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**Lab Dept:** Chemistry

**Test Name:** VORICONAZOLE LEVEL

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***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.

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***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 - 2 days; performed Monday - Sunday

**Special Instructions:** See [Patient Preparation](#)

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***Specimen***

**Specimen Type:** Blood

**Container:** Red NO GEL tube

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

<b>Processed Volume:</b>	2 mL (Minimum: 0.6 mL) serum
<b>Collection:</b>	Routine venipuncture
<b>Special Processing:</b>	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.
<b>Patient Preparation:</b>	None
<b>Sample Rejection:</b>	Mislabeled or unlabeled specimens; specimens collected in gel tubes

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### ***Interpretive***

<b>Reference Range:</b>	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.
<b>Critical Values:</b>	N/A
<b>Limitations:</b>	Voriconazole metabolism may be altered by coadministration of drugs that metabolically induce or inhibit CYP2C19 or by genetic polymorphisms that affect enzyme activity.
<b>Methodology:</b>	Liquid Chromatography/Tandem Mass Spectrometry (LC/MS/MS)
<b>References:</b>	<a href="#">Mayo Medical Laboratories</a> December 2017
<b>Updates:</b>	TAT updated 9/26/22