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**Lab Dept:** Chemistry

**Test Name:** ARTERIAL BLOOD GAS (ABG), PUMP

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***General Information***

**Lab Order Codes** ABGP

**Synonyms:** Arterial blood gas

**CPT Codes:** 82803 – Gases, blood, any combination of pH, pCO<sub>2</sub>, pO<sub>2</sub>, CO<sub>2</sub>, HCO<sub>3</sub> (including calculated O<sub>2</sub> saturation)

**Test Includes:** pH (no units), pCO<sub>2</sub> and pO<sub>2</sub> measured in mmHg, sO<sub>2</sub> and O<sub>2</sub>AD measured in %, HCO<sub>3</sub> and BE measured in mmol/L, Temperature (degrees C) and ST (specimen type)

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***Logistics***

**Test Indications:** Useful in determining arterial oxygen saturation of the patient during certain procedures such as ECMO or heart surgery.

**Lab Testing Sections:** Chemistry

**Phone Numbers:** MIN Lab: 612-813-6280  
STP Lab: 651-220-6550

**Test Availability:** Daily, 24 hours

**Turnaround Time:** 30 minutes

**Special Instructions:** For use by ECMO or surgery only. Specimen must arrive within 30 minutes of draw.

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***Specimen***

**Specimen Type:** Whole blood

**Container:** **Preferred:** Sims Portex<sup>®</sup> syringe (PB151) or Smooth-E syringe (956-463)

**Draw Volume:** 0.4 mL blood

**Processed Volume:** 0.2 mL blood

<b>Collection:</b>	Specimen is obtained from the ECMO Pump.  Draw blood into blood gas syringe. <b>Immediately</b> remove all air from syringe, remove needle, cap tightly, and mix. Send in original collection device. Forward immediately at ambient temperature only. <b>Do Not Expose Specimen To Air.</b>
<b>Special Processing:</b>	Lab Staff: Do not centrifuge. Specimen should be delivered to blood gas workstation for analysis and analyzed within 30 minutes of collection.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Clotted sample; mislabeled or unlabeled specimens

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### ***Interpretive***

<b>Reference ranges:</b>	N/A
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	N/A
<b>Methodology:</b>	Ion-Selective Electrode, HCO <sub>3</sub> and BE by calculation
<b>Contraindications:</b>	This test is not indicated for general patient assessment.
<b>References:</b>	ABL90 FLEX Operator's Manual from software version 3.1xx Publication 201403 Edition H, Code 995-646  Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp  Tietz Textbook of Clinical Chemistry (1999) 3rd Edition