Clinical Policy: Dasabuvir, Ombitasvir, Paritaprevir, Ritonavir (Viekira XR, Viekira Pak)

Reference Number: GA.PMN.12
Effective Date: 12/16
Last Review Date: 2/19
Line of Business: Medicaid

See Important Reminder at the end of this policy for important regulatory and legal information.

Description
Viekira XR and Viekira Pak include a hepatitis C virus nonnucleoside NS5B palm polymerase inhibitor (dasabuvir), a hepatitis C virus NS5A inhibitor (ombitasvir), a hepatitis C virus NS3/4A protease inhibitor (paritaprevir), and a CYP3A inhibitor (ritonavir) that inhibits CYP3A mediated metabolism of paritaprevir, thereby providing increased plasma concentration of paritaprevir.

FDA Approved Indication(s)
Viekira XR and Viekira Pak are indicated for the treatment of adult patients with chronic HCV:
- Genotype 1b infection without cirrhosis or with compensated cirrhosis;
- Genotype 1a infection without cirrhosis or with compensated cirrhosis for use in combination with ribavirin.

Policy/Criteria
It is the policy of health plans affiliated with Centene Corporation® that Viekira XR/Viekira Pak is medically necessary when the following criteria are met:

I. 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. Diagnosis of chronic hepatitis C virus (HCV) infection as evidenced by detectable HCV ribonucleic acid (RNA) levels over a six-month period;
      2. Age ≥ 18 years;
      3. Confirmed HCV genotype is 1;
         *Chart note documentation and copies of labs results are required
      4. Documentation of the treatment status of the patient (treatment-naïve or treatment-experienced);
      5. Documentation of cirrhosis status of the patient (no cirrhosis, compensated cirrhosis, or decompensated cirrhosis);
      6. Failure of Mavyret®, unless contraindicated or clinically significant adverse effects are experienced.
7. At the time of request, member has none of the following contraindications to Mavyret (a or b):
   a. Decompensated cirrhosis (Child-Pugh B or C) confirmed by lab findings and clinical notes;
   b. Co-administration with efavirenz or atazanavir;
      *See Appendix F for additional details on acceptable contraindications
8. Life expectancy ≥ 12 months with HCV treatment;
9. Prescribed regimen is consistent with an FDA or AASLD-IDSA recommended regimen (see Appendix D and E for reference);
10. Member is hepatitis B virus (HBV) negative, or if positive, documentation that concurrent HBV infection is being treated (e.g., tenofovir alafenamide, adefovir, entecavir), unless contraindicated or clinically significant adverse effects are experienced (see Appendix F);
11. If HCV/human immunodeficiency virus (HIV)-1 co-infection, member is or will be on a suppressive antiretroviral drug regimen to reduce the risk of HIV-1 protease inhibitor drug resistance;
12. Dose does not exceed:
   a. For Viekira Pak: ombitasvir/paritaprevir/ritonavir 25 mg/150 mg/100 mg (2 tablets) once daily and dasabuvir 500 mg (1 tablet) twice daily;
   b. For Viekira XR: dasabuvir/ombitasvir/paritaprevir/ritonavir 600 mg/24.99 mg/150mg/99.99 mg (3 tablets) per day.
13. Member has none of the following contraindications:
   a. Moderate to severe hepatic impairment (Child-Pugh B and C);
   b. Hypersensitivity to ritonavir (e.g., toxic epidermal necrolysis [TEN] or Stevens-Johnson syndrome);
   c. Co-administration with drugs that are highly dependent on cytochrome P450 (CYP) 3A for clearance, moderate or strong inducers of CYP3A, strong inducers of CYP2C8, and drugs that are strong inhibitors of CYP2C8 gation as follows: alfuzosin HCL, ranolazine, dronedarone, carbamazepine, phenytoin, phenobarbital, colchicine, gemfibrozil, rifampin, lurasidone, pimozide, ergotamine, dihydroergotamine, methylergonovine, ethinyl estradiol-containing medications such as combined oral contraceptives, cisapride, St. John’s Wort, lovastatin, simvastatin, efavirenz, sildenafil when dosed as Revatio for pulmonary arterial hypertension; triazolam, orally administered midazolam;
   d. If prescribed with ribavirin, member has none of the following contraindications:
      i. Pregnancy or possibility of pregnancy - member or partner;
      ii. Hypersensitivity to ribavirin;
      iii. Coadministration with didanosine;
      iv. Significant/unstable cardiac disease;
      v. Hemoglobinopathy (e.g., thalassemia major, sickle cell anemia);
      vi. Hemoglobin < 8.5 g/dL.

