Treatment of Hepatitis C with glecaprevir/pibrentasvir (Mavyret™)

Policy # 00593
Original Effective Date: 11/15/2017
Current Effective Date: 11/15/2017

Applies to all products administered or underwritten by Blue Cross and Blue Shield of Louisiana and its subsidiary, HMO Louisiana, Inc. (collectively referred to as the “Company”), unless otherwise provided in the applicable contract. Medical technology is constantly evolving, and we reserve the right to review and update Medical Policy periodically.

Note: Treatment of Hepatitis C with Triple Therapy (Ribavirin Plus Pegylated Interferon Alfa Plus telaprevir [Incivek®] or boceprevir [Victrelis®])®‡ is addressed separately in medical policy 00373.

Note: Treatment of Hepatitis C with Dual Therapy (Ribavirin Plus Pegylated Interferon Alfa) is addressed separately in medical policy 00374.

Note: Pegylated Interferons (Pegasys®, PegIntron®)‡ for Other (Non-Hepatitis C) Uses is addressed separately in medical policy 00375.

Note: Treatment of Hepatitis C with a simeprevir (Olysio®)† Based Regimen is addressed separately in medical policy 00396.

Note: Treatment of Hepatitis C with a sofosbuvir (Sovaldi®)† Based Regimen is addressed separately in medical policy 00397.

Note: Treatment of Hepatitis C with sofosbuvir/ledipasvir (Harvoni®)‡ is addressed separately in medical policy 00455.

Note: Treatment of Hepatitis C with simeprevir (Olysio®)† PLUS sofosbuvir (Sovaldi®)† is addressed separately in archived medical policy 00457.

Note: Treatment of Hepatitis C with ombitasvir, paritaprevir, ritonavir, and dasabuvir (Viekira Pak®)† is addressed separately in medical policy 00462.

Note: Treatment of Hepatitis C with ombitasvir, paritaprevir, and ritonavir (Technivie®)† is addressed separately in medical policy 00478

Note: Treatment of Hepatitis C with daclatasvir (Daklinza™)† and sofosbuvir (Sovaldi®)† is addressed separately in medical policy 00479

Note: Treatment of Hepatitis C with elbasvir and grazoprevir (Zepatier™)‡ is addressed separately in medical policy 00509.

Note: Treatment of Hepatitis C with sofosbuvir/velpatasvir (Epclusa®)‡ is addressed separately in medical policy 00514.

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Note: Treatment of Hepatitis C with sofosbuvir/velpatasvir/voxilaprevir (Vosevi™)‡ is addressed separately in medical policy 00594

When Services May Be Eligible for Coverage
Coverage for eligible medical treatments or procedures, drugs, devices or biological products may be provided only if:
- Benefits are available in the member’s contract/certificate, and
- Medical necessity criteria and guidelines are met.

Based on review of available data, the Company may consider glecaprevir/pibrentasvir (Mavyret™)‡ for the treatment of individuals with chronic hepatitis C virus (HCV) to be eligible for coverage.

Patient Selection Criteria
Based on review of available data, the Company may consider glecaprevir/pibrentasvir (Mavyret) when the following criteria are met:
- Patient has a diagnosis of chronic hepatitis C virus (HCV) genotypes 1, 2, 3, 4, 5, or 6; AND
- Patient does NOT have decompensated cirrhosis (Child-Pugh B/C); AND
- Patient meets the criteria in the chart below (including failure of certain treatment regimens) and adheres to the timeframes for treatment:

<table>
<thead>
<tr>
<th>Treatment Naive:</th>
<th>Genotype</th>
<th>No Cirrhosis</th>
<th>Compensated Cirrhosis (Child-Pugh A)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1, 2, 3, 4, 5, or 6</td>
<td>8 weeks</td>
<td>12 weeks</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Treatment Experienced:</th>
<th>Genotype</th>
<th>Previous Regimen</th>
<th>No Cirrhosis</th>
<th>Compensated Cirrhosis (Child-Pugh A)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
<td>An NS5A inhibitor‡ withOUT prior treatment with an NS3/4A protease inhibitor</td>
<td>16 weeks</td>
<td>16 weeks</td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>As NS3/4A protease inhibitor‡ withOUT prior treatment with an NS5A inhibitor</td>
<td>12 weeks</td>
<td>12 weeks</td>
</tr>
<tr>
<td></td>
<td>1, 2, 4, 5, or 6</td>
<td>PRS³</td>
<td>8 weeks</td>
<td>12 weeks</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>PRS³</td>
<td>16 weeks</td>
<td>16 weeks</td>
</tr>
</tbody>
</table>

³Patients in trials were treated with Harvoni Or Daklinza with pegylated interferon and ribavirin.

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2 Patients in trials were treated with prior regimens containing Olysio plus Sovaldi OR Olsyio, Incivek, or Victrelis plus pegylated interferon and ribavirin.

