Clinical Policy: Glecaprevir/Pibrentasvir (Mavyret)

Description
Glecaprevir and pibrentasvir (Mavyret™) are a fixed-dose combination of glecaprevir, a hepatitis C virus (HCV) NS3/4A protease inhibitor, and pibrentasvir, an HCV NS5A inhibitor.

FDA Approved Indication(s)
Mavyret is indicated for the treatment of:

- Adult and pediatric patients 12 years and older or weighing at least 45 kg with chronic HCV genotype 1, 2, 3, 4, 5, or 6 infection*** without cirrhosis or with compensated cirrhosis (Child-Pugh A)
- Adult and pediatric patients 12 years and older or weighing at least 45 kg with HCV genotype 1 infection, who previously have been treated with a regimen containing an HCV NS5A inhibitor* or an NS3/4A protease inhibitor**, but not both

* In clinical trials, prior NS5A inhibitor experience included ledipasvir and sofosbuvir or daclatasvir with pegylated interferon and ribavirin.
** In clinical trials, prior NS3/4A protease inhibitor experience included regimens containing simprevir and sofosbuvir, or simprevir, boceprevir, or telaprevir with pegylated interferon and ribavirin.
*** In clinical trials, prior treatment experience included regimens containing interferon, pegylated interferon, ribavirin, and/or sofosbuvir, but no prior treatment experience with an HCV NS3/4A protease inhibitor or NS5A inhibitor.

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 Mavyret 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 one of the following (a, b, or c);
         a. For treatment-naïve patients: genotypes 1, 2, 3, 4, 5, or 6;
         b. For patients treatment-experienced with interferon (IFN)/pegylated-interferon (pegIFN), ribavirin (RBV), and/or sofosbuvir only: genotypes 1, 2, 3, 4, 5, or 6;
         c. For patients treatment-experienced with either an NS5A inhibitor or an NS3/4A protease inhibitor: genotype 1 (see Appendix E);

*Chart note documentation and copies of lab results are required
3. Prescribed by or in consultation with a gastroenterologist, hepatologist, infectious disease specialist, or provider who has expertise in treating HCV based on a certified training program (see Appendix F);
4. Age ≥ 12 years or weight ≥ 45 kg;
5. If cirrhosis is present, confirmation of Child-Pugh A status;
6. Member is not treatment-experienced with both NS3/4A protease inhibitor AND NS5A inhibitors, such as combination therapies including Technivie, Viekira, and Zepatier;
7. Life expectancy ≥ 12 months with HCV treatment;
8. Member agrees to participate in a medication adherence program meeting 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;
9. Prescribed regimen is consistent with an FDA or AASLD-IDSA recommended regimen (see Section V Dosage and Administration for reference);
10. Dose does not exceed glecaprevir 300 mg and pibrentasvir 120 mg (3 tablets) per day.

**Approval duration: up to a total of 16 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.CPA.09 for commercial and HIM.PHAR.21 for health insurance marketplace.

**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. Must meet both of the following (i and ii):
      i. Documentation supports that member is currently receiving Mavyret for chronic HCV infection and has recently completed at least 40 days of treatment with Mavyret;
      ii. Confirmed HCV genotype is one of the following (1, 2, or 3):
         1) For treatment-naïve members: genotypes 1, 2, 3, 4, 5, or 6;
         2) For members treatment-experienced with interferon (IFN)/pegylated-interferon (pegIFN), ribavirin (RBV), and/or sofosbuvir only: genotypes 1, 2, 3, 4, 5, or 6;
         3) For members treatment-experienced with either an NS5A inhibitor or an NS3/4A protease inhibitor: genotype 1 (see Appendix E);
2. Member is responding positively to therapy;
3. Dose does not exceed glecaprevir 300 mg and pibrentasvir 120 mg (3 tablets) per day.

**Approval duration: up to a total of 16 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.CPA.09 for commercial and HIM.PHAR.21 for health insurance marketplace.

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 policy – CP.CPA.09 for commercial and HIM.PHAR.21 for health insurance marketplace or evidence of coverage documents;

B. Treatment-experienced patients with both NS3/4A protease inhibitor AND NS5A inhibitor, such as combination therapies including: Technivie, Viekira, and Zepatier.

