# **Justification**



to the Resolution of the Federal Joint Committee (G-BA) on an Amendment of the Pharmaceuticals Directive (AM-RL):
Annex XII – Benefit Assessment of Medicinal Products with New Active Ingredients According to Section 35a SGB V Glecaprevir/Pibrentasvir (new therapeutic indication: chronic hepatitis C, adolescent patients 12 to < 18 years)

of 17 October 2019

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## 1. Legal basis

According to Section 35a, paragraph 1 German Social Code, Book Five (SGB V), the Federal Joint Committee (G-BA) assesses the benefit of reimbursable medicinal products with new active ingredients. This includes in particular the assessment of the additional benefit and its therapeutic significance. The benefit assessment is carried out on the basis of evidence provided by the pharmaceutical company, which must be submitted to the G-BA electronically, including all clinical trials the pharmaceutical company has conducted or commissioned, at the latest at the time of the first placing on the market as well as the marketing authorisation of new therapeutic indications of the medicinal product, and which must contain the following information in particular:

- 1. Approved therapeutic indications,
- 2. Medical benefit,
- 3. Additional medical benefit in relation to the appropriate comparator therapy,
- 4. Number of patients and patient groups for whom there is a therapeutically significant additional benefit.
- 5. Treatment costs for statutory health insurance funds,
- 6. Requirements for a quality-assured application.

The G-BA may commission the Institute for Quality and Efficiency in Health Care (IQWiG) to carry out the benefit assessment. According to Section 35a, paragraph 2 SGB V, the assessment must be completed within three months of the relevant date for submission of the evidence and published on the internet.

According to Section 35a, paragraph 3 SGB V, the G-BA shall pass a resolution on the benefit assessment within three months of its publication. The resolution is to be published on the internet and forms part of the Pharmaceuticals Directive.

### 2. Key points of the resolution

The active ingredient combination glecaprevir/pibrentasvir was listed for the first time on 1 September 2017 in the "LAUER-TAXE®", the extensive German registry of available drugs and their prices.

On 11 March 2019, the active ingredient combination glecaprevir/pibrentasvir received the marketing authorisation for a new therapeutic indication classified as a major variation of type 2 according to Annex 2 number 2 letter to Regulation (EC) No. 1234/2008 of the Commission from 24 November 2008 concerning the examination of variations to the terms of marketing authorisations for medicinal products for human use and veterinary medicinal products (OJ L 334, 12 December 2008, p. 7).

On 4 April 2019, the pharmaceutical company submitted a dossier in accordance with Section 4, paragraph 3, number 2 Ordinance on the Benefit Assessment of Pharmaceuticals (AM-NutzenV) in conjunction with Chapter 5, Section 8, paragraph 1, number 2 of the Rules of Procedure (VerfO) of the G-BA on the active ingredient combination glecaprevir/pibrentasvir with the new therapeutic indication (chronic hepatitis C, adolescent patients 12 to < 18 years) in due time (i.e. at the latest within four weeks after informing the pharmaceutical company about the approval for a new therapeutic indication).

The G-BA commissioned the IQWiG to carry out the assessment of the dossier. The benefit assessment was published on the website of the G-BA (<a href="www.g-ba.de">www.g-ba.de</a>) on 15 July 2019, thus initiating the written statement procedure. In addition, an oral hearing was held.

The G-BA came to a resolution on whether an additional benefit of glecaprevir/pibrentasvir compared with the appropriate comparator therapy could be determined on the basis of the dossier of the pharmaceutical company, the dossier assessment prepared by the IQWiG, and the statements submitted in the written statement and oral hearing procedure. In order to determine the extent of the additional benefit, the G-BA has evaluated the data justifying the finding of an additional benefit on the basis of their therapeutic relevance (qualitative), in accordance with the criteria laid down in Chapter 5, Section 5, paragraph 7 VerfO. The methodology proposed by the IQWiG in accordance with the General Methods <sup>1</sup> was not used in the benefit assessment of glecaprevir/pibrentasvir.

