



HIGHLIGHTS OF PRESCRIBING INFORMATION

These highlights do not include all the information needed to use FAMCICLOVIR TABLETS safely and effectively. See full prescribing information for FAMCICLOVIR TABLETS.

FAMCICLOVIR tablet, for oral use
Initial U.S. Approval: 1994

INDICATIONS AND USAGE
Famciclovir tablet, a prodrug of penciclovir, is a nucleoside analog DNA polymerase inhibitor indicated for:

- Immunocompetent Adult Patients (1.1)
 - Herpes labialis (cold sores)
 - Treatment of recurrent episodes
 - Genital herpes
 - Treatment of recurrent episodes
- Immunocompromised Adult Patients (1.2)
 - Treatment of recurrent episodes of orolabial or genital herpes

The efficacy and safety of famciclovir tablets have not been established for:

- Patients <18 years of age
- Immunocompromised patients other than for the treatment of recurrent episodes of orolabial or genital herpes in HIV-infected patients
- Black and African American patients with recurrent genital herpes

DOSE AND ADMINISTRATION

Immunocompetent Adult Patients (2.1)

Herpes labialis (cold sores)	1500 mg as a single dose
Genital herpes	1000 mg twice daily for 1 day
Treatment of recurrent episodes	250 mg twice daily
Suppressive therapy	250 mg twice daily

HIV-Infected Adult Patients (2.2)

Recurrent episodes of orolabial or genital herpes	500 mg twice daily for 7 days
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Patients with renal impairment: Adjust dose based on creatinine clearance. (2.3)

DOSE FORMS AND STRENGTHS
Tablets: 125 mg, 250 mg, 500 mg (3)

CONTRAINDICATIONS
Known hypersensitivity to the product, its components, or penciclovir cream. (4)

Warnings and Precautions
Acute renal failure: May occur in patients with underlying renal disease who receive higher than recommended doses of famciclovir for their level of renal function. Reduce dosage in patients with renal impairment. (2.3, 8.5)

ADVERSE REACTIONS
The most common adverse events reported in at least 1 indication by >10% of adult patients are headache and nausea. (6.1)

DRUG INTERACTIONS
Probenecid may increase penciclovir levels. Monitor for evidence of penciclovir toxicity. (7.2)

USE IN SPECIFIC POPULATIONS
Nursing mothers: Famciclovir should not be used in nursing mothers unless the potential benefits outweigh the potential risks associated with treatment. (8.3)

See 17 for PATIENT COUNSELING INFORMATION and FDA-approved patient labeling

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- Sections or subsections omitted from the full prescribing information are not listed
- DOSE FORMS AND STRENGTHS
- Famciclovir tablets are available in 3 strengths:
 - 125 mg: Off white, round, biconvex, film coated tablets, debossed with '1' on one side and '50' on the other side
 - 250 mg: Off white, round, biconvex, film coated tablets, debossed with '1' on one side and '49' on the other side
 - 500 mg: Off white, oval, film coated, biconvex tablets, debossed with '1' on one side and '68' on the other side
- CONTRAINDICATIONS
- Famciclovir tablets are contraindicated in patients with known hypersensitivity to the product, its components, or penciclovir cream.
- WARNINGS AND PRECAUTIONS
- Acute renal failure: Cases of acute renal failure have been reported in patients with underlying renal disease who have received inappropriately high doses of famciclovir for their level of renal function. Dosage reduction is recommended when administering famciclovir to patients with renal impairment [See Dosage and Administration (2.3), Use in Specific Populations (6.6)].
- ADVERSE REACTIONS
- Acute renal failure is discussed in greater detail in other sections of the label [See Warnings and Precautions (5)].
- The most common adverse events reported in at least 1 indication by >10% of adult patients treated with famciclovir are headache and nausea.
- 6.1 Clinical Trials Experience in Adult Patients
- Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared with rates in the clinical trials of another drug and may not reflect the rates observed in practice.
- 6.2 Clinical Trials Experience in Pediatric Patients
- The safety of famciclovir tablets has been evaluated in active- and placebo-controlled clinical studies involving 163 famciclovir-treated patients with recurrent genital herpes (Famciclovir, 1000 mg twice daily), 1197 patients with recurrent genital herpes treated with famciclovir as suppressive therapy (125 mg once daily to 250 mg three times daily) of which 570 patients received famciclovir (open-label and/or double-blind) for at least 10 months, and 447 famciclovir-treated patients with herpes labialis (Famciclovir, 1500 mg once daily or 750 mg twice daily). Table 2 lists selected adverse events.