**Approval duration: up to a total of 24 weeks**

(*Approved duration should be consistent with a regimen in Appendix D or E*)
B. Other diagnoses/indications: Refer to CP.PHAR.53 – No Coverage Criteria/Off-Label Use Policy if diagnosis is NOT listed in section I.

II. Appendices/General Information

Appendix A: Abbreviation/Acronym Key

- AASLD: American Association for the Study of Liver Diseases
- APRI: AST to platelet ratio
- CTP: Child Turcotte Pugh
- CrCl: creatinine clearance
- FDA: Food and Drug Administration
- FIB-4: Fibrosis-4 index
- 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 B: Therapeutic Alternatives

This table provides a listing of preferred alternative therapy recommended in the approval criteria. The drugs listed here may not be a formulary agent for all relevant lines of business and may require prior authorization.

<table>
<thead>
<tr>
<th>Drug Name</th>
<th>Dosing Regimen</th>
<th>Dose Limit/Maximum Dose</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mavyret™ (glecaprevir/pibrentasvir)</td>
<td>Treatment-naïve chronic HCV infection: <strong>Genotypes 1, 2, 3, 4, 5, or 6</strong></td>
<td>Mavyret: glecaprevir 300mg/pibrentasvir 120mg (3 tablets) per day</td>
</tr>
<tr>
<td></td>
<td>Without cirrhosis: Three tablets PO QD for 8 weeks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With compensated cirrhosis: Three tablets PO QD for 12 weeks</td>
<td></td>
</tr>
<tr>
<td>Mavyret™ (glecaprevir/pibrentasvir)</td>
<td>Treatment-experienced with IFN/pegIFN+RBV+/- sofosbuvir chronic HCV infection: <strong>Genotypes 1, 2, 4, 5, or 6</strong></td>
<td>Mavyret: glecaprevir 300mg/pibrentasvir 120mg (3 tablets) per day</td>
</tr>
<tr>
<td></td>
<td>Without cirrhosis: Three tablets PO QD for 8 weeks</td>
<td></td>
</tr>
<tr>
<td></td>
<td>With compensated cirrhosis: Three tablets PO QD for 12 weeks</td>
<td></td>
</tr>
<tr>
<td>Mavyret™ (glecaprevir/pibrentasvir)</td>
<td>Treatment-experienced with IFN/pegIFN+RBV+/- sofosbuvir chronic HCV infection: <strong>Genotypes 3</strong></td>
<td>Mavyret: glecaprevir 300mg/pibrentasvir 120mg (3 tablets) per day</td>
</tr>
<tr>
<td>Drug Name</td>
<td>Dosing Regimen</td>
<td>Dose Limit/Maximum Dose</td>
</tr>
<tr>
<td>---------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------</td>
</tr>
</tbody>
</table>
| Mavyret™ (glecaprevir/pibrentasvir) | Treatment-experienced with NS5A inhibitor without prior NS3/4A protease inhibitor chronic HCV infection:  
**Genotype 1**  
Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 16 weeks | Mavyret: glecaprevir 300mg/pibrentasvir 120mg (3 tablets) per day |
| Mavyret™ (glecaprevir/pibrentasvir) | Treatment-experienced with NS3/4A protease inhibitor without prior NS5A inhibitor chronic HCV infection:  
**Genotype 1**  
Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 12 weeks | Mavyret: glecaprevir 300mg/pibrentasvir 120mg (3 tablets) per day |

*Therapeutic alternatives are listed as Brand Name® (generic) when the drug is available by brand name only and generic (Brand name®) when the drug is available by both brand and generic.*

**Appendix C: Contraindications**

Viekira XR and Viekira Pak are contraindicated in:

- Patients with moderate to severe hepatic impairment (Child-Pugh B and C) due to risk of potential toxicity
- If Viekira XR or Viekira is administered with RBV, the contraindications to RBV also apply to this combination regimen. Refer to the RBV prescribing information for a list of contraindications for RBV.
- Co-administration with:
  - Drugs that are highly dependent on CYP3A for clearance and for which elevated plasma concentrations are associated with serious and/or life-threatening events
  - Drugs that are moderate or strong inducers of CYP3A and strong inducers of CYP2C8 and may lead to reduced efficacy of Viekira XR and Viekira Pak
  - Drugs that are strong inhibitors of CYP2C8 and may increase dasabuvir plasma concentrations and the risk of QT prolongation
### Appendix D: Approximate Scoring Equivalencies using META VIR F3/F4 as Reference

<table>
<thead>
<tr>
<th>Fibrosis/ Cirrhosis</th>
<th>Serologic Tests*</th>
<th>Radiologic Tests†</th>
<th>Liver Biopsy‡</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fibro Test</td>
<td>FIBRO Spect II</td>
<td>APRI</td>
</tr>
<tr>
<td>Advanced fibrosis</td>
<td>≥0.59</td>
<td>≥42</td>
<td>&gt;1.5</td>
</tr>
<tr>
<td>Cirrhosis</td>
<td>≥0.75</td>
<td>≥42</td>
<td>&gt;1.5</td>
</tr>
</tbody>
</table>

*Serologic tests:
- FibroTest (available through Quest as FibroTest or LabCorp as FibroSure)
- FIBROspectrum II (available through Prometheus Laboratory)
- APRI (AST to platelet ratio index)
- FIB-4 (Fibrosis-4 index: includes age, AST level, platelet count)

†Radiologic tests:
- FibroScan (ultrasound-based elastography)
- MRE (magnetic resonance elastography)

‡Liver biopsy (histologic scoring systems):
- META VIR F3/F4 is equivalent to Knodell, Scheuer, and Batts-Ludwig F3/F4 and Ishak F4-5/F5-6
- META VIR fibrosis stages: F0 = no fibrosis; F1 = portal fibrosis without septa; F2 = few septa; F3 = numerous septa without cirrhosis; F4 = cirrhosis

### Appendix E: Direct-Acting Antivirals for Treatment of HCV Infection

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>Drug Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NS5A</td>
</tr>
<tr>
<td>Daklinza</td>
<td>Daclatasvir</td>
</tr>
<tr>
<td>Epclusa*</td>
<td>Velpatasvir Sofosbuvir</td>
</tr>
<tr>
<td>Harvoni*</td>
<td>Ledipasvir Sofosbuvir</td>
</tr>
<tr>
<td>Olysio</td>
<td></td>
</tr>
<tr>
<td>Sovaldi</td>
<td>Sofosbuvir</td>
</tr>
<tr>
<td>Technivic*</td>
<td>Ombitasvir Paritaprevir Ritonavir</td>
</tr>
<tr>
<td>Viekira XR/PAK*</td>
<td>Ombitasvir Dasabuvir Paritaprevir Ritonavir</td>
</tr>
<tr>
<td>Zepatier*</td>
<td>Elbasvir Grazoprevir</td>
</tr>
</tbody>
</table>

*Combination drugs
Appendix F: General Information

- Hepatitis B Virus (HBV) Reactivation is a black box warning for all direct-acting antiviral drugs for the treatment of HCV. HBV reactivation has been reported when treating HCV for patients co-infected with HBV, leading to fulminant hepatitis, hepatic failure, and death, in some cases. Patients should be monitored for HBV reactivation and hepatitis flare during HCV treatment and post-treatment follow-up, with treatment of HBV infection as clinically indicated.

- Acceptable medical justification for inability to use Mavyret (preferred product):
  - Severe hepatic disease (Child-Pugh C): use of Mavyret is not recommended due to higher exposures of glecaprevir and pibrentasvir.
  - Moderate hepatic disease (Child-Pugh B): although not an absolute contraindication, use of Mavyret is not recommended in patient with moderate hepatic disease (Child-Pugh B) due to lack of safety and efficacy data.
    - Following administration of Mavyret in HCV infected subjects with compensated cirrhosis (Child-Pugh A), exposure of glecaprevir was approximately 2-fold and pibrentasvir exposure was similar to non-cirrhotic HCV infected subjects.
    - At the clinical dose, compared to non-HCV infected subjects with normal hepatic function, glecaprevir AUC was 100% higher in Child-Pugh B subjects, and increased to 11-fold in Child-Pugh C subjects. Pibrentasvir AUC was 26% higher in Child-Pugh B subjects, and 114% higher in Child-Pugh C subjects.
  - Drug-drug interactions with one or more of the following agents:
    - Atazanavir
    - Efavirenz

