Anidulafungin

Antibiotic Class:
Echinocandin

Antimicrobial Spectrum:
_Candida_ spp. including azole-resistant strains. Activity against molds difficult to quantify but includes _Aspergillus_ spp.
Table 1, Table 2

Mechanism of Action:
Non-competitive inhibition of the enzyme β-(1,3)-glucan synthase.

Pharmacodynamics:
In-vitro studies have demonstrated concentration-dependent fungicidal activity against _Candida_ spp. Echinocandins have more fungicidal effects against _Candida_ species compared to filamentous organisms.

Pharmacokinetics:
Elimination half-life: 29h; Volume of distribution: 41.2L; Protein binding: 84%;
Clearance: 16mL/min; Table 3

Adverse Effects:
Hepatic: Elevated ALT
Respiratory: Dyspnea
Dermatologic: Flushing

Dosage:
IV only: 50mg vials

Candidemia/Candidiasis: 200mg IV on day 1, then 100mg q24h thereafter
Esophageal candidiasis: 100mg IV on day 1, then 50mg q24h thereafter

Disease state based dosing:
Hepatic failures: No dosing adjustment recommended
Renal failures: No dosing adjustment recommended
Geriatric patients: No dosing adjustment recommended

Contraindications/Warnings/Precautions: None to date

Drug Interactions:
No clinically relevant drug interactions found in studies of coadministration of anidulafungin with cyclosporin, voriconazole, tacrolimus, liposomal amphotericin B, and rifampin. Anidulafungin is not metabolized by the cytochrome P450 system.

Pregnancy: Category C: Risk unknown. Human studies inadequate.

Monitoring Requirements:
Routine monitoring of hepatic enzymes is recommended

Brand names/Manufacturer: Eraxis/Pfizer pharmaceuticals