Table 2 Selected Adverse Events (all grades and without regard to causality) Reported by ≥2% of Patients in Placebo-Controlled Famciclovir Trials*

Events	Incidence					
	Recurrent Genital Herpes† Famciclovir (n=183) Placebo (n=183)	Genital Herpes-Suppressant† Famciclovir (n=498) Placebo (n=497)	Herpes Labialis† Famciclovir (n=241) Placebo (n=241)			
Nervous System						
Headache	13.5	5.4	39.3	42.9	8.5	6.7
Paresthesia	0.0	0.0	0.9	0.0	0.0	0.0
Migraine	0.6	0.6	3.1	0.0	0.2	0.8
Gastrointestinal						
Nausea	2.5	3.6	7.2	9.5	2.2	3.9
Diarrhea	4.9	1.2	9.0	9.5	1.6	0.8
Vomiting	1.2	0.6	3.1	1.6	0.7	0.0
Flatulence	0.6	0.0	4.8	1.6	0.2	0.0
Abdominal Pain	0.0	1.2	7.9	7.9	0.2	0.4
Body as a Whole						
Fatigue	0.6	0.0	4.8	3.2	1.6	0.4
Skin and Appendages						
Pruritus	0.0	0.6	2.2	0.0	0.0	0.0
Rash	0.0	0.0	3.3	1.6	0.0	0.0
Reproductive (Female)						
Dyspareunia	1.8	0.6	7.6	6.3	0.4	0.0

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- Because clinical trials are conducted under widely varying conditions, adverse reaction rates observed in the clinical trials of a drug cannot be directly compared with rates in the clinical trials of another drug and may not reflect the rates observed in practice.
- 6.2 Clinical Trials Experience in Pediatric Patients
- The safety of famciclovir tablets has been evaluated in active- and placebo-controlled clinical studies involving 163 famciclovir-treated patients with recurrent genital herpes (Famciclovir, 1000 mg twice daily), 1197 patients with recurrent genital herpes treated with famciclovir as suppressive therapy (125 mg once daily to 250 mg three times daily) of which 570 patients received famciclovir (open-label and/or double-blind) for at least 10 months, and 447 famciclovir-treated patients with herpes labialis (Famciclovir, 1500 mg once daily or 750 mg twice daily). Table 2 lists selected adverse events.

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Migraine	0.6	0.6	3.1	0.0	0.2	0.8
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Nausea	2.5	3.6	7.2	9.5	2.2	3.9
Diarrhea	4.9	1.2	9.0	9.5	1.6	0.8
Vomiting	1.2	0.6	3.1	1.6	0.7	0.0
Flatulence	0.6	0.0	4.8	1.6	0.2	0.0
Abdominal Pain	0.0	1.2	7.9	7.9	0.2	0.4
Body as a Whole						
Fatigue	0.6	0.0	4.8	3.2	1.6	0.4
Skin and Appendages						
Pruritus	0.0	0.6	2.2	0.0	0.0	0.0
Rash	0.0	0.0	3.3	1.6	0.0	0.0
Reproductive (Female)						
Dyspareunia	1.8	0.6	7.6	6.3	0.4	0.0

* Hematology

Parameter	Famciclovir (n = 660) [†]	Placebo (n = 210) [†]
	%	%
ALT (SGPT) (>2 x NRH)	3.2	1.5
Total Bilirubin (>1.5 x NRH)	1.9	1.2
Serum Creatinine (>1.5 x NRH)	0.2	0.3
Amylase (>1.5 x NRH)	1.5	1.9
Lipase (>1.5 x NRH)	4.9	4.7

[†] Percentage of patients with laboratory abnormalities that were increased or decreased from baseline and were outside of specified ranges.
[†] n values represent the minimum number of patients assessed for each laboratory parameter.
NRH = Normal Range High.