- Unacceptable medical justification for inability to use Mavyret (preferred product):
  - Black Box warning (BBW): currently or previously infected with hepatitis B virus. This BBW is not unique to Mavyret, and it applies across the entire therapeutic class of direct-acting antivirals for treatment of HCV infection. Therefore it is not a valid clinical reason not to use Mavyret.
  - Concurrent anticoagulant therapy: Fluctuations in International Normalized Ration (INR) have been observed in warfarin recipients who were also receiving treatment for HCV infections. This BBW is not unique to Mavyret, and it applies across the entire therapeutic class of direct-acting antivirals for treatment of HCV infection.
  - Drug-drug interactions with one or more of the following agents:
    - Rifampin, carbamazepine, or St. John’s wort:
      - These drug-drug interactions are not unique to Mavyret, and they apply across the entire therapeutic class of direct-acting antivirals for the treatment of HCV infection.
III. Dosage and Administration

<table>
<thead>
<tr>
<th>Indication</th>
<th>Dosing Regimen</th>
<th>Maximum Dose</th>
<th>Reference</th>
</tr>
</thead>
<tbody>
<tr>
<td>Genotype 1a: Treatment-naive or treatment-experienced with pegIFN/RBV without cirrhosis</td>
<td>Viekira Pak/XR plus weight-based RBV for 12 weeks</td>
<td>Viekira Pak: paritaprevir 150 mg/ritonavir 100 mg/ombitasvir 25 mg per day; dasabuvir 500 mg per day Viekira XR: paritaprevir 150 mg/ritonavir 100 mg/ombitasvir 25 mg/dasabuvir 600 mg per day</td>
<td>1) FDA-approved labeling 2) AASLD-IDSA (updated September 2017)</td>
</tr>
<tr>
<td>Genotype 1b: Treatment-naïve or treatment-experienced with pegIFN/RBV with or without compensated cirrhosis</td>
<td>Viekira Pak/XR for 12 weeks</td>
<td>1) FDA-approved labeling 2) AASLD-IDSA (updated September 2017)</td>
<td></td>
</tr>
</tbody>
</table>

* 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 AASLD/IDSA HCV guidance updated September 2017 no longer recommends use of Viekira Pak/XR for the treatment of genotype 1a with compensated cirrhosis.

IV. Product Availability

<table>
<thead>
<tr>
<th>Drug</th>
<th>Availability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Paritaprevir/ritonavir/ombitasvir/dasabuvir (Viekira Pak)</td>
<td>Tablets: paritaprevir 75 mg, ritonavir 50 mg, ombitasvir 12.5 mg Tablets: dasabuvir 250 mg *Viekira Pak is dispensed in a monthly carton for a total of 28 days of therapy. Each monthly carton contains four weekly cartons. Each weekly carton contains seven daily dose packs.</td>
</tr>
<tr>
<td>Paritaprevir/ritonavir/ombitasvir/dasabuvir (Viekira XR)</td>
<td>Extended-release tablets: dasabuvir 200 mg, ombitasvir 8.33 mg, paritaprevir 50 mg, ritonavir 33.33 mg *Viekira XR is dispensed in a monthly carton for a total of 28 days of therapy. Each monthly carton contains four weekly cartons. Each weekly carton contains seven daily dose packs.</td>
</tr>
</tbody>
</table>
V. References
### Reviews, Revisions, and Approvals

