

Valacyclovir:

Class: Antiviral.

Indications:

Labeled Indications: Treatment of herpes zoster (shingles) in immunocompetent patients; treatment of first-episode and recurrent genital herpes; suppression of recurrent genital herpes and reduction of transmission of genital herpes in immunocompetent patients; suppression of genital herpes in HIV-infected individuals; treatment of herpes labialis (cold sores); chickenpox in immunocompetent children

Unlabeled: Prophylaxis of cancer-related HSV, VZV, and CMV infections; treatment of cancer-related HSV, VZV infection

Available dosage form in the hospital: 500MG TAB.

Dosage:

-CMV prophylaxis in allogeneic HSCT recipients (unlabeled use): 2 g 4 times daily

-Herpes labialis (cold sores): Oral: 2 g twice daily for 1 day (separate doses by ~12 hours)

-Herpes zoster (shingles): Oral: 1 g 3 times daily for 7 days

-HSV, VZV in cancer patients (unlabeled use):

-Prophylaxis: 500 mg 2-3 times daily

-Treatment: 1 g 3 times daily

-Genital herpes: Oral:

-Initial episode: 1 g twice daily for 10 days

-Recurrent episode: 500 mg twice daily for 3 days

-Reduction of transmission: 500 mg once daily (source partner)

-Suppressive therapy:

-Immunocompetent patients: 1 g once daily (500 mg once daily in patients with <9 recurrences per year)

-HIV-infected patients (CD4 \geq 100 cells/mm³): 500 mg twice daily

Renal Impairment:

-Herpes zoster: U.S. labeling:

- Cl_{cr} 30-49 mL/minute: 1 g every 12 hours
- Cl_{cr} 10-29 mL/minute: 1 g every 24 hours
- Cl_{cr} <10 mL/minute: 500 mg every 24 hours

Canadian labeling:

- $Cl_{cr} > 30$ mL/minute: No dosage adjustment required
- Cl_{cr} 15-30 mL/minute: 1 g every 12 hours
- $Cl_{cr} < 15$ mL/minute: 1 g every 24 hours

-Genital herpes: *U.S. labeling:*

Initial episode:

- Cl_{cr} 10-29 mL/minute: 1 g every 24 hours
- $Cl_{cr} < 10$ mL/minute: 500 mg every 24 hours

-Recurrent episode: $Cl_{cr} < 29$ mL/minute: 500 mg every 24 hours

-Suppressive therapy: $Cl_{cr} < 29$ mL/minute:

- For usual dose of 1 g every 24 hours, decrease dose to 500 mg every 24 hours
- For usual dose of 500 mg every 24 hours, decrease dose to 500 mg every 48 hours

-HIV-infected patients: 500 mg every 24 hours

Canadian labeling:

-Initial episode:

- Cl_{cr} 15-30 mL/minute: 1 g every 24 hours
- $Cl_{cr} < 15$ mL/minute: 500 mg every 24 hours

-Recurrent episode:

- Cl_{cr} 15-30 mL/minute: 500 mg every 12 hours
- $Cl_{cr} < 15$ mL/minute: 500 mg every 24 hours

-Suppressive therapy:

- Cl_{cr} 15-30 mL/minute: 500 mg every 24 hours
- $Cl_{cr} < 15$ mL/minute:

Immunocompetent or HIV-infected patients: 500 mg every 24 hours

Immunocompetent patients and ≤ 9 recurrences/year: 500 mg every 48 hours

Herpes labialis: Adolescents and Adults (*U.S. labeling*) or Adults (*Canadian labeling*):

- Cl_{cr} 30-49 mL/minute: 1 g every 12 hours for 2 doses
- Cl_{cr} 10-29 mL/minute: 500 mg every 12 hours for 2 doses
- $Cl_{cr} < 10$ mL/minute: 500 mg as a single dose

Hemodialysis: Dialyzable (~33% removed during 4-hour session); administer dose postdialysis

Chronic ambulatory peritoneal dialysis/continuous arteriovenous hemofiltration dialysis:
Pharmacokinetic parameters are similar to those in patients with ESRD; supplemental dose not needed following dialysis

Common side effect:

Central nervous system: Headache, Fatigue, dizziness.

Gastrointestinal: Nausea , abdominal pain, diarrhea.

Hepatic: ALT increased , AST increased .

Respiratory: Nasopharyngitis .

Dermatologic: Rash

Endocrine: Dysmenorrhea , dehydration .

Neuromuscular & skeletal: Arthralgia .

Pregnancy Risk Factor: B