HIV-Infected Patients: In HIV-infected patients, the most frequently reported adverse events for famciclovir (500 mg twice daily; n=150) and acyclovir (400 mg 5x/day; n=143), respectively, were headache (17% vs. 15%), nausea (11% vs. 13%), diarrhea (7% vs. 11%), vomiting (5% vs. 4%), fatigue (4% vs. 2%), and abdominal pain (3% vs. 6%).

6.2 Postmarketing Experience
The adverse events listed below have been reported during postapproval use of famciclovir. Because these events are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure:

- Blood and lymphatic system disorders: Thrombocytopenia
- Hepatobiliary disorders: Abnormal liver function tests, cholestatic jaundice
- Immune system disorders: Anaphylactic shock, anaphylactic reaction
- Nervous system disorders: Dizziness, somnolence, seizure
- Psychiatric disorders: Confusion (including delirium, disorientation, and confusional state occurring predominantly in the elderly), hallucinations
- Skin and subcutaneous tissue disorders: Urticaria, erythema multiforme, Stevens-Johnson syndrome, toxic epidermal necrolysis, angioedema (e.g., face, eyelid, periorbital, and pharyngeal edema), hypersensitivity vasculitis
- Cardiac disorders: Palpitations

7.1 Potential for Famciclovir to Affect Other Drugs
The adverse events listed below have been reported during postapproval use of famciclovir. Because these events are reported voluntarily from a population of uncertain size, it is not always possible to reliably estimate their frequency or establish a causal relationship to drug exposure:

7.2 Potential for Other Drugs to Affect Penciclovir
No clinically significant alterations in penciclovir pharmacokinetics were observed following single-dose administration of 500 mg famciclovir after pretreatment with multiple doses of allopurinol, cimetidine, theophylline, zidovudine, promethazine, when given shortly after an animal (magnesium and aluminum hydroxide), or concomitantly with entricarbonyl. No clinically significant effect on penciclovir pharmacokinetics was observed following multiple-dose (three times daily) administration of famciclovir (500 mg) with multiple doses of digoxin.

Concurrent use with probenecid or other drugs significantly eliminated by active renal tubular secretion may result in increased plasma concentrations of penciclovir. Interactions with other drugs metabolized by this enzyme and/or inhibiting this enzyme could potentially occur. Clinical interaction studies of famciclovir with cimetidine and promethazine, *in vitro* inhibitors of adenosine triphosphatase, did not show relevant effects on the formation of penciclovir. Raloxifene, a potent adenosine triphosphatase inhibitor *in vitro*, did not affect the formation of penciclovir. However, a clinical drug-drug interaction study to determine the magnitude of interaction between penciclovir and raloxifene has not been conducted.

8. USE IN SPECIFIC POPULATIONS

8.1 Pregnancy, Teratogenic Effects:
Pregnancy category B. After oral administration, famciclovir (prodrug) is converted to penciclovir (active drug). There are no adequate and well-controlled studies of famciclovir or penciclovir in pregnant women. Adverse effects on embryofetal development or reproduction in animal reproduction studies using famciclovir and penciclovir at doses higher than the maximum recommended human dose (MRHD) of human exposure. Because animal reproduction studies are always predictive of human response, famciclovir should be used during pregnancy only if needed.

