

EMA/107503/2018

## European Medicines Agency decision

P/0067/2018

of 16 March 2018

on the acceptance of a modification of an agreed paediatric investigation plan for autologous CD34+ haematopoietic stem cells transduced with lentiviral vector encoding the human betaA-T87Q-globin gene (EMEA-001665-PIP01-14-M02) 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 European Medicines Agency's decision P/0257/2015 issued on 30 October 2015 and the decision P/0297/2016 issued on 4 November 2016,

Having regard to the application submitted by bluebird bio France on 3 November 2017 under Article 22 of Regulation (EC) No 1901/2006 proposing changes to the agreed paediatric investigation plan with a deferral and a waiver,

Having regard to the opinion of the Paediatric Committee of the European Medicines Agency, issued on 26 January 2018, in accordance with Article 22 of Regulation (EC) No 1901/2006,

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 acceptance of changes to the agreed paediatric investigation plan.
- (2) It is therefore appropriate to adopt a decision on the acceptance of changes to the agreed paediatric investigation plan.

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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**

Changes to the agreed paediatric investigation plan for autologous CD34+ haematopoietic stem cells transduced with lentiviral vector encoding the human betaA-T87Q-globin gene, dispersion for infusion, intravenous use, are hereby accepted in the scope set out in the opinion of the Paediatric Committee of the European Medicines Agency annexed hereto, together with its appendices.

**Article 2**

This decision is addressed to bluebird bio France, 155, rue du Faubourg Saint-Denis, 75010 - Paris, France.

EMA/PDCO/757513/2017

London, 26 January 2018

## Opinion of the Paediatric Committee on the acceptance of a modification of an agreed Paediatric Investigation Plan EMA-001665-PIP01-14-M02

### Scope of the application

#### Active substance(s):

Autologous CD34+ haematopoietic stem cells transduced with lentiviral vector encoding the human betaA-T87Q-globin gene

#### Condition(s):

Treatment of beta-thalassaemia

#### Pharmaceutical form(s):

Dispersion for infusion

#### Route(s) of administration:

Intravenous use

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

bluebird bio France

### Basis for opinion

Pursuant to Article 22 of Regulation (EC) No 1901/2006 as amended, bluebird bio France submitted to the European Medicines Agency on 3 November 2017 an application for modification of the agreed paediatric investigation plan with a deferral and a waiver as set out in the European Medicines Agency's decision P/0257/2015 issued on 30 October 2015 and the decision P/0297/2016 issued on 4 November 2016.

The application for modification proposed changes to the agreed paediatric investigation plan.

The procedure started on 28 November 2017.

### Scope of the modification

Some measures of the Paediatric Investigation Plan have been modified.

## Opinion

1. The Paediatric Committee, having assessed the application in accordance with Article 22 of Regulation (EC) No 1901/2006 as amended, recommends as set out in the appended summary report:
  - to agree to changes to the paediatric investigation plan in the scope set out in the Annex I of this opinion.

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

2. The measures and timelines of the 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 beta-thalassaemia

The waiver applies to:

- the paediatric population weighing less than 6 kg;
- dispersion for infusion, intravenous use;
- on the grounds that the specific medicinal product does not represent a significant therapeutic benefit as clinical studies(s) are not feasible.

# 2. Paediatric investigation plan

## 2.1. Condition

Treatment of beta-thalassaemia

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

Treatment of beta-thalassaemia major and severe intermedia

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

From 6 kg of weight to less than 18 years of age

### 2.1.3. Pharmaceutical form(s)

Dispersion for infusion

### 2.1.4. Measures

| Area                    | Number of measures | Description                                                                                                                                                                                                                                                                                                                                                                                                                                     |
|-------------------------|--------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quality-related studies | 0                  | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Non-clinical studies    | 0                  | Not applicable.                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| Clinical studies        | 3                  | <b>Study 1</b><br><br>Open-label, non-randomised, single dose trial with 2 cohorts to evaluate activity and safety of autologous CD34+ haematopoietic stem cells transduced with lentiviral vector encoding the human betaA-T87Q-globin gene (LentiGlobin BB305) in adolescents from 12 years to less than 18 years of age (and adults) with transfusion-dependent beta-thalassaemia (TDT) who do not have a beta <sup>0</sup> mutation at both |

|                                                 |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------------|---|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                                 |   | <p>alleles of the beta-globin (HBB) gene [Cohort 1] and in children weighing at least 6 kg and less than 12 years of age with TDT who do not have a beta<sup>0</sup> mutation at both alleles of the HBB gene [Cohort 2].</p> <p><b>Study 2</b></p> <p>This study has been deleted in procedure No EMEA-001665-PIP01-14-M01.</p> <p><b>Study 3</b></p> <p>Open-label, non-randomised, single dose trial to evaluate activity and safety of LentiGlobin BB305 in children weighing at least 6 kg and less than 18 years of age (and adults) with severe beta-thalassaemia intermedia.</p> <p><b>Study 4</b></p> <p>Open-label, non-randomised, single dose trial to evaluate activity and safety of LentiGlobin BB305 in adolescents and children weighing at least 6 kg and less than 18 years of age (and adults) with transfusion-dependent beta thalassaemia (TDT) who have a beta<sup>0</sup> mutation at both alleles of the beta-globin (HBB) gene.</p> |
| Extrapolation, modelling and simulation studies | 0 | Not applicable                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                |
| 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: | Yes              |
| Date of completion of the paediatric investigation plan:                              | By December 2022 |
| Deferral for one or more measures contained in the paediatric investigation plan:     | Yes              |