DRUG QUANTITY MANAGEMENT POLICY - PER RX

POLICY: Antivirals – Famciclovir Drug Quantity Management Policy – Per Rx

• Famciclovir tablets – generic only

REVIEW DATE: 04/06/2022

OVERVIEW

Famciclovir is an orally administered prodrug of the anti-alpha herpes viral agent penciclovir.¹ It is indicated in the following instances:

- <u>Immunocompetent Adults</u>:
 - o Treatment of recurrent **herpes labialis** (cold sores).
 - o Treatment and chronic suppressive therapy of recurrent episodes of **genital herpes**.
 - Treatment of **herpes zoster**.
- Human Immunodeficiency Virus (HIV)-Infected Adults:
 - o Treatment of recurrent episodes of **orolabial or genital herpes**.

Dosing/Availability

Famciclovir is available as 125 mg, 250 mg, and 500 mg tablets.¹ The 125 mg tablet is available for dosage reductions in renal impairment. Manufacturer recommended dosing is provided in Table 1. The maximum number of tablets needed per course of <u>treatment</u> is 21 tablets.

Table 1. FDA-Approved Famciclovir Dosing.¹

Indication	Normal dosage	Dosing Adjustments					
	regimen	CrCl 40 to 59 mL/min	CrCl 20 to 39 mL/min	CrCl < 20 mL/min	Hemodialysis		
Immunocompetent Adults							
Recurrent herpes	1,500 mg as a	750 mg as a	500 mg as a	250 mg as a	250 mg single		
labialis (cold sores)	single dose	single dose	single dose	single dose	dose following		
					dialysis		
Recurrent genital	1 gram BID for 1	500 mg every 12	500 mg as a	250 mg as a	250 mg single		
herpes	day	hours for 1 day	single dose	single dose	dose following		
					dialysis		
Suppression of	250 mg BID for	250 mg every 12	125 mg every 12	125 mg every 24	125 mg following		
recurrent genital	up to 1 year	hours for up to 1	hours for up to 1	hours for up to 1	each dialysis for		
herpes		year	year	year	up to 1 year		
Herpes zoster	500 mg every 8	500 mg every 12	500 mg every 24	250 mg every 24	250 mg following		
(shingles)	hours for 7 days	hours for 7 days	hours for 7 days	hours for 7 days	each dialysis for 7		
					days		
HIV-infected Adults							
Recurrent orolabial	500 mg BID for 7	500 mg every 12	500 mg every 24	250 mg every 24	250 mg following		
and genital herpes	days	hours for 7 days	hours for 7 days	hours for 7 days	each dialysis for 7		
infection					days		

CrCl – Creatinine clearance; BID – Twice daily; HIV – human immunodeficiency virus.

Literature and guidelines support the use of famciclovir for several indications related to reactivation to latent varicella (chickenpox) virus.

For the treatment of an initial episode of genital herpes in immunocompetent patients, the Centers for Disease Control and Prevention (CDC) guidelines recommend famciclovir 250 mg three times daily (TID) for 7 to 10 days.² For immunocompetent individuals with recurrent genital HSV the CDC outlines the

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following treatment regimens: 1 gram twice daily (BID) for 1 day (FDA-approved dose), 500 mg one time followed by 250 mg BID for 5 days, or 125 mg BID for 5 days.²

Certain immunocompetent patients with herpes zoster will present with ocular, otic, or neurologic manifestations. In these situations, patients may require intravenous (IV) and/or prolonged therapy. Herpes zoster ophthalmicus is a serious sight-threatening condition associated with varicella zoster virus reactivation within the trigeminal ganglion. Patients can develop conjunctivitis, episcleritis, keratitis, and/or iritis. The standard approach to herpes zoster ophthalmicus includes oral antiviral therapy (acyclovir, valacyclovir, or famciclovir) to limit viral replication, and the use adjunctive topical steroid drops to reduce the inflammatory response and control immune-associated keratitis and iritis. IV acyclovir (10 mg/kg TID for 7 days) should be administered if the patient is immunocompromised or requires hospitalization for sight-threatening disease.

For Bell's Palsy, famciclovir 250 mg TID for 5 to 7 days in combination with a corticosteroid has been used. 5-9 The major otologic complication of varicella zoster reactivation is Ramsay Hunt syndrome, which includes the triad of ipsilateral facial paralysis, ear pain, and vesicles in the auditory canal and auricle. 7 Valacyclovir (1 g TID) for 7 to 10 days with and prednisone, (not famciclovir) is used. In severe cases (vertigo, tinnitus, or hearing loss), IV therapy can be initiated, and the patient can then be transitioned to an oral antiviral agent when the lesions begin to crust.

