
Lab Dept: Chemistry

Test Name: VORICONAZOLE LEVEL

General Information

Lab Order Codes: VOR

Synonyms: Vfend

CPT Codes: 80299 – Quantitation of therapeutic drug, not elsewhere specified

Test Includes: Voriconazole concentration in mcg/mL.

Logistics

Test Indications: Monitoring trough levels of voriconazole is suggested in individuals with reduced liver function, individuals with CYP2C19 polymorphisms associated with poor metabolic function, patients taking other medications that affect CYP2C19 activity, and in patients experiencing potential toxicity. Monitoring trough levels may be reasonable in patients who are not responding optimally or have drug interactions that may decrease voriconazole levels, or to ensure adequate oral absorption.

Lab Testing Sections: Chemistry - Sendouts

Referred to: Mayo Medical Laboratories (Test: VORI)

Phone Numbers: MIN Lab: 612-813-6280

STP Lab: 651-220-6550

Test Availability: Daily, 24 hours

Turnaround Time: 1 - 6 days; performed Tuesday - Saturday

Special Instructions: See [Patient Preparation](#)

Specimen

Specimen Type: Blood

Container: Red NO GEL tube

Draw Volume: 6 mL (Minimum: 1.8 mL) blood

Processed Volume:	2 mL (Minimum: 0.6 mL) serum
Collection:	Routine venipuncture
Special Processing:	Lab Staff: Spin down within 2 hours of draw. Centrifuge specimen, remove serum aliquot into a screw-capped round bottom plastic vial. Store and ship at refrigerated temperatures. Forward promptly.
Patient Preparation:	None
Sample Rejection:	Mislabeled or unlabeled specimens; specimens collected in gel tubes

Interpretive

Reference Range:	1.0 – 5.5 mcg/mL Trough level(ie, immediately before next dose) monitoring is recommended. Interpretation: Trough levels >6 mcg/mL (and especially >10 mcg/mL) have been associated with toxicity in several reports. Trough levels <1 mcg/mL have been associated with suboptimal response in several reports.
Critical Values:	N/A
Limitations:	Voriconazole metabolism may be altered by coadministration of drugs that metabolically induce or inhibit CYP2C19 or by genetic polymorphisms that affect enzyme activity.
Methodology:	Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)
References:	Mayo Medical Laboratories May 2016