



Know Your Antifungals: Echinocandins

Echinocandins are an antifungal class that includes caspofungin, micafungin, anidulafungin, and rezafungin. Spectrum of activity is similar with each agent and primarily includes *Candida* spp. and *Aspergillus* spp.^{1,2} When it comes to the echinocandin antifungals, what are some things to know?

Summary of Echinocandin Characteristics

	Caspofungin ^{1,3}	Micafungin ^{1,2}	Anidulafungin ^{1,2}	Rezafungin ⁴⁻⁶
Invasive candidiasis/ candidemia dosing	70 mg IV loading dose followed by 50 mg IV daily	100 mg IV daily	200 mg IV loading dose followed by 100 mg IV daily	400 mg IV loading dose followed by 200 mg IV weekly
Endocarditis dosing	150 mg IV daily	150 mg IV daily	200 mg IV daily	No alternative dose recommended. Limited use has been reported.
Invasive Aspergillosis	Guidelines do not recommend monotherapy for primary treatment. Used as salvage therapy, particularly in combination with azole antifungal (e.g. voriconazole) or polyene (e.g. amphotericin B).			Limited use has been reported.
Dose adjustment	No adjustments for renal or hepatic impairment.			
Tolerability and interactions	Well tolerated with minimal adverse events. Minimal drug interactions.			
Distribution	Inadequate concentrations in the central nervous system (CNS), eye, and urine .			

Key Takeaway: Echinocandin antifungals should not be used in CNS, eye, or urine infections. They are similar in characteristics such as spectrum of activity, tolerability and dosing regimens, except rezafungin. Rezafungin is a new, long acting echinocandin and its role in therapy is less well defined for uncommon infections such as endocarditis.

References:

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