In the light of the above and taking into account the comments received and the oral hearing, the G-BA has arrived at the following assessment:

# 2.1 Additional benefit of the medicinal product in relation to the appropriate comparator therapy

# 2.1.1 Approved therapeutic indication of glecaprevir/pibrentasvir (Maviret®) in accordance with the product information

Maviret is indicated for the treatment of chronic hepatitis C virus (HCV) infection in adults and in adolescents aged 12 to <18 years (see Sections 4.2, 4.4, and 5.1).

## 2.1.2 Appropriate comparator therapy

The appropriate comparator therapy was determined as follows:

- a) Patients with chronic hepatitis C aged 12 to < 18 years, genotype 1, 4, 5, or 6</li>
   Ledipasvir/sofosbuvir.
- a) Patients with chronic hepatitis C aged 12 to < 18 years, genotype 2 or 3</li>
   Sofosbuvir plus ribavirin.

### Criteria according to Chapter 5, Section 6 of the Rules of Procedure of the G-BA:

The appropriate comparator therapy must be an appropriate therapy in the therapeutic indication according to the generally recognised state of medical knowledge (Section 12 SGB V), preferably a therapy for which endpoint studies are available and which has proven its worth in practical application unless contradicted by the guidelines under Section 92, paragraph 1 SGB V or the principle of economic efficiency.

In determining the appropriate comparator therapy, the following criteria, in particular, must be taken into account as specified in Chapter 5, Section 6, paragraph 3 VerfO:

- 1. To be considered as a comparator therapy, the medicinal product must, principally, have a marketing authorisation for the therapeutic indication.
- 2. If a non-medicinal treatment is considered as a comparator therapy, this must be available within the framework of the SHI system.

General Methods, Version 5.0 dated 10 July 2017. Institut für Qualität und Wirtschaftlichkeit im Gesundheitswesen [Institute for Quality and Efficiency in Health Care], Cologne.

- As comparator therapy, medicinal products or non-medicinal treatments for which the
  patient-relevant benefit has already been determined by the Federal Joint Committee
  shall be preferred.
- 4. According to the generally recognised state of medical knowledge, the comparator therapy should be part of the appropriate therapy in the therapeutic indication.

## Justification based on the criteria set out in Chapter 5, Section 6, paragraph 3 VerfO:

- On 1. Peginterferon alfa-2a, peginterferon alfa-2b, interferon alfa-2b in each case in combination with ribavirin are authorised for the treatment of chronic hepatitis C in patients under 18 years of age who have not undergone previous treatment. Ledipasvir/sofosbuvir is approved for use in therapy-naïve and previously treated adolescent patients aged 12 to < 18 years with treatment recommendations for genotypes 1, 4, 5, or 6 and only in combination with ribavirin and in therapy-naïve patients, only in the presence of cirrhosis for genotype 3. Sofosbuvir is approved for genotypes 2 and 3 in adolescent patients aged 12 to < 18 years with treatment recommendations in combination with ribavirin.
- On 2. Non-medicinal treatment is not considered an appropriate comparator therapy in the therapeutic indication in question.
- On 3. In the therapeutic indication, there are resolutions of the G-BA on the benefit assessment of medicinal products with new active ingredients in accordance with Section 35a SGB V for the treatment of chronic hepatitis C. In the therapeutic indication for adolescent patients, there is a resolution on the active ingredient combination ledipasvir/sofosbuvir dated 15 February 2018 and a resolution on sofosbuvir dated 5 April 2018. For ledipasvir/sofosbuvir a hint for a non-quantifiable additional benefit was found for therapy-naïve and -experienced patients with infection of genotype 1, 4, 5, or 6; for patients with infection of genotype 3, no additional benefit was recognised. For sofosbuvir, a hint for an unquantifiable additional benefit was found for both therapy-naïve and -experienced patients with infection of genotype 2 or 3.
- On 4. The generally accepted state of medical knowledge was illustrated by research for guidelines as well as systematic reviews of clinical studies in the present indication. It can be stated that the data basis for medicinal therapies and treatment cascades is limited overall in the present therapeutic indication. However, the approved DAAs are already taken into account in the current guidelines. Accordingly, the combination peginterferon plus ribavirin still represents an alternative to sofosbuvir or ledipasvir/ sofosbuvir in adolescent patients who have not yet been pre-treated. However, it no longer has priority recommendation. Therapy with non-pegylated interferon is not recommended.

