



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

EMA/706526/2021

## European Medicines Agency decision P/0539/2021

of 31 December 2021

on the agreement of a paediatric investigation plan for 2'-O-(2-methoxyethyl) modified antisense oligonucleotide targeting glial fibrillary acidic protein pre-mRNA (ION373), (EMA-002822-PIP01-20) 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 Ionis Pharmaceuticals on 4 June 2020 under Article 16(1) of Regulation (EC) No 1901/2006 also requesting a waiver under Article 13 of said Regulation,

Having regard to the opinion of the Paediatric Committee of the European Medicines Agency, issued on 12 November 2021, in accordance with Article 17 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 agreement of a paediatric investigation plan.
- (2) It is therefore appropriate to adopt a decision agreeing a 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**

A paediatric investigation plan for 2'-O-(2-methoxyethyl) modified antisense oligonucleotide targeting glial fibrillary acidic protein pre-mRNA (ION373), solution for injection, intrathecal 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**

This decision is addressed to Ionis Pharmaceuticals, 2855 Gazelle Court, 92010 – Carlsbad, USA.



EUROPEAN MEDICINES AGENCY  
SCIENCE MEDICINES HEALTH

EMA/PDCO/470173/2021  
Amsterdam, 12 November 2021

## Opinion of the Paediatric Committee on the agreement of a Paediatric Investigation Plan

EMA-002822-PIP01-20

### Scope of the application

#### Active substance(s):

2'-O-(2-methoxyethyl) modified antisense oligonucleotide targeting glial fibrillary acidic protein pre-mRNA (ION373)

#### Condition(s):

Treatment of Alexander disease

#### Pharmaceutical form(s):

Solution for injection

#### Route(s) of administration:

Intrathecal use

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

Ionis Pharmaceuticals

### Basis for opinion

Pursuant to Article 16(1) of Regulation (EC) No 1901/2006 as amended, Ionis Pharmaceuticals submitted for agreement to the European Medicines Agency on 4 June 2020 an application for a paediatric investigation plan for the above mentioned medicinal product and a waiver under Article 13 of said Regulation.

The procedure started on 6 July 2020.

Supplementary information was provided by the applicant on 4 August 2021. The applicant proposed modifications to the paediatric investigation plan and withdrew its request for a waiver.



## 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 17(1) of said Regulation.

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

2. The measures and timelines of the agreed paediatric investigation plan 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

Not applicable.

## 2. Paediatric investigation plan

### 2.1. Condition:

Treatment of Alexander disease

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

Treatment of Alexander disease

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

From birth 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	0	Not applicable.
Non-clinical studies	0	Not applicable.
Clinical studies	1	<b>Study 1 (ION373-CS1)</b> Double-blind, randomised, placebo controlled trial to evaluate pharmacokinetics, safety, efficacy of ION373 in children from birth to less than 18 years of age (and adults) with Alexander disease.
Extrapolation, modelling and simulation studies	1	<b>Study 2</b> Modelling and simulation study to evaluate the relationship between the pharmacokinetics and pharmacodynamics of ION373 in treatment of Alexander disease.
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 September 2024
Deferral for one or more measures contained in the paediatric investigation plan:	No