

Cidofovir

Cidofovir is an antiviral medication used to treat CMV retinitis in immunocompromised patients, and it is also indicated for acyclovir-resistant HSV. This drug has a long half-life, and works by preferentially inhibiting viral DNA polymerase. This drug is active, and does not require phosphorylation by viral kinase. A chief side effect of cidofovir use is nephrotoxicity, which can be decreased when cidofovir is coadministered with probenecid and IV saline.



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Indications

CMV Retinitis

[Side-toe-mega virus with Red-tin-eyes](#)

Cidofovir is used to treat cytomegalovirus (CMV) retinitis in patients who are immunocompromised.

Acyclovir-resistant HSV

[Apple-cyclops Resisted by Herpes-harp](#)

Cidofovir has been shown to be effective when treating patients with acyclovir-resistant herpes-simplex virus (HSV) infections.

Mechanism

Inhibits Viral DNA Polymerase

[Inhibiting-chains on DNA Poly-mirror](#)

Cidofovir inhibits viral replication by selectively inhibiting viral DNA polymerases. Thus, this drug inhibits viral DNA synthesis during its reproduction cycle.

Side Effects

Nephrotoxicity

[Kidney with Toxic-green-glow](#)

The major side effect of this medication is nephrotoxicity, which is dose-dependant.

Administer with Probenecid and IV Saline

[Probe with IV Saline-sail](#)

Coadministering probenecid and IV saline with cidofovir decreases the nephrotoxic effects in patients.