In determining the appropriate comparator therapy, the additional benefit identified for sofosbuvir or ledipasvir/sofosbuvir in the respective patient groups (infection with genotype 2 or 3 or genotype 1, 4, 5, or 6) was taken into account. The avoidance of the side effects of interferon-containing therapy (in particular growth retardation and weight loss) is of particular importance in the present patient population. This is why peginterferons — although authorised — were not identified as an alternative appropriate comparator therapy.

The significance of ledipasvir/sofosbuvir in combination with ribavirin in adolescent patients (previously treated or with compensated cirrhosis) with infection of genotype 3 is unclear. Because of the unproven additional benefit, ledipasvir/sofosbuvir cannot currently be determined as an appropriate comparator therapy for adolescent patients with CHC infection of genotype 3. The marketing authorisation of ledipasvir/sofosbuvir does not include a treatment recommendation for patients with infection of genotype 2 and is therefore not an appropriate comparator therapy for this patient group.

In contrast to the resolutions on ledipasvir/sofosbuvir and sofosbuvir, it is no longer necessary to differentiate the appropriate comparator therapy according to previous therapy. In both groups of patients, the appropriate comparator therapies mentioned above can be considered for both therapy-naïve and -experienced patients.

The findings in Annex XII do not restrict the scope of treatment required to fulfil the medical treatment contract.

### 2.1.3 Extent and probability of the additional benefit

In summary, the additional benefit of glecaprevir/pibrentasvir is assessed as follows:

a) Patients with chronic hepatitis C aged 12 to < 18 years, genotype 1, 4, 5, or 6

An additional benefit of glecaprevir/pibrentasvir in adolescent patients with chronic hepatitis C aged 12 to < 18 years with infection of genotype 1, 4, 5, or 6 is not proven.

#### Justification:

Study M16-123 (DORA) is an open, one-arm study to investigate glecaprevir/pibrentasvir in previously treated and therapy-na $\ddot{}$ ve children and adolescents aged 3 to 18 years. For patients with infection of genotype 1, 4, 5, or 6, the pharmaceutical company presents the results of a sub-population of adolescents from 12 to < 18 years of age in the study. Patients in this sub-population (n = 40) were treated with glecaprevir/pibrentasvir for 8 weeks. The sub-population corresponds to the target population of the therapeutic indication. However, only patients with infection of genotype 1 (n = 37) and genotype 4 (n = 3) were recruited. The study investigates sustained virological response (SVR) as the endpoint of morbidity and side effects. These endpoints are basically patient-relevant.

A sustained virological response 12 (SVR12) at the end of therapy was achieved by all patients in the cohort. There were no deaths, serious adverse events, or adverse events leading to therapy discontinuation. A severe adverse event (depression, CTCAE  $\geq$  3) was observed in one patient.

Because of the lack of comparison, the one-arm study is not suitable for the assessment of an additional benefit; this would only be possible with very large effects compared with the appropriate comparator therapy. The results of the DORA study are in the same order of magnitude as those of the appropriate comparator therapy ledipasvir/sofosbuvir. For ledipasvir/sofosbuvir, SVR12 of 97.5–100% were observed (see G-BA resolution of 15 February 2018).

The evaluation report of the EMA shows that for the marketing authorisation for adolescent patients, the cure rates and pharmacokinetics for adolescent patients are considered comparable between adolescents and adults. The marketing authorisation is therefore also based on an extrapolation of the data to adult patients.

