

TEST STATUS – NEW TEST

Notification Date: January 14th, 2025

Effective Date: February 5th, 2025

Test Name: Itraconazole, quantitation by LC-MS/MS

Test ID: LAB6735

Explanation: On the effective date, itraconazole level quantitation by LC-MS/MS will become an in-house test and no longer be sent to a reference laboratory.

Useful For: Assess itraconazole level to optimize drug therapy and monitor patient adherence.

Methodology: Liquid chromatography tandem mass spectrometry

Reference Interval:

Therapeutic Ranges	
Itraconazole (trough) – Localized infection	Greater than 0.5 µg/mL
Itraconazole (trough) – Systemic infection	Greater than 1.0 µg/mL
Hydroxyitraconazole (metabolite)	No therapeutic range established
Itraconazole and hydroxyitraconazole concentrations combined should not exceed 10 µg/mL.	

Critical Value: Not applicable

Specimen Requirements:

Specimen Type:	EDTA plasma
Alternate Specimen:	Not applicable
Container/Tube:	EDTA tubes (lavender top)
Specimen Preparation:	Separate plasma from cells and freeze within 8 hours of collection (Min 0.5 mL).
Specimen Volume:	Fill to Indicator Line
Pediatric Collection:	1 Lavender Microtainer (EDTA tube)
Storage/Transport Temperature:	Frozen

Specimen Stability Information:

Specimen Type	Temperature	Time
Plasma	2° to 8°C	24 Hours
Plasma	Frozen	1 week

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Cautions: Do not draw levels within 2 hours after administration.

Reasons for Rejection: Improper collection container, sample outside of stability limits.

Recommendations: Specimens collected just before or within 15 minutes of the next dose represent the TROUGH levels. Timing of specimen collection: Pre-dose (trough) draw - At steady state concentration.

CPT Code(s): 80189

Days(s) Performed: Monday - Friday

Report Available: Within 24 hours

Questions: Please get in touch with Vanderbilt Medical Laboratories Customer Service at 615-875-5227 (5-LABS) or 800-551-5227 or visit our website: [Home | Vanderbilt Medical Laboratories \(vumc.org\)](#)