3 Patients in trials were treated with regimens containing interferon, pegylated interferon, ribavirin, and/or Sovaldi, but no prior treatment with an HCV NS3/4A protease inhibitor (Olysio, Incivek, Victrelis) or NS5A inhibitor (Harvoni)

When Services Are Considered Investigational

Coverage is not available for investigational medical treatments or procedures, drugs, devices or biological products.

Based on review of available data, the Company considers the use of glecaprevir/pibrentasvir (Mavyret) when patient selection criteria are not met to be investigational.*

Background/Overview

Mavyret is indicated for the treatment of patients with chronic HCV genotypes 1, 2, 3, 4, 5, or 6 infection with compensated cirrhosis or without cirrhosis. Mavyret is also indicated for the treatment of adult patients with HCV genotype 1 infection who have previously been treated with a regimen containing an HCV NS5A inhibitor or an NS3/4A protease inhibitor (PI), but not both. Mavyret is a fixed dose combination of glecaprevir (NS3/4A PI) and pibrentasvir (NS5A inhibitor). The dosage of Mavyret is three tablets taken once daily with food. The lengths of therapy for treatment vary including 8, 12, or 16 week regimens.

Hepatitis C

Hepatitis C is the most common blood borne pathogen. In the US, there are approximately 3.2 million people chronically infected with hepatitis C. Hepatitis C, a single-stranded RNA virus, is genetically complex with several recognized genotypes. Genotypes 1, 2, and 3 are the most frequently encountered genotypes worldwide. Type 1a is most frequently found in Northern Europe and North America, while 1b is most common in Japan and Southern and Eastern Europe. Genotypes 4 and 5 are most commonly found in Africa, while genotype 6 is common in Asia.

Drug regimens have evolved quite a bit over the past few years in this class. It is beyond the scope of this policy to delve into the entire timeline of approvals, however a brief overview will provide an idea of the evolution of these drugs. The earlier regimens contained ribavirin and interferon/pegylated interferons. The next wave of products brought NS3/4A PIs to market such as Incivek and Victrelis. After that, an NS5B polymerase inhibitor was approved (Sovaldi). Following the release of Sovaldi, a drug was approved that contained a combination NS5A inhibitor and NS5B polymerase inhibitor combination (Harvoni). Drugs approved up until that point in time mainly treated genotype 1 hepatitis C virus. After these drugs were approved, a multitude of other drugs were approved (Viekira/XR, Zepatier, Daklinza, etc). As drugs continue to be FDA approved in this space, the range of genotypes that can be treated increases. The latest wave of drugs includes pangenotypic products such as Eplcusa, Mavyret, and Vosevi. For more information on each individual drug, please see the product’s package insert or refer to their respective medical policy.
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Mavyret has been integrated into the American Association for the Study of Liver Diseases (AASLD) guidelines in various scenarios for the treatment of HCV, however it should be noted that these guidelines are receiving constant updates as new products are approved.

**FDA or Other Governmental Regulatory Approval**

U.S. Food and Drug Administration (FDA)

Mavyret is indicated for the treatment of patients with chronic HCV genotypes 1, 2, 3, 4, 5, or 6 infection with compensated cirrhosis or without cirrhosis. Mavyret is also indicated for the treatment of adult patients with HCV genotype 1 infection who have previously been treated with a regimen containing an HCV NS5A inhibitor or an NS3/4A PI, but not both.

**Rationale/Source**

This medical policy was developed through consideration of peer-reviewed medical literature generally recognized by the relevant medical community, U.S. FDA approval status, nationally accepted standards of medical practice and accepted standards of medical practice in this community, Blue Cross and Blue Shield Association technology assessment program (TEC) and other non-affiliated technology evaluation centers, reference to federal regulations, other plan medical policies, and accredited national guidelines.

**Treatment naïve OR pegylated interferon, ribavirin and/or sofosbuvir (Sovaldi) experienced adults with HCV genotype 1, 2, 4, 5, or 6 without cirrhosis**

The efficacy of Mavyret in subjects who were treatment-naïve or treatment-experienced to combinations of peginterferon, ribavirin and/or sofosbuvir (PRS) with genotype 1, 2, 4, 5 or 6 chronic HCV infection without cirrhosis was studied in four trials using 8- or 12-week durations: ENDURANCE-1, ENDURANCE-4, SURVEYOR-1 (Part 2), and SURVEYOR-2 (Part 2 and Part 4). The SVR12 in ENDURANCE-1 was 99% with 8 weeks of therapy. In SURVEYOR-2 (Part 2 and Part 4), ENDURANCE-1 and SURVEYOR-1 (Part 2), the SVR12s were 98% for genotype 2, 93% for genotype 4, 100% for genotype 5, and 100% for genotype 6 with 8 weeks of therapy. For 12 weeks of therapy, the SVR12 for genotype 5 and genotype 6 were 100%.