In AM-NutzenV Section 5, paragraph 5a, the legislator has granted the G-BA the task of examining whether an additional benefit can be recognised in the assessment of medicinal products with a marketing authorisation for paediatric use within the meaning of Article 2, paragraph 4 of Regulation (EC) No. 1901/2006 of the European Parliament and of the Council of 12 December 2006 on medicinal products for paediatric use and amending Regulation (EEC) No. 1768/92, Directives 2001/20/EC and 2001/83/EC, and Regulation (EC) No. 726/2004 (OJ L 378, 27.11.2006, p. 1) as last amended by Regulation (EC) No. 1902/2006 (OJ L 378, 27 December 2006, p. 20) for patient groups or partial indications that are covered by the marketing authorisation but which are not or not sufficiently represented in the study population and for which the marketing authorisation was granted on the basis of the transfer of evidence.

For the G-BA, the findings of the EMA form the minimum prerequisite for a transfer of evidence, whereby the comparability of the clinical picture by the underlying viral cause is taken into account. The appropriate comparator therapy for both adolescents and adults as defined by the G-BA is identical here. This provides a decisive criterion for the transfer of evidence in the benefit assessment.

In the resolution on glecaprevir/pibrentasvir (resolution of 1 February 2018) for adult patients with genotype 1, 4, 5, or 6, no additional benefit was found compared with ledipasvir/sofosbuvir because no assessable data were available. The recognition of an additional benefit for adolescent patients based on adult outcomes is therefore not possible.

Overall, no additional benefit can be identified on the basis of the data presented.

## a) Patients with chronic hepatitis C aged 12 to < 18 years, genotype 2 or 3

An additional benefit of glecaprevir/pibrentasvir in adolescent patients with chronic hepatitis C aged 12 to < 18 years with infection of genotype 2 or 3 is not proven.

#### Justification:

For patients with infection of genotype 2 or 3, the pharmaceutical company presents the results of a sub-population of adolescents from 12 to < 18 years of age in the same study (DORA). Patients in this sub-population (n = 7) were treated with glecaprevir/pibrentasvir for 8 or 16 weeks. The sub-population corresponds to the target population of the therapeutic indication; 3 patients with genotype 2, and 4 patients with genotype 3 were recruited. The study investigates sustained virological response (SVR) as the endpoint of morbidity and side effects. These endpoints are basically patient-relevant.

A sustained virological response 12 (SVR12) at the end of therapy was achieved by all patients in the cohort. There were no deaths, severe, or serious adverse events, or adverse events leading to therapy discontinuation.

The single-arm study is not suitable for the assessment of an additional benefit because of the lack of comparison with the appropriate comparator therapy. The results of the DORA study are in the same order of magnitude as those of the appropriate comparator therapy sofosbuvir (in combination with ribavirin). For sofosbuvir plus ribavirin, SVR12 of 96.4–100% were observed (see G-BA resolution of 15 February 2018).

The evaluation report of the EMA shows that for the marketing authorisation for adolescent patients, the cure rates and pharmacokinetics for adolescent patients are considered comparable between adolescents and adults. The marketing authorisation is therefore also based on an extrapolation of the data to adult patients.

In AM-NutzenV Section 5, paragraph 5a, the legislator has granted the G-BA the task of examining whether an additional benefit can be recognised in the assessment of medicinal products with a marketing authorisation for paediatric use within the meaning of Article 2, paragraph 4 of Regulation (EC) No. 1901/2006 of the European Parliament and of the Council of 12 December 2006 on medicinal products for paediatric use and amending Regulation (EEC) No. 1768/92, Directives 2001/20/EC and 2001/83/EC, and Regulation (EC) No. 726/2004 (OJ L 378, 27.11.2006, p. 1) as last amended by Regulation (EC) No. 1902/2006 (OJ L 378, 27 December 2006, p. 20) for patient groups or partial indications tat are covered by the marketing authorisation but which are not or not sufficiently represented in the study population and for which the marketing authorisation was granted on the basis of the transfer of evidence.

For the G-BA, the findings of the EMA form the minimum prerequisite for a transfer of evidence, whereby the comparability of the clinical picture by the underlying viral cause is taken into account. The appropriate comparator therapy for both adolescents and adults as

defined by the G-BA is identical here. This provides a decisive criterion for the transfer of evidence in the benefit assessment.

