**valACyclovir** (val-a-sye-kloe-veer)

**Valtrex**

**Classification**

Therapeutic: antivirals

**Pregnancy Category B**

**Indications**


**Action**

Rapidly converted to acyclovir. Acyclovir interferes with viral DNA synthesis. Therapeutic Effects: Inhibited viral replication, decreased viral shedding, reduced time to healing of lesions. Reduced transmission of genital herpes.

**Pharmacokinetics**

**Absorption:** 54% bioavailable as acyclovir after oral administration of valacyclovir.

**Distribution:** CSF concentrations of acyclovir are 50% of plasma concentrations. Acyclovir crosses placenta; enters breast milk.

**Metabolism and Excretion:** Rapidly converted to acyclovir via intestinal/hepatic metabolism.

**Half-life:** 2.5–3.3 hr; up to 14 hr in renal impairment (acyclovir).

**TIME/ACTION PROFILE (blood levels†)**

<table>
<thead>
<tr>
<th>ROUTE</th>
<th>ONSET</th>
<th>PEAK</th>
<th>DURATION</th>
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<tbody>
<tr>
<td>PO</td>
<td>unknown</td>
<td>1.5–2.5 hr</td>
<td>8–24 hr</td>
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**†Acyclovir**

**Contraindications/Precautions**

**Contraindicated in:** Hypersensitivity to valacyclovir or acyclovir.

**Use Cautiously in:** Renal impairment (p-dose/q-dosing interval recommended if CCr < 50 mL/min); OB, Lactation, Pedi: Pregnancy, lactation, or children (safety not established); Geri: Dose may be necessary due to ↑ risk of acute renal failure and CNS side effects.

**Adverse Reactions/Side Effects**

CNS: headache, agitation, confusion, delirium, dizziness, encephalopathy, hallucinations, vertigo, weakness. GI: nausea, abdominal pain, anorexia, constipation, diarrhea. GU: urinary frequency, polyuria. Hemat: thrombotic thrombocytopenic purpura/hemolytic uremic syndrome (very high doses in immunosuppressed patients).

**Drug-Drug:**

Probenecid and cimetidine ↑ blood levels; significant only in renal impairment. Concurrent use of other nephrotoxic drugs ↑ risk of adverse renal effects.

**Route/Dosage**

**Herpes Zoster**

PO (Adults): 1 g three daily for 7 days.

**Genital Herpes**

PO (Adults):

- Initial treatment—1 g twice daily for 10 days.
- Suppression of recurrence—500 mg once daily or 1000 mg once daily in patients experiencing ≥1 recurrence/year. Suppression of recurrence in HIV-infected patients—500 mg q 12 hr. Reduction of transmission—500 mg once daily for source partner.

**Herpes Labialis**

PO (Adults and Children ≥12 yr): 2 g then 2 g 12 hr later.

**Chickenpox**

PO (Children ≥2 yr): 20 mg/kg 3 times daily for 5 days (not to exceed 1 g 3 times daily).

**Renal Impairment**

PO (Adults):

- CCr 30–49 mL/min—1 g q 12 hr for herpes zoster treatment, no p-dose required for treatment of genital herpes; 1 g then 1 g 12 hr later for herpes labialis.
- CCr 10–29 mL/min—1 g q 24 hr for initial treatment of genital herpes, 500 mg q 12 hr thereafter.

**Interactions**

Drug-Dx: Probenecid and cimetidine ↑ blood levels; significant only in renal impairment. Concurrent use of other nephrotoxic drugs ↑ risk of adverse renal effects.
24 hr for treatment of recurrent episodes of genital herpes, 500 mg q 48 hr for suppression of genital herpes in patients with >10 recurrences/yr, 500 mg q 24 hr for suppression of genital herpes in patients with <10 recurrences/yr or HIV-infected patients, 500 mg q 24 hr for treatment of herpes zoster. 

NURSING IMPLICATIONS

Assessment
- Assess lesions before and daily during therapy.
- Monitor patient for signs of thrombotic thrombocytic purpura/hemolytic uremic syndrome (thrombocytopenia, microangiopathic hemolytic anemia, neurologic findings, renal dysfunction, fever). Requires prompt treatment; may be fatal.

Potential Nursing Diagnoses
- Risk for impaired skin integrity (Indications)
- Risk for infection (Indications) (Patient/Family Teaching)

Implementation
- High Alert: Do not confuse valacyclovir with valganciclovir. Do not confuse Valtrex (valacyclovir) with Valcyte (valganciclovir).
- PO: May be administered without regard to meals.
- Herpes Zoster: Implement valacyclovir therapy as soon as possible after the onset of signs or symptoms of herpes zoster; most effective if started within 48 hr of the onset of zoster rash. Efficacy of treatment started >72 hr after rash onset is unknown.

Genital Herpes and Herpes Labialis: Implement treatment for genital herpes as soon as possible after onset of symptoms (itching, itching, burning).
- Chicken Pox: Initiate therapy at the earliest sign or symptom, preferably within 24 hr of onset of rash.

Patient/Family Teaching
- Instruct patient to take valacyclovir exactly as directed for the full course of therapy. Take missed doses as soon as remembered or as close as possible to next dose; do not double doses. Advise patient to read the Patient Information before starting therapy.
- Advise patient to maintain adequate hydration during therapy.
- Advise patient to notify health care professional promptly if adverse systemic symptoms (aggressive behavior, unsteady movements, confusion, unusual thinking, hallucinations, seizures, contact with others). Requires prompt treatment; may be fatal.
- Instruct patient to notify health care professional if pregnancy is planned or suspected, or if breast feeding.
- Herpes Zoster: Informs patient that valacyclovir does not prevent the spread of infection to others. Precautions should be taken around others who have not had chickenpox or varicella vaccine, or are immunosuppressed, until lesions have crusted.
- Genital Herpes and Herpes Labialis: Informs patient that valacyclovir does not prevent the spread of infection to others. Advise patient to avoid contact with lesions while lesions or symptoms are present. Valacyclovir reduces transmission of genital herpes to others. Advise patient to practice safer sex (avoid sexual intercourse when lesions are present and wear a condom made of latex or polyurethane during sexual contact).

Evaluation/Desired Outcomes
- Decrease in time to full crusting, loss of vesicles, loss of ulcers, and development of crusts in patients with acute herpes zoster (shingles).
- Decrease in time to full crusting, loss of vesicles, loss of ulcers, and development of crusts in patients with genital herpes.
- Decrease in frequency of outbreaks in patients with genital herpes.
- Decrease in time to full crusting, loss of vesicles, loss of ulcers, and development of crusts in patients with herpes labialis. Decrease in transmission of genital herpes.
- Treatment of chickenpox.

Why was this drug prescribed for your patient?