**Treatment-naïve or pegylated interferon, ribavirin and/or sofosbuvir (Sovaldi) experienced adults with HCV Genotype 1, 2, 4, 5, or 6 Infection with compensated cirrhosis**

The efficacy of Mavyret in subjects who were treatment-naïve or treatment-experienced to combinations of PRS with genotype 2, 3, 4, 5 or 6 chronic HCV infection with compensated cirrhosis (Child-Pugh A) was studied in the EXPEDITION-1 trial, which included subjects treated with Mavyret for 12 weeks. In this trial, total SVR12 for all genotypes was 99%. Genotype 1 was 99% and genotypes 2, 4, 5, and 6 were 100%.

**Treatment-naïve or pegylated interferon, ribavirin and/or sofosbuvir (Sovaldi) experienced adults with HCV genotype 3 infection without cirrhosis or with compensated cirrhosis**

The efficacy of Mavyret in subjects without cirrhosis or with compensated cirrhosis who were treatment-naïve or treatment-experienced to combinations of PRS with genotype 3 chronic HCV infection was studied in ENDURANCE-3 and in SURVEYOR-2 Part 3. In ENDURANCE-3, SVR12 was 94.9% in the 8 week treatment group and 95.3% in the Mavyret 12 week group. In SURVEYOR-2 Part 3, the SVR12 for those...
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that were treatment naïve with compensated cirrhosis was 98%. The SVR12 in those who were treatment experienced with PRS without cirrhosis or with compensated cirrhosis that were treated for 16 weeks was 96%.

Treatment-naïve and pegylated interferon, ribavirin and/or sofosbuvir (Sovaldi) experienced adults with chronic kidney disease (CKD) stage 4 and 5 and chronic HCV infection without cirrhosis or with compensated cirrhosis
EXPEDITION-4 studied the safety and efficacy in subjects with severe renal impairment (CKD Stages 4 and 5) with compensated liver disease (with and without Child-Pugh A cirrhosis). The overall SVR12 rate was 98% and no subjects experienced virologic failure. The presence of renal impairment did not affect efficacy; no dose-adjustments were required during the trial.

Adults who are NS5A inhibitor or NS3/4A-protease inhibitor - experienced, without cirrhosis or with compensated cirrhosis
MAGELLAN-1 included genotype 1- or 4-infected subjects who failed a previous regimen containing an NS5A inhibitor and/or NS3/4A PI. The SVR12 in those that were PI experienced (and NS5A inhibitor naïve) was 92% with 12 weeks of Mavyret therapy. The SVR12 in those that were NS5A inhibitor experienced (PI naïve) was 94% with 16 weeks of therapy.

References
1. www.cdc.gov

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11/02/2017 Medical Policy Committee review
Next Scheduled Review Date: 11/2018

*Investigational – A medical treatment, procedure, drug, device, or biological product is Investigational if the effectiveness has not been clearly tested and it has not been incorporated into standard medical practice. Any determination we make that a medical treatment, procedure, drug, device, or biological product is Investigational will be based on a consideration of the following:
A. Whether the medical treatment, procedure, drug, device, or biological product can be lawfully marketed without approval of the U.S. Food and Drug Administration (FDA) and whether such approval has been granted at the time the medical treatment, procedure, drug, device, or biological product is sought to be furnished; or
B. Whether the medical treatment, procedure, drug, device, or biological product requires further studies or clinical trials to determine its maximum tolerated dose, toxicity, safety, effectiveness, or effectiveness as compared with the standard means of treatment or diagnosis, must improve health outcomes, according to the consensus of opinion among experts as shown by reliable evidence, including:
   1. Consultation with the Blue Cross and Blue Shield Association technology assessment program (TEC) or other nonaffiliated technology evaluation center(s);
   2. Credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community; or

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3. Reference to federal regulations.

**Medically Necessary (or “Medical Necessity”) - Health care services, treatment, procedures, equipment, drugs, devices, items or supplies that a Provider, exercising prudent clinical judgment, would provide to a patient for the purpose of preventing, evaluating, diagnosing or treating an illness, injury, disease or its symptoms, and that are:

A. In accordance with nationally accepted standards of medical practice;
B. Clinically appropriate, in terms of type, frequency, extent, level of care, site and duration, and considered effective for the patient's illness, injury or disease; and
C. Not primarily for the personal comfort or convenience of the patient, physician or other health care provider, and not more costly than an alternative service or sequence of services at least as likely to produce equivalent therapeutic or diagnostic results as to the diagnosis or treatment of that patient's illness, injury or disease.

For these purposes, “nationally accepted standards of medical practice” means standards that are based on credible scientific evidence published in peer-reviewed medical literature generally recognized by the relevant medical community, Physician Specialty Society recommendations and the views of Physicians practicing in relevant clinical areas and any other relevant factors.

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**NOTICE:** Medical Policies are scientific based opinions, provided solely for coverage and informational purposes. Medical Policies should not be construed to suggest that the Company recommends, advocates, requires, encourages, or discourages any particular treatment, procedure, or service, or any particular course of treatment, procedure, or service.