In the resolution on glecaprevir/pibrentasvir (resolution of 1 February 2018) for adult patients with genotype 2 or 3, no additional benefit was found for sofosbuvir plus ribavirin because no assessable data were available. The recognition of an additional benefit for adolescent patients based on adult outcomes is therefore not possible.

The written and oral statements referred to the possible advantages of a ribavirin-free therapy option. However, there is no evidence for the assessment of an additional benefit in patient groups that may benefit from ribavirin-free treatment. There is thus no hint for an additional benefit.

Overall, no additional benefit can be identified on the basis of the data presented.

### 2.1.4 Summary of the assessment

For the benefit assessment of glecaprevir/pibrentasvir for the treatment of patients aged 12 to < 18 years with chronic hepatitis C, only data from the one-arm, non-comparative DORA study was presented. Because of the lack of comparison, the data are not suitable for the derivation of an additional benefit compared with the appropriate comparator therapy ledipasvir/sofosbuvir (genotype 1, 4, 5, or 6) or sofosbuvir in combination with ribavirin (genotype 2 or 3). In addition, the observed response rates are in the same order of magnitude as with the appropriate comparator therapies. Even if the transfer of evidence carried out at the time of marketing authorisation is taken into account, no additional benefit for adolescent patients is to be recognised on the basis of the assessment made for adult patients because no additional benefit was found for adult patients for the respective genotypes. Overall, no additional benefit can be found for patients with infections of genotype 1, 4, 5, or 6 or for patients with infections of genotype 2 or 3.

## 2.2 Number of patients or demarcation of patient groups eligible for treatment

The information on the number of patients is based on the target population in statutory health insurance (SHI).

The G-BA bases its resolution on the patient numbers stated by the pharmaceutical company in the dossier. The pharmaceutical company determined the figures with the help of a query of the reporting cases transmitted to the Robert Koch Institute in accordance with the Infection Protection Act. Based on this approach, the estimated number of patients is considered plausible because it can be assumed that almost all adolescents with hepatitis C infection are covered by the reporting requirement. Nevertheless, uncertainties remain regarding patients who may be cured or not yet diagnosed. For the proportions of the different HCV genotypes, the pharmaceutical company uses data from a cross-sectional study from 2016 (Hüppe *et al.*, Chronic hepatitis C patients prior to broad access to interferon-free treatments in Germany. Z Gastroenterol 2016). Uncertainties exist in the transferability of the data used to the age group addressed here (12 to under 18 years).

## 2.3 Requirements for a quality-assured application

The requirements in the product information are to be taken into account. The European Medicines Agency (EMA) provides the contents of the product information (summary of product characteristics, SmPC) for Maviret® (active ingredient combination:

glecaprevir/pibrentasvir) at the following publicly accessible link (last access: 14 August 2019):

https://www.ema.europa.eu/documents/product-information/maviret-epar-product-information\_de.pdf

Treatment with glecaprevir/pibrentasvir should be performed only by a physician experienced in the treatment of chronic hepatitis C.

## 2.4 Treatment costs

The treatment costs are based on the contents of the product information and the information listed in the LAUER-TAXE® (last revised: 15 September 2019).

In accordance with the product information, the following therapy options result:

| Designation of the therapy  | Duration of<br>the treatment<br>cycle  | Use in accordance with product information  |  |  |  |  |  |
|---|--|---|--|--|--|--|--|
| a) Patients with  | a) Patients with chronic hepatitis C aged 12 to < 18 years, genotype 1, 4, 5, or 6 |   |  |  |  |  |  |
| Medicinal prod  | uct to be assess   | sed   |  |  |  |  |  |
| Glecaprevir/p<br>ibrentasvir  | 8 weeks  | Therapy-naïve patients with genotype 1, 4, 5, or 6 without or with cirrhosis and therapy experienced patients with genotype 1, 4, 5, or 6 without cirrhosis |  |  |  |  |  |
| Glecaprevir/p ibrentasvir   | 12 weeks   | Therapy experienced patients with genotype 1, 4, 5 or 6 with cirrhosis  |  |  |  |  |  |
| Appropriate co  | mparator therap  | у   |  |  |  |  |  |
| Ledipasvir/<br>sofosbuvir   | 8 weeks  | May be considered in patients without cirrhosis with genotyp 1.   |  |  |  |  |  |
| Ledipasvir/<br>sofosbuvir   | 12 weeks   | Patients with genotype 1, 4, 5, or 6 without cirrhosis or with compensated cirrhosis, low risk of progression, and option for re-treatment.                 |  |  |  |  |  |
| Ledipasvir/<br>sofosbuvir   | 24 weeks   | Therapy experienced patients with genotype 1, 4, 5 or 6 and compensated cirrhosis   |  |  |  |  |  |
| a) Patients with chronic hepatitis C aged 12 to < 18 years, genotype 2 or 3 |  |   |  |  |  |  |  |
| Medicinal product to be assessed  |  |   |  |  |  |  |  |
| Glecaprevir/p<br>ibrentasvir  | 8 weeks  | Therapy-naïve and therapy experienced patients with genotype 2 without or with cirrhosis and therapy-naïve patients with genotype 3 without cirrhosis.      |  |  |  |  |  |
| Glecaprevir/p ibrentasvir   | 12 weeks   | Therapy experienced patients with genotype 2 and cirrhosis and therapy-naïve patients with genotype 3 with cirrhosis.                                       |  |  |  |  |  |
| Glecaprevir/p ibrentasvir   | 16 weeks   | Therapy experienced patients with genotype 3.   |  |  |  |  |  |
| Appropriate comparator therapy  |  |   |  |  |  |  |  |

| Designation of the therapy | Duration of<br>the treatment<br>cycle | Use in accordance with product information   |
|----------------------------|---------------------------------------|--|
| Sofosbuvir + ribavirin     | 12 weeks                              | Patients with genotype 2.  |
| Sofosbuvir + ribavirin     | 24 weeks                              | Patients with genotype 3 or, where appropriate, patients with genotype 2, in particular in the presence of one or more factors associated with lower response rates to interferoncontaining therapies. |

## **Treatment period:**

| Designation of the therapy  | Treatmen t mode | Number of treatments/patient/ye ar | Treatment<br>duration/treatme<br>nt (days) | Treatment days/patient / year |  |
|---|-----------------|------------------------------------|--|-------------------------------|--|
| a) Patients with chronic  | hepatitis C     | aged 12 to < 18 years, g           | enotype 1, 4, 5, or 6                      |                               |  |
| Medicinal product to be   | assessed        |                                    |  |                               |  |
| Glecaprevir/pibrentasv ir   | 1 × daily       | 56–84                              | 1  | 56–84                         |  |
| Appropriate comparator  | therapy         |                                    |  |                               |  |
| Ledipasvir/sofosbuvir   | 1 x daily       | 56–168                             | 1  | 56–168                        |  |
| a) Patients with chronic hepatitis C aged 12 to < 18 years, genotype 2 or 3 |                 |                                    |  |                               |  |
| Medicinal product to be assessed  |                 |                                    |  |                               |  |
| Glecaprevir/pibrentasv ir   | 1 × daily       | 56–112                             | 1  | 56–112                        |  |
| Appropriate comparator therapy  |                 |                                    |  |                               |  |
| Sofosbuvir +  | 1 × daily       | 84–168                             | 1  | 84–168                        |  |
| Ribavirin   | 2 × daily       | 84–168                             | 1  | 84–168                        |  |

### Usage and consumption:

For the cost representation, only the dosages of the general case are considered. Patient-individual dose adjustments (e.g. because of side effects or co-morbidities) are not taken into account when calculating the annual treatment costs.

The active ingredient ribavirin is dosed depending on body weight. The cost calculation is based on standard patients with an average body weight of 47.1 kg (for patients aged 12 years) or 67 kg (for patients aged 17 to < 18 years). The recommended dosage of ribavirin in combination with sofosbuvir is 600 mg/day for patients between 47 and 49 kg body weight and 1,000 mg/day for patients between 66 and 80 kg body weight.

