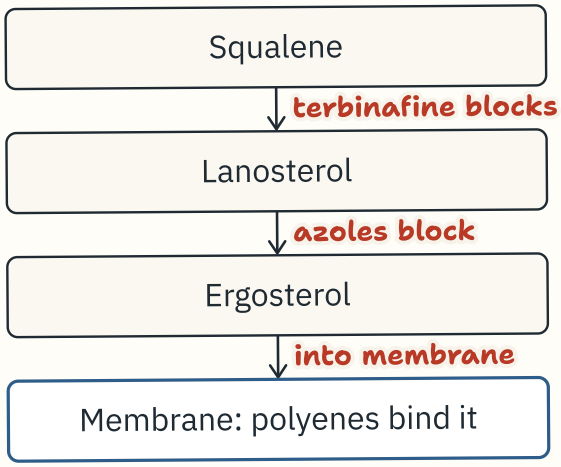
Antifungals: match the drug to the map

Classify the antifungals by fungal target



Step by step

1. Fungal membrane: ergosterol, not cholesterol.
2. Fungal wall: chitin, mannans, glucans.
3. Ergosterol: squalene, lanosterol, ergosterol.
4. Name ending -azole: demethylase; -fungin: wall.

Class	Target	Key point
Polyenes	Ergosterol (pores)	Kidney injury; infusion reactions
Azoles	Lanosterol 14-α-demethylase	Fungistatic vs Candida; interactions
Terbinafine	Squalene epoxidase	Skin and nails
Echinocandins	β-1,3-D-glucan synthase	IV; no Cryptococcus effect
Flucytosine	Nucleic acid synthesis	Resistance; paired drug

Five classes, five targets

Map rule

Membrane, pathway, wall or nucleic acid.

Squalene piles up: block is before lanosterol.

Exam traps

- Amphotericin B is also IV and fungicidal vs Candida, but unlike echinocandins it works against Cryptococcus.
- Azoles are mainly fungistatic against Candida.
- Terbinafine is for skin and nails, not for bloodstream Candida.

Antifungal drugs explained: mechanisms of action

Video, written lesson, practice question and sources: medservatory.com/usmle-step-1/microbiology/antifungal-mechanisms

For exam study only, not medical advice. Follow local guidelines and your lab's ranges.
© 2026 Medservatory, a project of ADMR Solutions Ltd. Free to print and share for personal study.