

## Caspofungin:

**Class:** Antifungal

**Indications:** Treatment of invasive *Aspergillus* infections in patients who are refractory or intolerant of other therapies; treatment of candidemia and other *Candida* infections (intra-abdominal abscesses, peritonitis, pleural space); treatment of esophageal candidiasis; empirical treatment for presumed fungal infections in febrile neutropenic patients

**Available dosage form in the hospital:** 50 MG VIAL, 70 MG VIAL

**Trade Names:**

**Dosage:**

- Aspergillosis (invasive): I.V.: Initial dose: 70 mg on day 1; subsequent dosing: 50 mg once daily. Duration of therapy should be a minimum of 6-12 weeks or throughout period of immunosuppression and until lesions have resolved (Walsh, 2008). Salvage treatment with 70 mg once daily (unlabeled dosing) has been reported (Maertens, 2006).
- Candidemia: I.V.: Initial dose: 70 mg on day 1; subsequent dosing: 50 mg once daily; generally continue for at least 14 days after the last positive culture or longer if neutropenia warrants. Higher doses (150 mg once daily infused over ~2 hours) compared to the standard adult dosing regimen (50 mg once daily) have not demonstrated additional benefit or toxicity in patients with invasive candidiasis (Betts, 2009).
- Esophageal candidiasis: I.V.: 50 mg once daily; continue for 7-14 days after symptom resolution. Note: The majority of patients studied for this indication also had oropharyngeal involvement.
- Empiric therapy: I.V.: Initial dose: 70 mg on day 1; subsequent dosing: 50 mg once daily; continue until resolution of neutropenia; if fungal infection confirmed, continue for a minimum of 14 days (continue for at least 7 days after resolution of both neutropenia and clinical symptoms); if clinical response inadequate, may increase up to 70 mg once daily if tolerated, but increased efficacy not demonstrated.
- Concomitant use of Enzyme inducer:
  - Patients receiving rifampin: 70mg caspofungin daily.
  - Patients receiving carbamazepine, dexamethasone, efavirenz, nevirapine **or** phenytoin (and possibly other enzyme inducer) may require an increased daily dose of caspofungin.

Hepatic Impairment:

Adults:

- Mild insufficiency (Child-Pugh class A): No dosage adjustment necessary.
- Moderate insufficiency (Child-Pugh class B): 70 mg on day 1 (where recommended), followed by 35 mg once daily
- Severe insufficiency (Child-Pugh class C): No dosage adjustment provided in manufacturer's labeling (has not been studied).

**Common side effect:** Hypotension, peripheral edema ,tachycardia ,Fever , chills , headache ,Hypokalemia ,Diarrhea , vomiting , nausea, Hypomagnesemia.

**Pregnancy Risk Factor: C**