
Lab Dept: Chemistry

Test Name: GENTAMICIN 2-POST DOSE, EXTENDED INTERVAL

General Information

Lab Order Codes: GENPX

Synonyms: Garamycin®

CPT Codes: 80170 – Gentamicin

Test Includes: Gentamicin concentration in ug/mL

Logistics

Test Indications: Useful in monitoring peak therapeutic dosage and is effective against gram-negative bacteria, for patients on extended interval (q24hr) dosing schedule.

Lab Testing Sections: Chemistry – Performed on Mpls Campus

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: Within 2 hours of receipt at Minneapolis lab. Please note – additional time required for transport from off site locations.

Special Instructions: Draw two levels at 2 hours and 8 hours after the end of the 30 min infusion of the 2nd dose.

Specimen

Specimen Type: Blood

Container: Green top (Li Heparin) tube **preferred**
Alternate tube: Red, marble or gold top, Green (NaHep), Lavender (EDTA)

Draw Volume: 0.6 mL blood

Processed Volume: 0.2 mL serum/plasma

Collection:	Routine blood collection. Mix tubes containing anticoagulant by gentle inversion.
Special Processing:	Lab Staff: Centrifuge specimen, remove serum/plasma aliquot into plastic sample cup. Store at refrigerated temperature.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimen

Interpretive

Reference Range: *Note:* Therapeutic ranges for individual patients should be based on dosing strategy.

Peak Level, Extended Interval Dosing	
Therapeutic concentration:	20-40 ug/mL

Critical Values: >40 ug/mL

Limitations: Patients receiving sisomicin should not rely on this method.

Methodology: Particle Enhanced Turbidimetric Inhibition Immunoassay (Petinia)

References: Abbott Alinity c Gentamicin Reagent Kit Instructions for Use, Abbott Diagnostics Division, Abbott Park, IL, USA. Revised September 2019

Abbott Alinity c TDM Multiconstituent Calibrator Package Insert, Abbott Diagnostics Division, Abbott Park, IL, USA. Revised July 2018

Bio-Rad Liquichek Immunoassay Plus Package Insert, Bio-Rad Laboratories, Irvine, CA, USA

Jacobs & DeMott Laboratory Test Handbook (2001) Lexi-Comp, Inc, Hudson, OH, 5th Edition, 2001

Biorad Liquichek Unassayed Chemistry Control Product Insert, Bio-Rad Laboratories, Irvine, CA 92618

Updates: 6/1/2023: New test code.