

Brand Name: Cancidas

Generic: caspofungin acetate

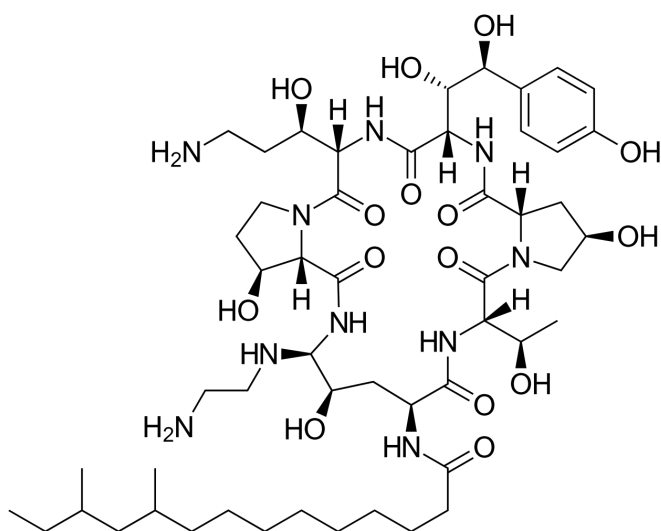
Type: small molecule

Year Accepted/Phase: 2001

Mechanism:

Caspofungin is an echinocandin antifungal agent that inhibits the synthesis of β -(1,3)-D-glucan, an essential component of the fungal cell wall.

Chemical Structure:



Indication:

Cancidas is indicated for:

Treatment of invasive aspergillosis in patients who are refractory to or intolerant of other therapies.

Treatment of candidemia and other Candida infections (intra-abdominal abscesses, peritonitis, and pleural space infections).

Empirical therapy for presumed fungal infections in febrile, neutropenic patients.

Treatment of esophageal candidiasis.

Clinical trials:

Clinical Trial for Invasive Aspergillosis

Purpose: Evaluate the efficacy of caspofungin in the treatment of invasive aspergillosis in patients who were refractory to or intolerant of other therapies.

Dates: Conducted from 1998 to 2000.

Results: Caspofungin demonstrated significant efficacy, with approximately 45% of patients achieving a favorable response. This included both complete and partial responses in patients with invasive aspergillosis who had failed or could not tolerate conventional therapies.

Impact: The results supported the use of caspofungin as an alternative treatment for invasive aspergillosis, particularly in patients who do not respond to or cannot tolerate other treatments.

Clinical Trial for Candidemia and Other Candida Infections

Purpose: Compare the efficacy and safety of caspofungin with conventional amphotericin B therapy in patients with candidemia and other Candida infections.

Dates: Conducted from 1999 to 2001.

Results: Caspofungin showed similar efficacy to amphotericin B but with a significantly better safety profile. The response rate for caspofungin was comparable to that of amphotericin B, with fewer adverse events and a lower incidence of drug-related nephrotoxicity.

Impact: This trial established caspofungin as an effective and safer alternative to amphotericin B for the treatment of candidemia and other Candida infections.

Clinical Trial for Empirical Therapy in Febrile Neutropenic Patients

Purpose: Assess the efficacy of caspofungin as empirical therapy for presumed fungal infections in febrile neutropenic patients.

Dates: Conducted from 2000 to 2002.

Results: Caspofungin was effective as an empirical antifungal therapy, showing non-inferiority to amphotericin B with a favorable safety and tolerability profile. The trial demonstrated similar success rates in reducing fever and managing fungal infections, with fewer side effects compared to amphotericin B.

Impact: The findings supported the use of caspofungin as an empirical treatment option in febrile neutropenic patients, providing a safer alternative to amphotericin B.