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<sup>&</sup>lt;sup>2</sup> Federal health reporting. Average body measurements of the population (2017, both sexes), www.gbe-bund.de

| Designation of the therapy | Dosage/<br>application         | Dose/pati<br>ent/treat<br>ment<br>days | Consumption by potency/treatm ent day | Treatment days/ patient/ year | Annual mean consumption according to potency |
|----------------------------|--------------------------------|--|---------------------------------------|-------------------------------|--|
| a) Patients with chro      | onic hepatitis C               | aged 12 to                             | < 18 years, genot                     | ype 1, 4, 5, or               | 6  |
| Medicinal product to       | be assessed                    |  |                                       |                               |  |
| Glecaprevir/pibren tasvir  | 300 mg/120<br>mg               | 300<br>mg/120<br>mg                    | 3 × 100 mg/40<br>mg                   | 56–84                         | 168 – 252 ×<br>100 mg/40<br>mg               |
| Appropriate compar         | ator therapy                   |  |                                       |                               |  |
| Ledipasvir/sofosb<br>uvir  | 90 mg/400<br>mg                | 90<br>mg/400<br>mg                     | 1 x 90 mg/400<br>mg                   | 56–168                        | 56 – 168 ×<br>90 mg/400<br>mg                |
| a) Patients with chro      | onic hepatitis C               | aged 12 to                             | < 18 years, genot                     | ype 2 or 3                    |  |
| Medicinal product to       | be assessed                    |  |                                       |                               |  |
| Glecaprevir/pibren tasvir  | 300 mg/120<br>mg               | 300<br>mg/120<br>mg                    | 3 × 100 mg/40<br>mg                   | 56–112                        | 168 – 336 ×<br>100 mg/40<br>mg               |
| Appropriate compar         | Appropriate comparator therapy |  |                                       |                               |  |
| Sofosbuvir +               | 400 mg                         | 400 mg                                 | 1 × 400 mg                            | 84                            | 84 × 400 mg<br>+                             |
| Ribavirin                  | 600 mg –<br>1,000 mg           | 600 mg –<br>1,000 mg                   | 3–5 × 200 mg                          |                               | 252–420 ×<br>200 mg                          |
| Sofosbuvir +               | 400 mg                         | 400 mg                                 | 1 × 400 mg                            | 168                           | 168 × 400<br>mg +                            |
| Ribavirin                  | 600 mg –<br>1,000 mg           | 600 mg –<br>1,000 mg                   | 3–5 × 200 mg                          |                               | 504–840 ×<br>200 mg                          |

## Costs:

In order to improve comparability, the costs of the medicinal products were approximated both on the basis of the pharmacy retail price level and also deducting the statutory rebates in accordance with Sections 130 and 130 a SGB V. To calculate the annual treatment costs, the required number of packs of a particular potency was first determined on the basis of consumption. Having determined the number of packs of a particular potency, the costs of the medicinal products were then calculated on the basis of the costs per pack after deduction of the statutory rebates.

## **Costs of the medicinal product:**

| Designation of the therapy       | Package<br>size | Costs<br>(pharmacy<br>wholesale price) | Rebat<br>e<br>Sectio<br>n 130<br>SGB V | Rebate<br>Section<br>130a<br>SGB V | Costs after deduction of statutory rebates |
|----------------------------------|-----------------|--|--|------------------------------------|--|
| Medicinal product to be assessed |                 |  |  |                                    |  |

| Designation of the therapy                                   | Package<br>size | Costs<br>(pharmacy<br>wholesale price) | Rebat<br>e<br>Sectio<br>n 130<br>SGB V | Rebate<br>Section<br>130a<br>SGB V | Costs after deduction of statutory rebates |
|--|-----------------|--|--|------------------------------------|--|
| Glecaprevir/pibrentasvir                                     | 84 FCT          | €14,995.00                             | €1.77                                  | €0.00                              | €14,993.23                                 |
| Appropriate comparator therapy                               |                 |  |  |                                    |  |
| Ledipasvir/sofosbuvir  | 28 FCT          | €14,995.00                             | €1.77                                  | €0.00                              | €14,993.23                                 |
| Sofosbuvir   | 28 FCT          | €14,348.98                             | €1.77                                  | €0.00                              | €14,347.21                                 |
| Ribavirin  | 168 HC          | €744.29                                | €1.77                                  | €34.80                             | €707.72                                    |
| Abbreviations: FCT = film-coated tablets, HC = hard capsules |                 |  |  |                                    |  |