In animal reproduction studies, pregnant rats and rabbits received oral famciclovir at doses of 1000 mg/kg/day (including 21 to 20.8 times (rats) and 1.4 to 5.4 times (rabbits) the human systemic exposures based on AUC). No adverse effects were observed on embryo-fetal development. In other studies, pregnant rats and rabbits received intraperitoneal famciclovir at doses (250 mg/kg/day) of 1.5 to 6 times (rats) and (120 mg/kg/day) 1.1 to 4.5 times (rabbits) or penciclovir at doses (80 mg/kg/day) 0.3 to 1.3 times (rats) and (50 mg/kg/day) 0.5 to 2.1 times (rabbits) the MRHD based on body surface area. Reproductive studies are always predictive of human response, famciclovir should be used during pregnancy only if needed.

8.2 Nursing Mothers:
It is not known whether famciclovir (prodrug) or penciclovir (active drug) are excreted in human milk. Following oral administration of famciclovir to lactating rats, penciclovir was excreted in breast milk at concentrations higher than those seen in the plasma. There are no data on the excretion of famciclovir or penciclovir in human milk. Because of the potential for adverse effects on nursing mothers, famciclovir should be used during lactation only if the potential risks outweigh the potential benefits. Consideration should be given to the potential risks associated with treatment.

8.3 Pediatric Use:
The efficacy of famciclovir tablets has not been established in pediatric patients. The pharmacokinetic profile and safety of famciclovir (experimental granules mixed with OraSweet™ or tablets) were studied in 2 open-label studies.

8.4 Geriatric Use:
Study 1 was a single-dose pharmacokinetic and safety study in infants 1 month to <12 years of age who had an active herpes simplex virus (HSV) infection or who were at risk for HSV infection. Eighteen subjects were enrolled and received a single dose of famciclovir (1500 mg once daily) with OraSweet for the treatment of their infection. The efficacy and safety of famciclovir have not been established as suppressive therapy in infants following neonatal HSV infections. In addition, the efficacy cannot be extrapolated from adults to infants because there is no similar disease in adults. Therefore, famciclovir is not recommended in infants.

Study 2 was an open-label, single-dose pharmacokinetic, multiple-dose safety study of famciclovir experimental granules mixed with OraSweet in children 1 to <12 years of age with clinically suspected HSV infection. Fifty-one subjects were enrolled in the pharmacokinetic part of the study and received a single body weight adjusted dose of famciclovir (doses ranged from 125 mg to 500 mg). These doses were selected to provide penciclovir systemic exposures similar to the penciclovir systemic exposures observed in adults after administration of 500 mg famciclovir. Based on the pharmacokinetic data observed with these doses in children, a new weight-based dosing algorithm was designed and used in the multiple-dose safety part of the study. Pharmacokinetic data were not obtained with the revised weight-based dosing algorithm.

A total of 100 patients were enrolled in the multiple-dose safety part of the study. 47 subjects with active or latent HSV infection and 53 subjects with chickenpox. Patients with active or latent HSV infection received famciclovir twice a day for 7 days. The daily dose of famciclovir ranged from 150 mg to 500 mg twice daily depending on the patient's body weight. Patients with chickenpox received famciclovir three times daily for 7 days. The daily dose of famciclovir ranged from 150 mg to 500 mg three times daily depending on the patient's body weight. The clinical adverse events and laboratory test abnormalities observed in this study were similar to those seen in adults. The available data are insufficient to support the use of famciclovir for the treatment of children 1 to <12 years of age with chickenpox or infections due to HSV for the following reasons:

Chickenpox: The efficacy of famciclovir for the treatment of chickenpox has not been established in other pediatric or adult patients.

Genital herpes: Clinical information on genital herpes in children is limited. Therefore, efficacy data from adults cannot be extrapolated to this population. Further, famciclovir has not been studied in children 1 to <12 years of age with recurrent genital herpes. None of the children in Study 2 had genital herpes.

Herpes labialis: There are no pharmacokinetic and safety data in children 1 to <12 years of age to support a famciclovir dose that provides penciclovir systemic exposures comparable to the penciclovir systemic exposures in adults after a single dose administration of 1500 mg. Moreover, no efficacy data have been obtained in children 1 to <12 years of age with recurrent herpes labialis.