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
HCV: hepatitis C virus
HIV: human immunodeficiency virus
IDSA: Infectious Diseases Society of America
NS3/4A, NS5A/B: nonstructural protein
PegIFN: pegylated interferon
RBV: ribavirin
RNA: ribonucleic acid

Appendix B: Therapeutic Alternatives

Not applicable

Appendix C: Contraindications/Boxed Warnings

- Contraindication(s):
  - Patients with moderate or severe hepatic impairment (Child-Pugh C)
  - Co-administration with atazanavir or rifampin

- 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>Drug Class</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>NS5A Inhibitor</td>
</tr>
<tr>
<td>Daklinza</td>
<td>Daclatasvir</td>
</tr>
<tr>
<td>Epclusa*</td>
<td>Velpatasvir</td>
</tr>
<tr>
<td>Harvoni*</td>
<td>Ledipasvir</td>
</tr>
<tr>
<td>Mavyret*</td>
<td>Pibrentasvir</td>
</tr>
<tr>
<td>Olysio</td>
<td>Sofosbuvir</td>
</tr>
<tr>
<td>Sovaldi</td>
<td>Sofosbuvir</td>
</tr>
</tbody>
</table>
### Clinical Policy

**Glecaprevir/Pibrentasvir**

<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>Technivie*</td>
<td>Ombitasvir</td>
<td></td>
<td></td>
<td>Paritaprevir</td>
<td>Ritonavir</td>
</tr>
<tr>
<td>Viekira XR/PAK*</td>
<td>Ombitasvir</td>
<td></td>
<td>Dasabuvir</td>
<td>Paritaprevir</td>
<td>Ritonavir</td>
</tr>
<tr>
<td>Vosevi*</td>
<td>Velpatasvir</td>
<td></td>
<td>Sofosbuvir</td>
<td></td>
<td>Voxilaprevir</td>
</tr>
<tr>
<td>Zepatier*</td>
<td>Elbasvir</td>
<td></td>
<td></td>
<td></td>
<td>Grazoprevir</td>
</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.

- Due to higher rates of virologic failure and treatment-emergent drug resistance, the data do not support labeling for treatment of HCV genotype 1 infected patients who are both NS3/4A PI and NS5A inhibitor-experienced.

- **Child-Pugh Score:**

<table>
<thead>
<tr>
<th>1 Point</th>
<th>2 Points</th>
<th>3 Points</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bilirubin</td>
<td>Less than 2 mg/dL</td>
<td>2-3 mg/dL</td>
</tr>
<tr>
<td></td>
<td>Less than 34 umol/L</td>
<td>34-50 umol/L</td>
</tr>
<tr>
<td>Albumin</td>
<td>Over 3.5 g/dL</td>
<td>2.8-3.5 g/dL</td>
</tr>
<tr>
<td></td>
<td>Over 35 g/L</td>
<td>28-35 g/L</td>
</tr>
<tr>
<td>INR</td>
<td>Less than 1.7</td>
<td>1.7 - 2.2</td>
</tr>
<tr>
<td>Ascites</td>
<td>None</td>
<td>Mild / medically controlled</td>
</tr>
<tr>
<td>Encephalopathy</td>
<td>None</td>
<td>Mild / medically controlled</td>
</tr>
</tbody>
</table>

Child-Pugh class is determined by the total number of points: A = 5-6 points; B = 7-9 points; C = 10-15 points

### Appendix F: Healthcare Provider HCV Training

Acceptable HCV training programs and/or online courses include, but are not limited to the following:

- **Hepatitis C online course** ([https://www.hepatitisc.uw.edu/](https://www.hepatitisc.uw.edu/)): University of Washington is funded by the Division of Viral Hepatitis to develop a comprehensive, online self-study course for medical providers on diagnosis, monitoring, and management of hepatitis C virus infection. Free CME and CNE credit available.

