

Clinical Policy: Simeprevir (Olysio)

Reference Number: PA.CP.PHAR.280

Effective Date: 01/18

Last Review Date: 09/17

[Revision Log](#)

Description

Simeprevir (Olysio™) is an inhibitor of the hepatitis C virus (HCV) nonstructural protein 3/4A (NS3/4A) protease.

FDA-Approved Indication

Olysio is indicated for the treatment of adults with chronic HCV infection:

- In combination with sofosbuvir in patients with HCV genotype 1 without cirrhosis or with compensated cirrhosis
- In combination with peginterferon alfa (Peg-IFN-alfa) and ribavirin (RBV) in patients with HCV genotype 1 or 4 without cirrhosis or with compensated cirrhosis

Limitations of use:

- Efficacy of Olysio in combination with Peg-IFN-alfa and RBV is substantially reduced in patients infected with HCV genotype 1a with an NS3 Q80K polymorphism.
- Olysio is not recommended in patients who have previously failed therapy with a treatment regimen that included Olysio or other HCV protease inhibitors.

Policy/Criteria

It is the policy of Pennsylvania Health and Wellness® that Olysio is **medically necessary** when the following criteria are met:

I. Initial Approval Criteria

*** Provider must submit documentation (including office chart notes and lab results) supporting that member has met all approval criteria ***

A. Chronic Hepatitis C Infection (must meet all):

1. Age \geq 18 years;
2. Diagnosis of chronic hepatitis C virus (HCV) infection as evidenced by detectable HCV ribonucleic acid (RNA) levels;
3. Confirmed HCV genotype is 1 or 4;
4. If actively abusing alcohol or IV drugs, or has a history of abuse, has documentation of prescriber counseling regarding the risks of alcohol or IV drug abuse and an offer of a referral for substance use disorder treatment.
5. Has all of the following:
 - a. Documented quantitative HCV RNA at baseline that was tested within the past 3 months.
 - b. Dose not have a life expectancy of less than 12 months due to non-liver-related comorbid conditions.
 - c. Has correct or addressed the causes of non-adherence to a previously prescribed Hepatitis C treatment regimen if the recipient has a history of failed treatment due to non-adherence.
 - d. Had all potential drug interactions addressed by the prescriber

6. Prescribed regimen is consistent with an FDA or AASLD-IDSAs recommended regimen (*see Section V Dosage and Administration for reference*);
 - a. If a lower cost alternative regimen carries an equal or higher AASLD-IDSAs rating, a clinical contraindication or intolerance must be present for the alternative regimen prior to the approval of a Simeprevir-based regimen;
7. If member is without cirrhosis or with compensated cirrhosis (Child-Pugh A):
contraindication or intolerance to Mavyret; or Mavyret is not AASLD recommended.
8. Member has contraindication or intolerance to Zepatier and Epclusa (*Zepatier is the preferred agent; Epclusa should be used if Zepatier is contraindicated*);
9. Has a documented commitment to adherence with the planned course of treatment
10. Has documented completion of
 - a. Hepatitis B immunization series or Hepatitis B screening (sAb/sAg and cAb/cAg)
AND
 - b. If there is detectable HBV DNA, will be treated for Hepatitis B or if negative for hepatitis BsAb, is being vaccinated against Hepatitis B. AND
 - c. Has a documented HIV screening (HIV Ag/Ab) and if confirmed positive by HIV-1/HIV-2 differentiation immunoassay: Is being treated for HIV or is not being treated for HIV and the medical record documents the rationale for not being treated
11. If prescribed with ribavirin, at the time of request, member has none of the following contraindications:
 - a. Pregnancy;
12. Dose does not exceed 150 mg (1 capsule) per day.

