



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

EMA/527327/2014

## European Medicines Agency decision

P/0245/2014

of 29 September 2014

on the agreement of a paediatric investigation plan and on the granting of a deferral and on the granting of a waiver for recombinant soluble fusion protein with a modified form of the extracellular domain of human activin receptor IIB linked to the human IgG1 Fc domain (ACE-536) (EMEA-001521-PIP01-13) 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 Acceleron Pharma, Inc. on 11 November 2013 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 15 August 2014, 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 and on the granting of a waiver.
- (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 recombinant soluble fusion protein with a modified form of the extracellular domain of human activin receptor IIB linked to the human IgG1 Fc domain (ACE-536), solution for injection, subcutaneous 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 recombinant soluble fusion protein with a modified form of the extracellular domain of human activin receptor IIB linked to the human IgG1 Fc domain (ACE-536), solution for injection, subcutaneous 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 recombinant soluble fusion protein with a modified form of the extracellular domain of human activin receptor IIB linked to the human IgG1 Fc domain (ACE-536), solution for injection, subcutaneous 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 Acceleron Pharma, Inc., 128 Sidney Street, 02139 – Cambridge, United States.

Done at London, 29 September 2014

For the European Medicines Agency  
Guido Rasi  
Executive Director  
(Signature on file)

EMA/PDCO/342034/2014

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

EMA-001521-PIP01-13

### Scope of the application

#### Active substance(s):

Recombinant soluble fusion protein with a modified form of the extracellular domain of human activin receptor IIB linked to the human IgG1 Fc domain (ACE-536)

#### Condition(s):

Treatment of myelodysplastic syndromes

Treatment of beta-thalassaemia

#### Pharmaceutical form(s):

Solution for injection

#### Route(s) of administration:

Subcutaneous use

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

Accelaron Pharma, Inc.

### Basis for opinion

Pursuant to Article 16(1) of Regulation (EC) No 1901/2006 as amended, Accelaron Pharma, Inc. submitted for agreement to the European Medicines Agency on 11 November 2013 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 18 December 2013.

Supplementary information was provided by the applicant on 22 May 2014. The applicant proposed modifications to the paediatric investigation plan.

## 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.

London, 15 August 2014

On behalf of the Paediatric Committee  
Dr Dirk Mentzer, Chairman  
(Signature on file)

## **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 myelodysplastic syndromes

The waiver applies to:

- all subsets of the paediatric population from birth to less than 18 years of age;
- solution for injection, subcutaneous use;
- on the grounds that the specific medicinal product does not represent a significant therapeutic benefit over existing treatments.

### **1.2. Condition:**

Treatment of beta-thalassaemia

The waiver applies to:

- the paediatric population from birth to less than 6 months;
- Solution for injection, subcutaneous 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 beta-thalassaemia

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

Treatment of anaemia in patients with beta-thalassaemia intermedia and major

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

From 6 months to less than 18 years of age.

#### **2.1.3. Pharmaceutical form(s)**

Solution for injection

#### 2.1.4. Measures

| Area                                            | Number of measures | Description                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |
|-------------------------------------------------|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Quality-related studies                         | 1                  | Study 1<br><br>Development of an age-appropriate formulation in a self-administration device for subcutaneous use, allowing sufficient accuracy of dose measurement and delivery in all age groups to be treated.                                                                                                                                                                                                                                                                                                                      |
| Non-clinical studies                            | 2                  | Study 2 (1383657025333)<br><br>Dose range-finding juvenile toxicity study<br><br>Study 3 (1381154982795)<br><br>Definitive juvenile toxicity study                                                                                                                                                                                                                                                                                                                                                                                     |
| Clinical studies                                | 2                  | Study 4 (1378937733170)<br><br>Two-part, double-blind, randomised, placebo controlled trial to evaluate pharmacokinetics, safety and efficacy of ACE-536 in children from 6 months to less than 18 years of age with transfusion-dependent beta-thalassaemia.<br><br>Study 5 (1406216840211)<br><br>Two-part, double-blind, randomised, placebo controlled trial to evaluate pharmacokinetics, safety and efficacy of ACE-536 in children from 6 months to less than 18 years of age with non-transfusion-dependent beta-thalassaemia. |
| 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 June 2019 |
| Deferral for one or more measures contained in the paediatric investigation plan:     | Yes          |