- **Fundamentals of Liver Disease** ([https://liverlearning.aasld.org/fundamentals-of-liver-disease](https://liverlearning.aasld.org/fundamentals-of-liver-disease)): The AASLD, in collaboration with ECHO, the American College of Physicians
(ACP), CDC, and the Department of Veterans Affairs, has developed Fundamentals of Liver Disease, a free, online CME course to improve providers’ knowledge and clinical skills in hepatology.

- CDC training resources: [https://www.cdc.gov/hepatitis/resources/professionals-trainingresources.htm](https://www.cdc.gov/hepatitis/resources/professionals-trainingresources.htm)

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>Genotypes 1-6: Treatment-naive</td>
<td>Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 8 weeks</td>
<td>Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day</td>
<td>1) FDA-approved labeling 2) AASLD-IDSA (updated May 2018)</td>
</tr>
<tr>
<td></td>
<td>With compensated cirrhosis: Three tablets PO QD for 12 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genotypes 1, 2, 4, 5, or 6: Treatment-experienced with IFN/pegIFN + RBV</td>
<td>Without cirrhosis: Three tablets PO QD for 8 weeks</td>
<td>Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day</td>
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<td></td>
<td>With compensated cirrhosis: Three tablets PO QD for 12 weeks</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Genotypes 1 or 2: Treatment-experienced with sofosbuvir</td>
<td>Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 12 weeks</td>
<td>Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day</td>
<td>1) FDA-approved labeling 2) AASLD-IDSA (updated May 2018)</td>
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<td></td>
<td>Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 16 weeks</td>
<td>Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day</td>
<td>FDA-approved labeling</td>
</tr>
<tr>
<td>Genotype 3: Treatment-experienced with IFN/pegIFN + RBV</td>
<td>Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 16 weeks</td>
<td>Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day</td>
<td>1) FDA-approved labeling 2) AASLD-IDSA (updated May 2018)</td>
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<tr>
<td>Genotype 1: Treatment-experienced with NS3/4A protease inhibitor* without prior NS5A inhibitor*</td>
<td>Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 16 weeks</td>
<td>Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day</td>
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</tr>
<tr>
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<td>Without cirrhosis: Three tablets PO QD for 8 weeks</td>
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<td>FDA-approved labeling</td>
</tr>
<tr>
<td>Genotype 3: Treatment-experienced with IFN/pegIFN + RBV</td>
<td>Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 16 weeks</td>
<td>Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day</td>
<td>1) FDA-approved labeling 2) AASLD-IDSA (updated May 2018)</td>
</tr>
<tr>
<td>Genotype 1: Treatment-experienced with NS3/4A protease inhibitor* without prior NS5A inhibitor*</td>
<td>Without cirrhosis or with compensated cirrhosis: Three tablets PO QD for 16 weeks</td>
<td>Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day</td>
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<td>1) FDA-approved labeling</td>
</tr>
</tbody>
</table>
Indication | Dosing Regimen | Maximum Dose | Reference
--- | --- | --- | ---
Genotype 1-6: Treatment-naïve or treatment-experienced, post-liver or kidney transplantation with or without compensated cirrhosis | Three tablets PO QD for 12 weeks | Three tablets (glecaprevir 300 mg/ pibrentasvir 120 mg) per day | 2) AASLD-IDSA (updated May 2018)

*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. 
*See appendix E

VI. Product Availability
Tablets: glecaprevir 100 mg and pibrentasvir 40 mg

VII. References

Reviews, Revisions, and Approvals

<table>
<thead>
<tr>
<th>Description</th>
<th>Date</th>
<th>P&amp;T Approval Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Policy created; per SDC and prior clinical guidance added HIM line of business to the existing Commercial policy (modified policy number to CP.PCH.18, retired HIM.PA.SP36 and CP.CPA.285); added requirement that life expectancy ≥ 12 months with HCV treatment and participation in a medication adherence program.</td>
<td>12.03.19</td>
<td>02.20</td>
</tr>
<tr>
<td>Added new prescriber requirement to include a “provider who has expertise in treating HCV based on a certified training program”;</td>
<td>11.07.19</td>
<td>02.20</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.
Clinical Policy
Glecaprevir/Pibrentasvir

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.

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