Clinical Policy: Ombitasvir/Paritaprevir/Ritonavir (Technivie)
Reference Number: CP.PHAR.276
Effective Date: 09.16
Last Review Date: 08.19
Line of Business: Medicaid

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

Description
Ombitasvir/paritaprevir/ritonavir (Technivie™) is a combination fixed-dose oral tablet formulation consisting of an NS5A inhibitor (ombitasvir), NS3/4A protease inhibitor (paritaprevir), and CYP3A inhibitor (ritonavir).

FDA Approved Indication(s)
Technivie is indicated in combination with ribavirin (RBV) for the treatment of patients with genotype 4 chronic hepatitis C virus (HCV) infection without cirrhosis or with compensated cirrhosis.

Policy/Criteria
Provider must submit documentation (such as office chart notes, lab results or other clinical information) supporting that member has met all approval criteria.

It is the policy of health plans affiliated with Centene Corporation® that Technivie is medically necessary when the following criteria are met:

I. Initial Approval Criteria
   A. Chronic Hepatitis C Infection (must meet all):
      1. Diagnosis of chronic HCV infection as evidenced by detectable serum HCV RNA levels by quantitative assay in the last 6 months;
      2. Confirmed HCV genotype is 4;
         *Chart note documentation and copies of lab results are required
      3. If cirrhosis is present, confirmation of Child-Pugh A status;
      4. Prescribed by or in consultation with a gastroenterologist, hepatologist, or infectious disease specialist;
      5. Age ≥ 18 years;
      6. Prescribed in combination with RBV;
      7. Member is contraindicated to treatment with Mavyret™ due to current treatment with efavirenz or atazanavir;
         *See Appendix E for additional details on acceptable contraindications
      8. Life expectancy ≥ 12 months with HCV treatment;
      9. Member agrees to participate in a medication adherence program including both of the following components (a and b):
         a. Medication adherence monitored by pharmacy claims data or member report;
         b. Member’s risk for non-adherence identified by adherence program or member/prescribing physician follow-up at least every 4 weeks;
10. Prescribed regimen is consistent with an FDA or AASLD-IDSA recommended regimen (see Section V Dosage and Administration for reference);
11. Dose does not exceed ombitasvir/paritaprevir/ritonavir 25 mg/150 mg/100 mg (2 tablets) per day.

Approval duration: 12 weeks*
(*Approved duration should be consistent with a regimen in Section V Dosage and Administration)

B. Other diagnoses/indications
1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.PMN.53 for Medicaid.

II. Continued Therapy
A. Chronic Hepatitis C Infection (must meet all):
1. Member meets one of the following (a or b):
   a. Currently receiving medication via Centene benefit or member has previously met initial approval criteria;
   b. Both of the following (i and ii):
      i. Documentation supports that member is currently receiving Technivie for chronic HCV infection and has recently completed at least 60 days of treatment with Technivie;
      ii. Confirmed HCV genotype is 4;
2. Member is responding positively to therapy;
3. Dose does not exceed ombitasvir/paritaprevir/ritonavir 25 mg/150 mg/100 mg (2 tablets) per day.

Approval duration: up to a total of 12 weeks*
(*Approved duration should be consistent with a regimen in Section V Dosage and Administration)

B. Other diagnoses/indications
1. Refer to the off-label use policy for the relevant line of business if diagnosis is NOT specifically listed under section III (Diagnoses/Indications for which coverage is NOT authorized): CP.PMN.53 for Medicaid.

III. Diagnoses/Indications for which coverage is NOT authorized:
A. 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 policies – CP.PMN.53 for Medicaid or evidence of coverage documents.
B. Patients who have failed to respond to previous protease inhibitor (Olysio, Victrelis, Viekira Pak) based therapy;
C. Patients with decompensated cirrhosis (Child-Pugh Class B or C).