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>New policy created, split from CP.PHAR.17 Hepatitis C Therapies. HCV RNA levels over six-month period added to confirm infection is chronic. Life expectancy “≥12 months if HCC and awaiting transplant” is modified to indicate “≥12 months with HCV therapy.” Testing criteria reorganized by “no cirrhosis”/”cirrhosis;” HCC population is included under “cirrhosis” and broadened to incorporate HCC amenable to curative measures (resection, ablation, transplant). Methods to diagnose fibrosis/cirrhosis are modified to require presence of HCC, liver biopsy or a combination of one serologic and one radiologic test. Serologic and radiologic tests are updated and correlated with METAVIR per Appendix B. Removed creatinine clearance restriction. Dosing regimens are presented in Appendix D and E per AASLD guidelines and FDA-approved indications. The initial approval period is shortened to 8 weeks.</td>
<td>08/16</td>
<td>09/16</td>
</tr>
<tr>
<td>Removed criteria regarding medication prescribed by a specialist</td>
<td>10/16</td>
<td>10/16</td>
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<tr>
<td>Remove criteria regarding having HCC or advanced liver disease</td>
<td></td>
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<tr>
<td>Removed criteria regarding medication adherence program</td>
<td></td>
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<tr>
<td>Removed criteria regarding sobriety from alcohol/illicit drugs</td>
<td></td>
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<tr>
<td>Added availability of full course of therapy as initial therapy consistent with appendix recommendation for initial criteria</td>
<td>4/17</td>
<td></td>
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<tr>
<td>Removed continuation criteria</td>
<td></td>
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</tr>
<tr>
<td>Added preferring information requiring Mavyret for FDA-approved indications. Exception made to require Hep B screening for all patients prior to treatment. Added do not exceed dosing restrictions</td>
<td>9/17</td>
<td></td>
</tr>
<tr>
<td>Annual review. No changes made.</td>
<td>3/18</td>
<td></td>
</tr>
<tr>
<td>Changed current Georgia policy templates to corporate standard templates for drug coverage criteria to meet corporate compliance. Changes/revisions included; new formatting, font size, use of standard policy language for each section of policy, and rearranged order of certain steps in criteria and sections. Added new preferred treatment tables that includes dosage and frequency based on genotype for Mavyret. Removed background sections. Updated general information and contraindication section to be consistent with corporate HCV policies.</td>
<td>2/21/19</td>
<td></td>
</tr>
</tbody>
</table>

### Important Reminder

This clinical policy has been developed by appropriately experienced and licensed health care professionals based on a review and consideration of currently available generally accepted standards of medical practice; peer-reviewed medical literature; government agency/program approval status; evidence-based guidelines and positions of leading national health professional organizations; views of physicians practicing in relevant clinical areas affected by this clinical policy; and other available clinical information. The Health Plan makes no representations and accepts no liability with respect to the content of any external information used or relied upon in developing this clinical policy. This clinical policy is consistent with standards of medical practice current at the time that this clinical policy was approved. “Health Plan” means a health plan that has adopted this clinical policy and that is operated or...
administered, in whole or in part, by Centene Management Company, LLC, or any of such health plan’s affiliates, as applicable.

The purpose of this clinical policy is to provide a guide to medical necessity, which is a component of the guidelines used to assist in making coverage decisions and administering benefits. It does not constitute a contract or guarantee regarding payment or results. Coverage decisions and the administration of benefits are subject to all terms, conditions, exclusions and limitations of the coverage documents (e.g., evidence of coverage, certificate of coverage, policy, contract of insurance, etc.), as well as to state and federal requirements and applicable Health Plan-level administrative policies and procedures.

This clinical policy is effective as of the date determined by the Health Plan. The date of posting may not be the effective date of this clinical policy. This clinical policy may be subject to applicable legal and regulatory requirements relating to provider notification. If there is a discrepancy between the effective date of this clinical policy and any applicable legal or regulatory requirement, the requirements of law and regulation shall govern. The Health Plan retains the right to change, amend or withdraw this clinical policy, and additional clinical policies may be developed and adopted as needed, at any time.

This clinical policy does not constitute medical advice, medical treatment or medical care. It is not intended to dictate to providers how to practice medicine. Providers are expected to exercise professional medical judgment in providing the most appropriate care, and are solely responsible for the medical advice and treatment of members. This clinical policy is not intended to recommend treatment for members. Members should consult with their treating physician in connection with diagnosis and treatment decisions.

Providers referred to in this clinical policy are independent contractors who exercise independent judgment and over whom the Health Plan has no control or right of control. Providers are not agents or employees of the Health Plan.

This clinical policy is the property of the Health Plan. Unauthorized copying, use, and distribution of this clinical policy or any information contained herein are strictly prohibited. Providers, members and their representatives are bound to the terms and conditions expressed herein through the terms of their contracts. Where no such contract exists, providers, members and their representatives agree to be bound by such terms and conditions by providing services to members and/or submitting claims for payment for such services.

**Note: For Medicaid members**, when state Medicaid coverage provisions conflict with the coverage provisions in this clinical policy, state Medicaid coverage provisions take precedence. Please refer to the state Medicaid manual for any coverage provisions pertaining to this clinical policy.