



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

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Human Medicines Evaluation Division

## Assessment report for paediatric studies submitted according to Article 46 of the Regulation (EC) No 1901/2006

### Harvoni

ledipasvir / sofosbuvir

Procedure no: EMEA/H/C/003850/P46/022

### Note

Assessment report as adopted by the CHMP with all information of a commercially confidential nature deleted.

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# 1. Introduction

Gilead Sciences Ireland UC (Gilead) has submitted a final clinical study report the Gilead study GS-US-337-1904, in accordance with Article 46 of Regulation (EC) No 1901/2006. Gilead confirms that there are no regulatory consequences identified.

## 2. Scientific discussion

### 2.1. Information on the development program

This is a standalone study.

### 2.2. Information on the pharmaceutical formulation used in the study

Subjects were assigned to receive LDV/SOF 90/400 mg (1 x 90/400–mg tablet, i.e. adult tablet, or 4 x 22.5/100 mg tablets) once daily based on a swallowability assessment performed during screening period. All subjects were able to swallow the 90/400 mg tablet, the lower dose tablet was not used.

This is the approved dose for adolescents.

### 2.3. Clinical aspects

#### *Background*

Chronic hepatitis C is highly prevalent in Egyptian pediatric patients receiving cancer chemotherapy or following allogeneic bone-marrow transplantation (El-Sayed 2011 and 2004). The progression of HCV-related liver disease in this population may be rapid and a main cause of death in Egyptian patients with allogeneic bone marrow transplantation.

#### *The study*

Study GS-US-337-1904 [study period August 2016 to Feb 2019] was conducted at 1 study center in Egypt, in adolescents (12-18 years of age) with chronic hepatitis C infection of genotypes 1 or 4, who were receiving maintenance cancer chemotherapy for a hematologic malignancy. A total of 19 subjects were enrolled out of 24 screened.

Of those 19 enrolled, 16 were males, and 13/19 aged 12 to 15. All had genotype 4-infection, none had cirrhosis.

All 19 completed the 12 weeks of treatment, and SVR12 was achieved in 19/19.

There were no specific safety issues identified. Serious adverse events were reported in 3 subjects, non-related to the hep C therapy (but to underlying condition/cancer therapy). None of the chemotherapy interruptions or discontinuations was due to a study drug-related AE. Laboratory abnormalities were frequent, and deemed most likely caused by underlying treatment.

None experienced an HCV flare (defined in the protocol as  $\geq 3$ -fold increase in aALT combined with  $\geq 1 \log_{10}$  increase in HCV RNA from Day 1 of the study).

### 3. CHMP overall conclusion and recommendation

In this phase 2 study of limited size the efficacy and safety of sofosbuvir/ledipasvir in adolescents with chronic hepatitis C who were receiving a maintenance cancer chemotherapy regimen was without remarks. The outcome is rather expected; sofosbuvir/ledipasvir has been studied in fairly large number of patients with a prior liver transplant, i.e. and subsequent immunosuppressive therapy, with favourable efficacy and safety outcomes.

The company does not propose any labelling changes. This is endorsed.

**Fulfilled:**

No regulatory action required.