IV. Appendices/General Information
Appendix A: Abbreviation/Acronym Key

- AASLD: American Association for the Study of Liver Diseases
- FDA: Food and Drug Administration
- HBV: hepatitis B virus
- HCC: hepatocellular carcinoma
- HCV: hepatitis C virus
- HIV: human immunodeficiency virus
### 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>Genotype 4</strong> Without cirrhosis: Three tablets PO QD for 8 weeks With compensated cirrhosis: Three tablets PO QD for 12 weeks</td>
<td>Mavyret: glecaprevir 300 mg/pibrentasvir 120 mg (3 tablets) per day</td>
</tr>
<tr>
<td></td>
<td>Treatment-experienced with IFN/pegIFN + RBV +/- sofosbuvir chronic HCV infection: <strong>Genotype 4</strong> Without cirrhosis: Three tablets PO QD for 8 weeks With compensated cirrhosis: Three tablets PO QD for 12 weeks</td>
<td>Mavyret: glecaprevir 300 mg/pibrentasvir 120 mg (3 tablets) per day</td>
</tr>
</tbody>
</table>

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/Boxed Warnings

- **Contraindication(s):**
  - In patients with moderate to severe hepatic impairment (Child-Pugh B and C) due to risk of potential toxicity
  - 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.
  - With drugs that are moderate or strong inducers of CYP3A and may lead to reduced efficacy of Technivie.
  - In patients with known hypersensitivity to ritonavir (e.g., toxic epidermal necrolysis (TEN) or Stevens-Johnson syndrome)
  - The contraindications to RBV also apply to this combination regimen. Refer to the RBV prescribing information for a list of contraindications for RBV.

- **Boxed warning(s):** risk of hepatitis B virus reactivation in patients coinfected with HCV and HBV
## Appendix D: Direct-Acting Antivirals for Treatment of HCV Infection

<table>
<thead>
<tr>
<th>Brand Name</th>
<th>NS5A Inhibitor</th>
<th>Nucleotide Analog NS5B Polymerase Inhibitor</th>
<th>Non-Nucleoside NS5B Palm Polymerase Inhibitor</th>
<th>NS3/4A Protease Inhibitor (PI)</th>
<th>CYP3A Inhibitor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Daklinza</td>
<td>Daclatasvir</td>
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<tr>
<td>Epclusa*</td>
<td>Velpatasvir</td>
<td>Sofosbuvir</td>
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<tr>
<td>Harvoni*</td>
<td>Ledipasvir</td>
<td>Sofosbuvir</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mavyret*</td>
<td>Pibrentasvir</td>
<td></td>
<td></td>
<td>Gilecaprevir</td>
<td></td>
</tr>
<tr>
<td>Olysio</td>
<td></td>
<td></td>
<td></td>
<td>Simeprevir</td>
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<tr>
<td>Sovaldi</td>
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<tr>
<td>Technivie*</td>
<td>Ombitasvir</td>
<td></td>
<td>Paritaprevir</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Viekira XR/PAK*</td>
<td>Ombitasvir</td>
<td>Dasabuvir</td>
<td>Paritaprevir</td>
<td></td>
<td></td>
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<tr>
<td>Vosevi*</td>
<td>Velpatasvir</td>
<td>Sofosbuvir</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Zepatier*</td>
<td>Elbasvir</td>
<td></td>
<td></td>
<td>Grazoprevir</td>
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</tr>
</tbody>
</table>

*Combination drugs

## Appendix E: General Information

- Hepatitis B Virus Reactivation (HBV) 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.
- For patients with HCV/HIV-1 (human immunodeficiency virus type-1) co-infection, the patient should be on a suppressive antiretroviral drug regimen to reduce the risk of HIV-1 protease inhibitor drug resistance.
- 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 patients 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 the following agents:
• Atazanavir
• Efavirenz

- Unacceptable medical justification for inability to use Mavyret (preferred product):
  o 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.
  o Concurrent anticoagulant therapy: Fluctuations in International Normalized Ratio (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. Although caution is advised when using Mavyret while receiving concurrent anticoagulant therapy, specifically warfarin, this is not an absolute contraindication as long as patient is adequately monitored and educated during therapy.
  o 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 treatment of HCV infection.

