

## **Echinocandins**

Echinocandins are antifungal medications that work by inhibiting cell wall synthesis. They do this by inhibiting the synthesis of Beta-glucan. These drugs are used for treating invasive aspergillosis and candida. Side effects of echinocandin use are rare but can include GI upset and flushing due to histamine release.



**PLAY PICMONIC** 

### "-Fungin" Suffix

Funyuns

Echinocandins are recognizable because they share a "-fungin" suffix. Example medications include caspofungin and micafungin.

#### **Indications**

### **Invasive Aspergillosis**

**Invading Asparagus** 

Echinocandins are used empirically in patients with invasive aspergillosis. These medications can also be used in patients with refractory infections or who are intolerant of other medications, such as amphotericin B or itraconazole.

### Candida

Canada

This drug class is approved for use against invasive candidiasis as well, with specific indications for intra-abdominal abscesses, peritonitis, pleural cavity infections, and esophagitis.

### Mechanism

# **Inhibits Cell Wall Synthesis**

Disrupted Cell Wall

This drug class makes fungi susceptible to destruction by inhibiting cell wall synthesis, thus decreasing fungal cell wall integrity.

### Inhibits Synthesis of Beta-glucan

Inhibiting-chains on Beta-fish with Glue-can

This drug class inhibits the enzyme that makes Beta-glucan, which is an integral part of fungal cell walls.

### **Side Effects**

### **GI Distress**

GI-guy with Flare-gun

This drug class has a very low incidence of side effects, but patients have been known to complain of GI upset and distress.

### **Flushing**

Flashlight

Patients can complain of flushing or hypersensitivity reactions, as echinocandins can promote histamine release.