



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

EMA/290656/2016

## European Medicines Agency decision

P/0140/2016

of 20 May 2016

on the agreement of a paediatric investigation plan and on the granting of a deferral and on the granting of a waiver for doravirine / lamivudine / tenofovir disoproxil fumarate (EMA-001695-PIP01-14) in accordance with Regulation (EC) No 1901/2006 of the European Parliament and of the Council

### Disclaimer

This Decision does not constitute entitlement to the rewards and incentives referred to in Title V of Regulation (EC) No 1901/2006.

**Only the English text is authentic.**



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The European Medicines Agency,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to 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, Directive 2001/20/EC, Directive 2001/83/EC and Regulation (EC) No 726/2004<sup>1</sup>,

Having regard to Regulation (EC) No 726/2004 of the European Parliament and of the Council of 31 March 2004 laying down Community procedures for the authorisation and supervision of medicinal products for human and veterinary use and establishing a European Medicines Agency<sup>2</sup>,

Having regard to the application submitted by Merck Sharp & Dohme (Europe), Inc. on 10 October 2014 under Article 16(1) of Regulation (EC) No 1901/2006 also requesting a deferral under Article 20 of said Regulation and a waiver under Article 13 of said Regulation.

Having regard to the opinion of the Paediatric Committee of the European Medicines Agency, issued on 1 April 2016, in accordance with Article 18 of Regulation (EC) No 1901/2006, and Article 21 of said Regulation and Article 13 of said Regulation.

Having regard to Article 25 of Regulation (EC) No 1901/2006,

Whereas:

- (1) The Paediatric Committee of the European Medicines Agency has given an opinion on the agreement of a paediatric investigation plan and on the granting of a deferral.
- (2) It is therefore appropriate to adopt a decision agreeing a paediatric investigation plan.
- (3) It is therefore appropriate to adopt a decision granting a deferral.
- (4) It is therefore appropriate to adopt a decision granting a waiver.

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<sup>1</sup> OJ L 378, 27.12.2006, p.1.

<sup>2</sup> OJ L 136, 30.4.2004, p. 1.

Has adopted this decision:

**Article 1**

A paediatric investigation plan for doravirine / lamivudine / tenofovir disoproxil fumarate, tablet, granules, oral use, the details of which are set out in the opinion of the Paediatric Committee of the European Medicines Agency annexed hereto, together with its appendices, is hereby agreed.

**Article 2**

A deferral for doravirine / lamivudine / tenofovir disoproxil fumarate, tablet, granules, oral use, the details of which are set out in the opinion of the Paediatric Committee of the European Medicines Agency annexed hereto, together with its appendices, is hereby granted.

**Article 3**

A waiver for doravirine / lamivudine / tenofovir disoproxil fumarate, tablet, granules, oral use, the details of which are set out in the opinion of the Paediatric Committee of the European Medicines Agency annexed hereto, together with its appendices, is hereby granted.

**Article 4**

This decision is addressed to Merck Sharp & Dohme (Europe), Inc., Clos du Lynx, 5, B-1200 - Brussels Belgium.

Done at London, 20 May 2016

For the European Medicines Agency  
Zaïde Frias  
Head of Division  
Human Medicines Research and Development Support  
(Signature on file)



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

EMA/PDCO/34469/2016

London, 1 April 2016

## Opinion of the Paediatric Committee on the agreement of a Paediatric Investigation Plan and a deferral and a waiver

EMA-001695-PIP01-14

### Scope of the application

#### Active substance(s):

Doravirine / lamivudine / tenofovir disoproxil fumarate

#### Condition(s):

Treatment of human immunodeficiency virus type 1 (HIV-1) infection

#### Pharmaceutical form(s):

Tablet

Granules

#### Route(s) of administration:

Oral use

#### Name / corporate name of the PIP applicant:

Merck Sharp & Dohme (Europe), Inc.

### Basis for opinion

Pursuant to Article 16(1) of Regulation (EC) No 1901/2006 as amended, Merck Sharp & Dohme (Europe), Inc. submitted for agreement to the European Medicines Agency on 10 October 2014 an application for a paediatric investigation plan for the above mentioned medicinal product and a deferral under Article 20 of said Regulation and a waiver under Article 13 of said Regulation.

The procedure started on 19 November 2014.

Supplementary information was provided by the applicant on 17 December 2015.



