/dL	11.0 - 13.0	< 7.0
6 years - 12 years	g/dL	11.0 - 15.0	< 7.0
Female > 12 years	g/dL	11.5 - 15.5	< 7.0
Male > 12 years	g/dL	11.5 - 18.0	< 7.0

Analyte	Units	Population	Venous	Cord: Arterial & Venous	Capillary
pH	(none)	All populations	7.33-7.43	7.20-7.45 CV <7.10	7.35-7.45
pCO ₂	mmHg	All populations	40-50	38-54	32-48
pO ₂	mmHg	All populations	29-49	10-24	80-90
HCO ₃	mmol/L	All populations	22-29	15-25	22-27
TCO ₂	mmol/L	All populations	22-34	20-34	33-43
O ₂ Saturation	%	All populations	60-85	60-98	90-100
Base Excess	mmol/L	All populations	<3	(-6.2) –(-0.5)	see below by age
		<1 wk			(-10) - (-2)
		1 wk - 1 yr			(-7) - (+1)
		1 - 16 yr			(- 4) - (+2)
		16 yr			(- 3) - (+3)

Additional Information

Requisition must indicate source (i.e. venous) and time sample is drawn.

Methodology

pH and pCO₂: direct potentiometry pO₂: amperometrically

CPT Code(s)

82803