Approval duration: up to 24 weeks (**Approved duration should be consistent with a regimen in Section V Dosage and Administration*)

- B. Other diagnoses/indications:** Refer to PA.CP.PHAR.57 - Global Biopharm Policy if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

II. Continued Approval

**** Provider must submit documentation (including office chart notes and lab results) supporting that member has met all approval criteria ****

A. Chronic Hepatitis C Infection (must meet all):

1. Currently receiving medication via Pennsylvania Health and Wellness benefit or member has previously met all initial approval criteria or Continuity of Care policy (PA.LTSS.PHAR.01) applies;
2. Dose does not exceed 150mg (1 capsule) per day.

Approval duration: up to a total of 24 weeks*
(**Approved duration should be consistent with a regimen in Section V Dosage and Administration*)

B. Other diagnoses/indications

C. Refer to PA.CP.PHAR.57 if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized).

D. Diagnoses/Indications for which coverage is NOT authorized:

III. Non-FDA approved indications, which are not addressed in this policy, unless there is sufficient documentation of efficacy and safety according to the off label use policy – PA.CP.PHAR.57 or evidence of coverage documents.

IV. Appendices

Appendix A: Abbreviation Key

ALT: alanine aminotransferase
APRI: AST to platelet ratio
AASLD: American Association for the Study of Liver Diseases
CTP: Child Turcotte Pugh
CrCl: creatinine clearance
FDA: Food and Drug Administration
FIB-4: Fibrosis-4 index
HBeAg: hepatitis B virus envelope antigen
HBV: hepatitis B virus

HIV-1: human immunodeficiency virus
HCC: hepatocellular carcinoma
HCV: hepatitis C virus
IDSA: Infectious Diseases Society of America
MRE: magnetic resonance elastography
NS3/4A, NS5A/B: nonstructural protein
Peg-IFN: pegylated interferon
PI: protease inhibitor
RBV: ribavirin
RNA: ribonucleic acid

Appendix C: Direct-Acting Antivirals for Treatment of HCV Infection

Brand Name	Drug Class				
	NS5A Inhibitor	Nucleotide Analog NS5B Polymerase Inhibitor	Non-Nucleoside NS5B Palm Polymerase Inhibitor	NS3/4A Protease Inhibitor (PI)**	CYP3A Inhibitor
Daklinza	Daclatasvir				
Epclusa*	Velpatasvir	Sofosbuvir			
Harvoni*	Ledipasvir	Sofosbuvir			
Olysio				Simeprevir	
Sovaldi		Sofosbuvir			
Technivie*	Ombitasvir			Paritaprevir	Ritonavir
Viekira XR/PAK*	Ombitasvir		Dasabuvir	Paritaprevir	Ritonavir
Zepatier*	Elbasvir			Grazoprevir	

*Combination drugs

**Additional PIs no longer recommended: Victrelis (boceprevir), Incivek (telaprevir)

Appendix D: Direct-Acting Antivirals for Treatment of HCV Infection

Brand Name	Drug Class				
	NS5A Inhibitor	Nucleotide Analog NS5B Polymerase Inhibitor	Non-Nucleotide NS5B Palm Polymerase Inhibitor	NS3/4A Protease Inhibitor (PI)	CYP3A Inhibitor
Daklinza	Daclatasvir				
Epclusa*	Velpatasvir	Sofosbuvir			
Harvoni*	Ledipasvir	Sofosbuvir			
Olysio				Simeprevir	
Sovaldi		Sofosbuvir			
Technivie*	Ombitasvir			Paritaprevir	Ritonavir
Viekira XR/PAK*	Ombitasvir		Dasabuvir	Paritaprevir	Ritonavir
Zepatier*	Elbasvir			Grazoprevir	

*Combination drugs

IV. Dosage and Administration

- a. **AASLD/IDSA treatment guidelines for chronic hepatitis C infection are updated at irregular intervals; refer to the most updated AASLD/IDSA guideline for most accurate treatment regimen.*