V. 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 4: Treatment-naive or treatment-experienced with pegIFN/RBV with or without compensated cirrhosis</td>
<td>Technivie 2 tablets PO qAM plus weight-based RBV for 12 weeks</td>
<td>Two tablets (paritaprevir 150 mg, ritonavir 100 mg, ombitasvir 25 mg) per day</td>
<td>1) FDA-approved labeling 2) AASLD-IDSA (updated May 2018)</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.

VI. Product Availability
Tablet: paritaprevir 75 mg, ritonavir 50 mg, ombitasvir 12.5 mg

VII. References

<table>
<thead>
<tr>
<th>Reviews, Revisions, and Approvals</th>
<th>Date</th>
<th>P&amp;T Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>New policy created, split from CP.PHAR.17 Hep C Therapies. HCV RNA levels over six-month period</td>
<td>08.16</td>
<td>09.16</td>
</tr>
<tr>
<td>added to confirm infection is chronic. Life expectancy “≥12 months if HCC and awaiting transplant”</td>
<td></td>
<td></td>
</tr>
<tr>
<td>is modified to indicate “≥12 months with HCV therapy.” Testing criteria reorganized by “no cirrhosis”/“cirrhosis” consistent with the regimen tables; 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. Criteria added excluding post-liver transplantation unless regimens specifically designate. Dosing regimens are presented in Appendix D and E per AASLD guidelines and FDA-approved indications. The initial approval is shortened to 8 weeks.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial revision to add new FDA labeled indication: HCV genotype 4 infection with compensated cirrhosis (Appendix D). Policy converted to new template. Max dose added to criteria. Approval duration lengthened to 12 weeks; renewal criteria deleted. Added “+RBV” to the treatment-naïve regimen per AASLD-IDSA guidelines (Appendix E). PI updated. Added renewal criteria.</td>
<td>04.17</td>
<td>09.17</td>
</tr>
<tr>
<td>Added requirement for prevention of HBV reactivation. Deleted total in initial approval duration for consistency; consolidated appendix D and E into dosing and administration in section V; deleted adherence requirement in continued therapy, added documentation of positive response to therapy and continuity of care, and removed CIs in section II, added reference column in section V. Added preferencing information requiring Mavyret for FDA-approved indications. Safety criteria was applied according to the safety guidance discussed at CPAC and endorsed by Centene Medical Affairs. Exception made to require Hep B screening for all patients prior to treatment to ensure that proper risk reduction measures are taken.</td>
<td>08.17</td>
<td>09.17</td>
</tr>
<tr>
<td>3Q 2018 annual review: removed requirement for HBV verification; removed requirement to check for ART for HCV/HIV co-infection; added prescribed in combination with RBV; expanded duration of tx required for COC from 30 days to three quarters of the full regimen;</td>
<td>05.22.18</td>
<td>08.18</td>
</tr>
<tr>
<td>Reviews, Revisions, and Approvals</td>
<td>Date</td>
<td>P&amp;T Approval Date</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------------</td>
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<td>-------------------</td>
</tr>
<tr>
<td>required verification of genotype for COC; removed conditional requirement for RBV CI; references reviewed and updated.</td>
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</tr>
<tr>
<td>Removed advanced liver disease requirement to align with 2018 AASLD/IDSA hepatitis C treatment guidelines.</td>
<td>04.18.19</td>
<td>05.19</td>
</tr>
<tr>
<td>3Q 2019 annual review: removed documented sobriety from alcohol and illicit IV drugs for ≥ 6 months prior to starting therapy; references reviewed and updated.</td>
<td>06.26.19</td>
<td>08.19</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.

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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.

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