
Lab Dept:	Chemistry
Test Name:	GLUCOSE, PUMP

General Information

Lab Order Codes:	GLUCP
Synonyms:	Blood Sugar, Pump
CPT Codes:	82947 – Glucose; quantitative, blood
Test Includes:	Glucose concentration reported in mg/dL.

Logistics

Test Indications:	Useful for determining the glucose 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:	1 hour
Special Instructions:	N/A

Specimen

Specimen Type:	Whole blood, pump
Container:	Heparin blood gas syringe
Draw Volume:	0.6 mL blood
Processed Volume:	0.2 mL blood
Collection:	The 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.

Patient Preparation: None

Sample Rejection: Mislabeled or unlabeled specimen; clotted specimen

Interpretive

Reference Range: Reference ranges have not been established for pump samples.

Critical Values: All ages: <50 or >300 mg/dL

Limitations: Glucose concentrations are decreased by excess hemolysis, excess bilirubin and excess lipemia.

Methodology: IRMA/RADIOMETER 825: Ion-Selective Electrode (ISE):
ABBOTT: Enzymatic

Contraindications: This test is not indicated for general patient assessment.

References: Tietz (1999) Textbook of Clinical Chemistry, 3rd edition, Philadelphia, WB Saunders Co, p 750

Children's Hospitals and Clinics, May 2009

See Glucose for updated references

Updates: 8/19/2009: TAT previously listed as 2 hours.
10/18/2019: New backup instrumentation