Indication	Dosing Regimen	Maximum Dose	Reference
Genotype 1 CHC: Treatment-naïve or treatment-experienced with peg-IFN/RBV patients without cirrhosis	Sovaldi 400 mg by mouth daily plus Olysio 150 mg by mouth daily for 12 weeks	Olysio: 150mg/day	1) FDA-approved labeling 2) AASLD-IDSA https://www.hcvguidelines.org/
Genotype 1 CHC: Treatment-naïve or treatment-experienced with peg-IFN/RBV patients with compensated cirrhosis:	Sovaldi 400 mg by mouth daily plus Olysio 150 mg by mouth daily with† or without weight-based RBV (1000 mg [<75 kg] to 1200 mg [>75 kg]) for 24 weeks	Olysio: 150mg/day	1) FDA-approved labeling 2) AASLD-IDSA https://www.hcvguidelines.org/
Genotype 1 CHC: Liver transplant patients including those with compensated cirrhosis	Sovaldi 400 mg by mouth daily plus Olysio 150 mg by mouth daily with or without weight-based RBV (1000 mg [<75 kg] to 1200 mg [>75 kg]) for 12 weeks	Olysio: 150mg/day	AASLD-IDSA https://www.hcvguidelines.org/

**AASLD/IDSA treatment guidelines for chronic hepatitis C infection are updated at irregular intervals; refer to the most updated AASLD/IDSA guideline for most accurate treatment regimen.*

**The use of Olysio in combination with peginterferon and ribavirin for the treatment of chronic HCV GT1 or 4 is no longer recommended by the AASLD/IDSA guidelines.*

V. Product Availability

Capsule: 150 mg

References

1. Olysio Prescribing Information. Titusville, NJ: Janssen Therapeutics.; May 2016. Available at <https://www.olytio.com/shared/product/olytio/prescribing-information.pdf>. Accessed May 11, 2017.
2. American Association for the Study of Liver Diseases/ Infectious Disease Society of America (AASLD-IDSA). Recommendations for testing, managing, and treating hepatitis C. <http://www.hcvguidelines.org>. Accessed May 11, 2017.
3. Bonder A, Afdhal N. Utilization of FibroScan in clinical practice. *Curr Gastroenterol Rep.* 2014; 16(372): 1-7. DOI 10.1007/s11894-014-0372-6.
4. Halfon P, Bourliere M, Deydier R, et al. Independent prospective multicenter validation of biochemical markers (Fibrotest–Actitest) for the prediction of liver fibrosis and activity in patients with chronic hepatitis C: The Fibropaca study. *Am J Gastroenterol.* 2006; 101: 547-555. DOI: 10.1111/j.1572-0241.2006.0411.x
5. Hepatitis C Virus (HCV) FibroSure. Laboratory Corporation of America Holdings and Lexi-Comp, Inc. Available at <https://www.labcorp.com>. 2016. Accessed July 15, 2016.
6. Hepatitis C Virus (HCV) FibroTest-ActiTest Panel. Nichols Institute/Quest Diagnostics. Available at http://education.questdiagnostics.com/physician_landing_page. 2016. Accessed July 15, 2016.
7. Hepatitis C Virus (HCV) FIBROSpect II. Prometheus Therapeutics and Diagnostics. Available at http://www.prometheuslabs.com/Resources/Fibrospect/Fibrospect_II_Product_Detail_Sheet_FIB16005_04-16.pdf. April 2016. Accessed July 15, 2016.
8. Hsieh YY, Tung SY, Lee K, et al. Routine blood tests to predict liver fibrosis in chronic hepatitis C. *World J Gastroenterol.* February 28, 2012; 18(8): 746-53. doi: 10.3748/wjg.v18.i8.746.
9. PegIntron Prescribing Information. Whitehouse Station, NJ: Merck Sharp and Dohme Corp.; February 2016. Available at https://www.merck.com/product/usa/pi_circulars/p/pegintron/pegintron_pi.pdf. Accessed July 25, 2016.

10. Terrault NA, Bzowej NH, Chang KM, et al. AASLD Guidelines for Treatment of Chronic Hepatitis B. *Hepatology* 2016; 62(1): 261-283.