

# Antifungal Therapeutic Drug Monitoring (TDM): Overview


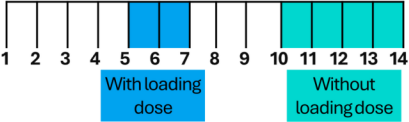
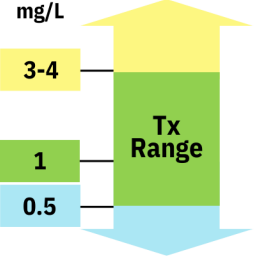




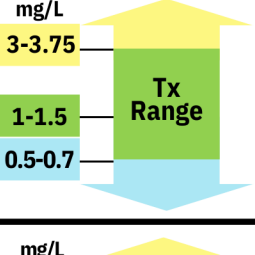




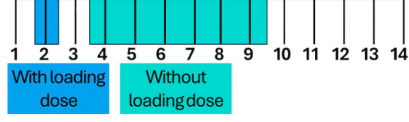
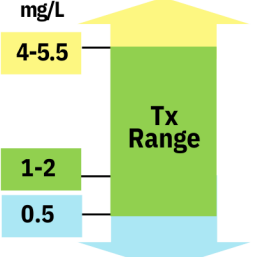



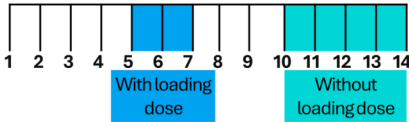
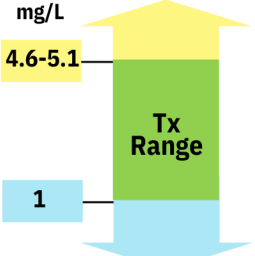

## Why TDM?

To achieve blood levels to support efficacy and minimize toxicity

## Which drugs?

Triazole antifungals

## How to perform TDM in adult patients

Drug		TDM Recommendation		Timing of Samples (after drug initiation, dose change, or change in interacting medication[s])	Target Trough Range
		Prophylaxis	Treatment		
Itraconazole	Sporanox capsule 	✓✓	✓✓		
	Itraconazole suspension 	✓✓	✓		
	SUBA-itraconazole (Tolsura) 	Non-applicable	✓		
Posaconazole	Immediate-release suspension 	✓✓	✓✓		
	Delayed-release tablet 	✓✓	✓		
	Delayed-release suspension 	✓✓	✓		
	Intravenous 	✓✓	✓		
Voriconazole	Tablet 	✓✓	✓✓		
	Intravenous 				
	Suspension 				
Isavuconazole	Tablet 	Not Available	Consider in situations marked by pharmacokinetic variability (e.g., critical illness, alternative delivery, extremes in weight, etc.) or refractory illness.		
	Intravenous 				

**Key**  — Therapeutic Upper Range (Toxicity Ceiling)  — Therapeutic Lower Range  — Prophylaxis Lower Range

✓✓ Recommended ✓ Consider

**Next steps?** See the companion infographic for a discussion of dosing adjustments to consider.

**Resource:** McCreary EK, et al. Utility of triazole antifungal therapeutic drug monitoring: Insights from the Society of Infectious Diseases Pharmacists: Endorsed by the Mycoses Study Group Education and Research Consortium. *Pharmacotherapy*. 2023 Oct;43(10):1043-1050. doi: 10.1002/phar.2850.

Release date: July, 2024.

This educational initiative was funded in part by a cooperative agreement with the Centers for Disease Control and Prevention (CDC-RFA-CK20-2003) to the University of Alabama at Birmingham. The University of Alabama at Birmingham is collaborating with the Mycoses Study Group Education & Research Consortium and Terranova Medica, LLC, on this initiative. The Centers for Disease Control and Prevention is an agency within the Department of Health and Human Services (HHS). The contents of this resource center do not necessarily represent the policy of CDC or HHS and should not be considered an endorsement by the Federal Government.