



**LABORATORY ALLIANCE** of Central New York, LLC

## Changes to Laboratory Analysis of Cord Blood Gases

Effective July 10, 2012, Laboratory Alliance will offer individual tests for umbilical artery gases and umbilical vein gases. The cord blood gas test that is currently offered has fairly broad reference ranges, encompassing values found in arterial, venous or mixed cord blood. The new tests will have unique reference ranges specific for the designated specimen type.

Testing is available in our Upstate University Hospital at Community General Rapid Response Lab (RRL) and at our Crouse Hospital RRL. Specimen required is heparinized whole blood and must be delivered to the laboratory promptly after collection. Specimen may be submitted in a capped heparinized syringe. Syringes with needles attached will be rejected. Ambient specimens are preferred. Specimen stability is 30 minutes.

Specimen volume required is dependent on syringe used. Using a 1-mL syringe, a minimum volume of 0.3 mL is required. Use of larger syringes requires significantly more blood (at least 1/3 of syringe capacity).

Follow hospital policies for identification of umbilical artery and umbilical vein and collection of cord blood specimens. Label syringe with 2 patient identifiers and mark clearly as Umbilical Artery or Umbilical Vein. Mix specimen well by rolling or inverting syringe ten times. Specimens not clearly labeled with source will be reported using the existing cord blood gas test code.

<b>Method:</b>	Ion Selective Electrode
<b>Specimen Requirements:</b>	Lithium heparinized whole blood. Submit in a heparinized syringe (capped, with needle removed). 0.3 mL whole blood minimum.
<b>Unacceptable:</b>	Syringe with needle attached.
<b>Stability:</b>	Ambient: 30 minutes.
<b>Schedule of Testing:</b>	Daily, all shifts
<b>CPT:</b>	82803

**Billing Codes:**

Cord blood (CBGAS)	1010373
Umbilical Artery (CBGASA)	1010439
Umbilical Vein (CBGASV)	1010440

**Reference Ranges:**

	Cord Blood, not otherwise specified	Umbilical Artery	Umbilical Vein
	Order code: CBGAS	Order code: CBGASA	Order code: CBGASV
<b>Component</b>	<b>Reference Range</b>		
pH	7.14 - 7.44	7.14 - 7.40	7.23 - 7.46
PCO2	30 - 78	32 - 69	28 - 57
PO2	3 - 43	8 - 33	15 - 42
Base Excess	0.0 - 2.0	0 - 1.3	0 - 0.7
Base Deficit	0.0 - 7.0	0 - 7.0	0 - 5.8
HCO3	20 - 29	16.0 - 27.1	17.4 - 25.4
O2 Saturation	Not reported	5 - 59	14 - 75

**Critical Values:**

pH (any source) <7.00  
 Base excess or deficit (any source) ≥ 12.0

Questions regarding these tests may be directed to Cheryl Haskins, MS, MT(ASCP)SC,  
 Manager of Chemistry and Referral Testing, at 315-410-7014 or  
[cherylhaskins@lacny.com](mailto:cherylhaskins@lacny.com)

6/14/12, cmh