For adults with human immunodeficiency virus (HIV), the Department of Health and Human Services (DHHS) guidelines on opportunistic infections recommend that orolabial herpes simplex virus (HSV) be treated with famciclovir 500 mg twice daily (BID) for 5 to 10 days; first episodes of genital HSV should be treated with famciclovir 500 mg BID for 7 to 10 days and recurrent episodes for 5 to 10 days.³ Severe mucocutaneous HSV lesions respond best to initial treatment with IV therapy; once lesions regress, patients can be switched to oral famciclovir and continued until lesions have completely healed. Suppressive therapy is effective in preventing recurrences of HSV lesions and is preferred for patients who have severe or frequent recurrences or who want to minimize the frequency of recurrences. Suppressive therapy for HSV with famciclovir 500 mg BID may be continued indefinitely, without regard to improved CD4 count, although the need for continued therapy should be addressed on an annual basis, particularly if immune reconstitution has occurred.

For uncomplicated varicella, famciclovir (500 mg TID), initiated as early as possible after lesion onset and continued for 5 to 7 days is a preferred regimen.³ For individuals with severe or complicated varicella, IV therapy is recommended; if no evidence of visceral involvement is apparent, it is recommended to switch to oral antiviral therapy after the patient has defervesced (famciclovir 500 mg TID, optimal duration is not cited). For herpes zoster virus, antiviral therapy with famciclovir 500 mg TID should be instituted as soon as possible and continued for 7 to 10 days, although longer durations of therapy should be considered if lesions resolve slowly.

For acute localized dermatomal herpes zoster in individuals with HIV famciclovir 500 mg TID for 7 to 10 days is recommended, although longer durations of therapy should be considered if lesions resolve slowly.³ If cutaneous lesions are extensive or if visceral involvement is suspected, IV acyclovir should be initiated and continued until clinical improvement is evident. A switch from IV acyclovir to oral antiviral therapy (famciclovir 500 mg TID to complete a 10 to 14 day treatment course) is reasonable when formation of new cutaneous lesions has ceased and the signs and symptoms of visceral varicella zoster virus infection are improving. For herpes zoster ophthalmitis, following IV acyclovir, patients are switched to oral therapy which can include famciclovir 500 mg TID to complete a 10 to 14 day course of therapy.

 $\begin{tabular}{ll} Table 2. DHHS Guidelines for the Prevention and Treatment of Opportunistic Infections in Adults and Adolescents with HIV.$^3 \end{tabular}$

Indication	Usual Dose	Renal Dose Adjustment	Duration
HSV			
Orolabial	Famciclovir	CrCl 20 to 39 mL/min: 500 mg Q24 hours	5 to 10 days
Genital – First Episode	500 mg BID	CrCl < 20 mL/min: 250 mg Q24 hours	7 to 10 days
Genital – Recurrent Episode		HD: 250 mg on HD days.	5 to 10 days
Severe Mucocutaneous			Until lesions are completely healed.
Chronic Suppressive Therapy			Indefinite (evaluate annually)
Varicella Zoster			
Uncomplicated Primary Varicella Infection (Chickenpox) Severe or Complicated varicella Herpes Zoster (Shingles) [acute localized dermatonal]	Famciclovir 500 mg TID	CrCl 20 to 39 mL/min: 500 mg Q24 hours CrCl < 20 mL/min: 250 mg Q24 hours HD: 250 mg on HD days.	Optimal duration not cited (following IV therapy). 7 to 10 days; consider longer therapy if lesions resolve alongly. Patients continuing
			slowly. Patients continuing from IV therapy should complete a 10 to 14 day course of therapy.
Herpes Zoster Ophthalmitis – Extensive Cutaneous			10 to 14 days
Lesion or Visceral Involvement			

DHHS – Department of Health and Human Services; HIV – Human Immunodeficiency Virus; BID – Twice daily; CrCl – Creatinine clearance; Q24 – Every 24; HD – Hemodialysis; TID – Three times daily; IV – Intravenous.

