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**Lab Dept:** Chemistry

**Test Name:** LACTATE, PUMP

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***General Information***

**Lab Order Codes:** LACTP

**Synonyms:** Lactic acid, Pump

**CPT Codes:** 83605 – Lactate (lactic acid)

**Test Includes:** Lactate, Pump concentration reported mg/dL.

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***Logistics***

**Test Indications:** Useful for determining the lactate 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:** [See Collection](#)

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***Specimen***

**Specimen Type:** Whole blood, pump, [See Collection](#)

**Container:** Arterial/Venous draws: Sims Portex® syringe (PB151) or Smooth-E syringe (956-463) are the preferred syringes for analysis

**Draw Volume:** 0.4 mL (Minimum: 0.2 mL) blood

**Processed Volume:** 0.2 mL whole blood

**Collection:** The specimen is collected from the ECMO pump.

**Immediately** remove all air from the syringe, cap tightly and mix by gentle inversion, and place in an ice slurry. Deliver specimens immediately to the lab. Specimens must be analyzed immediately in the laboratory. Specimen should be tested with 15 minutes of collection.

<b>Special Processing:</b>	Lab Staff: Analyze all lactate samples <b>immediately</b> . <b>Do Not</b> centrifuge. Specimen should be delivered to testing station on ice in original collection container. Lab staff responsible for testing should be notified immediately.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimen; clotted specimen; delay in specimen testing more than 30 minutes after collection

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### ***Interpretive***

<b>Reference Range:</b>	Reference ranges have not been established for pump samples
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	N/A
<b>Methodology:</b>	Ion Selective Electrode (ISE)
<b>Contraindications:</b>	This test is not indicated for general patient assessment.
<b>References:</b>	Tietz (1999) Textbook of Clinical Chemistry, 3 <sup>rd</sup> edition, Philadelphia, WB Saunders Co, pp 788-789  ABL90 Flex Operators Manual (2014), Edition E, Publication 201410, Code Number 994-909, Radiometer Medical Applications
<b>Updates:</b>	5/26/2015: Specimens must be immediately placed on ice at the point of collection. 6/11/2018: Updated references