Labeling describing additional clinical pharmacokinetic, safety, and antiviral activity studies in pediatric patients (ages of 12 years to <18 years) is approved for Novartis Pharmaceuticals Corporation's Famciclovir Tablets. However, due to Novartis Pharmaceuticals Corporation's marketing exclusivity rights, a description of these studies is not approved for this famciclovir tablet product.

8.5 Geriatric Use:
Of 616 patients with recurrent herpes simplex (type 1 or type 2) in clinical studies who were treated with famciclovir, 26 (4.3%) were >65 years of age and 7 (1.1%) were >75 years of age. Clinical studies of famciclovir in patients with recurrent genital herpes did not include sufficient numbers of subjects aged 65 and over to determine whether they respond differently compared to younger subjects.

PATIENT INFORMATION

Famciclovir (fam SYM klo veer) Tablets

Read this Patient Information before you start taking famciclovir and each time you get a refill. There may be new information. This information does not take the place of talking with your healthcare provider about your medical condition or treatment.

What is famciclovir?

- Famciclovir is a prescription antiviral medicine used to:
- treat outbreaks of cold sores (fever blisters) in healthy adults
- treat outbreaks of genital herpes in healthy adults
- decrease the number of outbreaks of genital herpes in healthy adults
- treat outbreaks of herpes simplex lesions in or around the mouth, genitals, and anal area in people infected with HIV

It is not known if famciclovir is safe and effective in children younger than 18 years of age.

Famciclovir is not a cure for herpes. It is not known if famciclovir can stop the spread of herpes to others. If you are sexually active, you can pass herpes to your partner even if you are taking famciclovir. Herpes can be transmitted even if you do not have active symptoms. You should continue to practice safer sex to lower the chances of spreading genital herpes to others. Do not have sexual contact with your partner during an outbreak of genital herpes or if you have any symptoms of genital herpes. Use a condom made of latex or polyurethane when you have a sexual contact. Ask your healthcare provider for more information about safer sex practices.

Who should not take famciclovir?

Do not take famciclovir if you are allergic to any of its ingredients or to penciclovir cream. See the end of this Patient Information leaflet for a complete list of ingredients in famciclovir.

What should I tell my healthcare provider before taking famciclovir?

Before you start taking famciclovir, tell your healthcare provider if you:

- have kidney or liver problems
 - have a rare genetic problem with galactose intolerance, a severe lactase deficiency or you do not absorb glucose-galactose (malabsorption)
 - are pregnant or planning to become pregnant. It is not known if famciclovir will harm your unborn baby
 - are breastfeeding or plan to breastfeed.
- Tell your healthcare provider about all the medicines you take, including prescription and nonprescription medicines, vitamins, and herbal supplements. Especially tell your healthcare provider if you take:
- any other medicines and products you use to treat herpes outbreaks
 - probenecid (Probalan)

Know the medicines you take. Keep a list of them with you to show to your healthcare provider and pharmacist every time you get a new medicine.

How should I take famciclovir?

- Take famciclovir exactly as prescribed
- Your healthcare provider will tell you how many famciclovir to take and when to take them. Your dose of famciclovir and how often you take it may be different depending on your condition
- Famciclovir can be taken with or without food
- It is important for you to finish all of the medicine as prescribed, even if you begin to feel better
- Your symptoms may continue even after you finish all of your famciclovir. This does not mean that you need more medicine, since you have already finished a full course of famciclovir and it will continue to work in your body. Talk to your healthcare provider if you have any questions about your condition and your treatment.

What are the possible side effects of famciclovir?

The most common side effects of famciclovir include:

- headache
- nausea

Talk to your healthcare provider if you have any side effect that bothers you or that does not go away. These are not all the possible side effects of famciclovir. Ask your healthcare provider or pharmacist for more information.

Call your healthcare provider for medical advice about side effects. You may report side effects to FDA at 1-800-FDA-1088.

How should I store famciclovir?