There are no dosage forms of famciclovir available to accommodate pediatric patients who cannot swallow tablets. According to the guidelines for the treatment of opportunistic infections in HIV-infected children, famciclovir 250 mg BID for 5 to 14 days is used to treat genital HSV episodes.⁴ Children who have frequent, severe, or troubling recurrences of mucocutaneous HSV(four to six severe episodes a year) can be given daily prophylaxis with oral famciclovir (500 mg BID).⁴ For the treatment of recurrent herpes labialis in children old enough for adult dosing, famciclovir 1 g BID for 1 day is an option. Recurrent genital HSV in children can be treated with famciclovir 1 g BID for two doses.

POLICY STATEMENT

This Drug Quantity Management program has been developed to promote the safe, effective, and economic use of famciclovir. If the Drug Quantity Management rule is not met for the requested medication at the point of service, coverage will be determined by the Criteria below. All approvals are provided for 1 year in duration.

Automation: None.

Drug Quantity Limits

Product	Strength and Form	Maximum Quantity per Rx
Famciclovir tablets	125 mg tablets	21 tablets
(generic only)	250 mg tablets	60 tablets
	500 mg tablets	21 tablets

CRITERIA

famciclovir 125 mg tablets

1. If the patient meets the following criteria (A and B), approve 60 tablets per dispensing:

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- A) The medication is for chronic suppression or prevention of recurrent genital herpes; AND
- **B)** Patient has reduced renal function.
- **2.** If the medication is being requested for an ophthalmic infection, approve the quantity requested for a 30-day supply per dispensing.

famciclovir 250 mg tablets

1. If the medication is being requested for an ophthalmic infection, approve the quantity requested for a 30-day supply per dispensing.

famciclovir 500 mg tablets

- 1. If the medication is being requested for the chronic suppression or prevention of mucocutaneous herpes (genital, perianal, oral) in an immunocompromised patient, approve 60 tablets per dispensing.
- 2. If the medication is being requested for the treatment of mucocutaneous herpes (genital, perianal, oral) in an immunocompromised patient, approve 60 tablets per dispensing.
- **3.** If the medication is being requested for an ophthalmic infection, approve the quantity requested for a 30-day supply per dispensing.
- **4.** If the medication is being requested for the treatment of varicella zoster virus infection in immunocompromised patients, approve up to 90 tablets per dispensing.
- **5.** If the medication is being requested for the treatment of acute local dermatomal herpes zoster in an immunocompromised patient, approve up to 90 tablets per dispensing.

REFERENCES

- 1. Famciclovir [prescribing information]. North Wales, PA: Teva Pharmaceuticals; January 2019.
- Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2021. MMWR. 2021;70(4):1-192. Available at: https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8344968/pdf/rr7004a1.pdf. Accessed on March 23, 2022.
- 3. Panel on Opportunistic Infections in HIV-Infected Adults and Adolescents. Guidelines for the prevention and treatment of opportunistic infections in HIV-infected adults and adolescents: recommendations from the Centers for Disease Control and Prevention, the National Institutes of Health, and the HIV Medicine Association of the Infectious Diseases Society of America. Updated February 17, 2022. Available at: https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/Adult_OI.pdf. Accessed March 22, 2022.
- 4. Guidelines for the prevention and treatment of opportunistic infections in HIV-exposed and HIV-infected children: recommendations from the National Institutes of Health, Centers for Disease Control and Prevention, the HIV Medicine Association of the Infectious Diseases Society of America, the Pediatric Infectious Diseases Society, and the American Academy of Pediatrics. Updated January 24, 2022. Available at: https://clinicalinfo.hiv.gov/sites/default/files/guidelines/documents/OI Guidelines Pediatrics.pdf. Accessed March 22, 2022.
- 5. Aizman A, Johnson MW, Elner SG. Treatment of acute retinal necrosis syndrome with oral antiviral medications. *Ophthalmology*. 2007;114:307-312.
- 6. Tibbetts, MD, Shah CP, Young LH, et al. Treatment of acute retinal necrosis. Ophthalmology. 2010;117:818-824.
- Clinical Pharmacology [database online]. Tampa, FL: Gold Standard, Inc.; 2010. Available at http://www.clinicalpharmacology-ip.com/Default.aspx. Accessed on March 23, 2022. Search terms: famciclovir.
- Albrecht MA. Treatment of herpes zoster in the immunocompetent host. In: UpToDate, Post TW (Ed), UpToDate, Waltham, MA. Accessed on March 25, 2022.
- 9. Pergam SA and Limaye AP on behalf of the American Society of Transplantation Infectious Diseases Community of Practice. Varicella zoster virus in solid organ transplantation: guidelines from the American Society of Transplantation Infectious Diseases Community. *Clinical Transplantation*. 2019;33:e13622.