Lab Dept: Chemistry
Test Name: IONIZED CALCIUM, PUMP

General Information
Lab Order Codes: PICA
Synonyms: Calcium, Ionized, Blood, ICa
CPT Codes: 82330 – Calcium; ionized
Test Includes: Ionized calcium reported in mEq/L.

Logistics
Test Indications: Useful for determining the ionized calcium of the pump prime solution prior to 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/heart surgery only. Specimen may be tested at the bedside by POCT, or forward promptly to the lab at ambient temperature.

Specimen
Specimen Type: Whole blood
Container: Preferred: Sims Portex® syringe (PB151) or Smooth-E syringe (956-463)
Draw Volume: 0.4 mL blood
Processed Volume: 0.2 mL blood
**Collection:**  Specimen is collected from the ECMO Pump.

Draw in an electrolyte-balanced heparin blood gas syringe. Immediately remove all air from syringe, remove needle, cap tightly, and mix. Send specimen in original tube. Forward promptly at ambient temperature only. Do not expose the specimen to air.

**Special Processing:**  Lab Staff: Do not centrifuge. Specimen should be delivered to blood gas workstation for analysis and analyzed within 2 hours of collection.

**Patient Preparation:**  None

**Sample Rejection:**  Clotted specimen; mislabeled or unlabeled specimens; sample containing air; specimens older than 2 hours

### Interpretive

<table>
<thead>
<tr>
<th>Reference Range:</th>
<th>Undetermined</th>
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</thead>
<tbody>
<tr>
<td>Critical Values:</td>
<td>N/A</td>
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<tr>
<td>Limitations:</td>
<td>N/A</td>
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<tr>
<td>Methodology:</td>
<td>Ion-Selective Electrode (ISE)</td>
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<td>Contraindications:</td>
<td>This test is not indicated for evaluation of patient ionized calcium.</td>
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<td>References:</td>
<td>Children’s Hospitals and Clinics, October, 2004</td>
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<tr>
<td>Updates:</td>
<td>10/13/2014: Stability on ice changed from 30 minutes to 2 hours.</td>
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