Pharmaceutical retail price (LAUER-TAXE®) as last revised: 15 September 2019

#### Costs for additionally required SHI services:

Only costs directly related to the use of the medicinal product are taken into account. If there are regular differences in the necessary use of medical treatment or in the prescription of other services in the use of the medicinal product to be evaluated and the appropriate comparator therapy in accordance with the product information, the costs incurred for this must be taken into account as costs for additionally required SHI services.

Medical treatment costs, medical fee services, and costs incurred for routine examinations (e.g. regular laboratory services such as blood count tests) that do not exceed standard expenditure in the course of the treatment are not shown.

Because there are no regular differences in the necessary medical treatment or the prescription of other services when using the medicinal product to be assessed and the appropriate comparator therapy according to the product information, no costs for additionally required SHI services had to be taken into account.

### 3. Bureaucratic costs

The proposed resolution does not create any new or amended information obligations for care providers within the meaning of Annex II to Chapter 1 VerfO and, accordingly, no bureaucratic costs.

## 4. Process sequence

The Subcommittee on Medicinal Products determined the appropriate comparator therapy at its session on 10 July 2018.

On 4 April 2019, the pharmaceutical company submitted a dossier for the benefit assessment of glecaprevir/pibrentasvir to the G-BA in due time in accordance with Chapter 5, Section 8, paragraph 1, number 2 VerfO.

By letter dated 5 April 2019 in conjunction with the resolution of the G-BA of 1 August 2011 concerning the commissioning of the IQWiG to assess the benefits of medicinal products with new active ingredients in accordance with Section 35a SGB V, the G-BA commissioned the IQWiG to assess the dossier concerning the active ingredient glecaprevir/pibrentasvir

The dossier assessment by the IQWiG was submitted to the G-BA on 11 July 2019, and the written statement procedure was initiated with publication on the website of the G-BA on 15 July 2019. The deadline for submitting written statements was 5 August 2019.

The oral hearing was held on 26 August 2019.

In order to prepare a recommendation for a resolution, the Subcommittee on Medicinal Products commissioned a working group (Section 35a) consisting of the members nominated by the leading organisations of the care providers, the members nominated by the SHI umbrella organisation, and representatives of the patient organisations. Representatives of the IQWiG also participate in the sessions.

The evaluation of the written statements received and the oral hearing were discussed at the session of the subcommittee on 24 September 2019, and the proposed resolution was approved.

At its session on 17 October 2019, the plenum adopted a resolution to amend the Pharmaceuticals Directive.

## **Chronological course of consultation**

| Session                              | Date                                  | Subject of consultation  |
|--------------------------------------|---------------------------------------|--|
| Subcommittee<br>Medicinal<br>product | 10 July 2018                          | Determination of the appropriate comparator therapy  |
| Working group<br>Section 35a         | 20 August 2019                        | Information on written statements received; preparation of the oral hearing  |
| Subcommittee<br>Medicinal<br>product | 26 August 2019                        | Conduct of the oral hearing  |
| Working group<br>Section 35a         | 3 September 2019<br>17 September 2019 | Advice on the dossier evaluation of the Institute for Quality and Efficiency in Health Care (IQWiG), evaluation of the written statement procedure |
| Subcommittee<br>Medicinal<br>product | 24 September 2019                     | Concluding discussion of the proposed resolution   |
| Plenum                               | 17 October 2019                       | Adoption of the resolution on the amendment of Annex XII of the AM-RL  |

Berlin, 17 October 2019

Federal Joint Committee (G-BA) in accordance with Section 91 SGB V
The chair

Prof Hecken