## Opinion

1. The Paediatric Committee, having assessed the proposed paediatric investigation plan in accordance with Article 17 of Regulation (EC) No 1901/2006 as amended, recommends as set out in the appended summary report:

- to agree the paediatric investigation plan in accordance with Article 18 of said Regulation;
- to grant a deferral in accordance with Article 21 of said Regulation;
- to grant a waiver for one or more subsets of the paediatric population in accordance with Article 13 of said Regulation and concluded in accordance with Article 11(1)(c) of said Regulation, on the grounds that the specific medicinal product does not represent a significant therapeutic benefit over existing treatments for paediatric patients.

The Norwegian Paediatric Committee member agrees with the above-mentioned recommendation of the Paediatric Committee.

2. The measures and timelines of the agreed paediatric investigation plan and the subset(s) of the paediatric population and condition(s) covered by the waiver are set out in the Annex I.

This opinion is forwarded to the applicant and the Executive Director of the European Medicines Agency, together with its annex and appendix.

## **Annex I**

**The subset(s) of the paediatric population and condition(s) covered by the waiver and the measures and timelines of the agreed paediatric investigation plan (PIP)**

# 1. Waiver

## 1.1. Condition:

Treatment of human immunodeficiency virus-1 (HIV-1) infection

The waiver applies to:

- the paediatric population from birth to less than 2 years of age;
- granules, for oral use;

on the grounds that the specific medicinal product does not represent a significant therapeutic benefit over existing treatments.

And

- the paediatric population from birth to less than 12 years of age and weighing less than 35Kg;
- tablet, for oral use;
- on the grounds that the specific medicinal product does not represent a significant therapeutic benefit over existing treatments.

# 2. Paediatric investigation plan

## 2.1. Condition:

Treatment of human immunodeficiency virus type 1 (HIV-1) infection.

### 2.1.1. Indication(s) targeted by the PIP

Antiretroviral combination therapy, for the treatment of HIV-1 infection in adults and in children aged 2 to 18 years.

### 2.1.2. Subset(s) of the paediatric population concerned by the paediatric development

From 2 to less than 18 years of age.

### 2.1.3. Pharmaceutical form(s)

Granules

#### 2.1.4. Measures

| Area                    | Number of measures | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|-------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quality-related studies | 1                  | <b>Study 1</b><br>Development of an age-appropriate oral solid dosage form for the fixed dose combination doravirine, lamivudine, tenofovir disoproxil fumarate..                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Non-clinical studies    | 2                  | <b>Study 2</b><br>Dose range-finding juvenile toxicity study<br><br><b>Study 3</b><br>Definitive juvenile toxicity study                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Clinical studies        | 6                  | <b>Study 4</b><br>Open-label two periods trial to evaluate pharmacokinetic, safety, and activity, of doravirine and doravirine fixed dose combination with lamivudine and tenofovir disoproxil fumarate in children from 12 to less than 18 years of age with HIV-1 infection<br><br><b>Study 5</b><br>Open-label two periods trial to evaluate pharmacokinetic, safety and activity, of doravirine and doravirine fixed dose combination with lamivudine and tenofovir disoproxil fumarate in paediatric patients from 2 to less than 12 years of age with HIV-1 infection<br><br><b>Study 6</b><br>Relative bioavailability study with doravirine adult oral granules to be part of the fixed dose combination in healthy adults<br><br><b>Study 7</b><br>Relative bioavailability study with doravirine age appropriate oral granules new formulation as be part of the fixed dose combination.<br><br><b>Study 8</b><br>Relative bioavailability study with lamivudine age appropriate formulation to be part of the fixed dose combination in healthy adults |

|                                                 |   |                                                                                                                                                                            |
|-------------------------------------------------|---|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 |   | <b>Study 9</b><br>Relative bioavailability study with tenofovir disoproxil fumarate age appropriate formulation to be part of the fixed dose combination in healthy adults |
| Extrapolation, modelling and simulation studies | 1 | <b>Study 10</b><br>Dose finding modelling and simulation study in children from 2 to less than less than 18 years of age                                                   |
| Other studies                                   | 0 | Not applicable                                                                                                                                                             |
| Other measures                                  | 0 | Not applicable                                                                                                                                                             |

### 3. Follow-up, completion and deferral of PIP

|                                                                                       |              |
|---------------------------------------------------------------------------------------|--------------|
| Concerns on potential long term safety/efficacy issues in relation to paediatric use: | No           |
| Date of completion of the paediatric investigation plan:                              | By July 2024 |
| Deferral for one or more measures contained in the paediatric investigation plan:     | Yes          |