

Amphotericin B

Amphotericin B is a polyene medication, which works by binding to ergosterol in fungal cell membranes. It forms membrane pores, causing electrolytes to leak, killing the fungal cell. It is used for serious, systemic mycoses. It can lead to the side effects of fever and chills, nephrotoxicity, arrhythmias, anemia and IV phlebitis.



PLAY PICMONIC

Indications

Systemic Mycosis

Systemic Mic-fungus

Amphotericin B is used to treat various systemic fungal infections. Examples include patients who are critically ill, comorbidly infected, or immunocompromised with suspected *Cryptococcus*.

Fungal Meningitis

Fun-guy Men-in-tights

Amphotericin B is used to treat fungal meningitis, such as cryptococcal meningitis.

Last Resort for Protozoan infections

Last Resort Propeller-protozoa

Amphotericin B can also be used intravenously to treat otherwise-untreatable parasitic protozoan infections like visceral leishmaniasis and amoebic meningoencephalitis from *Naegleria fowleri*.

Mechanism

Polyene

Polly-lean

This medication works as a polyene as it binds to ergosterol and forms membrane pores.

Binds Ergosterol

Binding to Eggo-stairs

After binding to ergosterol, Amphotericin B forms membrane pores and allows leakage of electrolytes, resulting in fungal cell death.

Forms Membrane Pores

Membrane Holes

After binding to ergosterol, Amphotericin B forms membrane pores, which allows leakage of electrolytes, ultimately killing the fungal cell.