Clinical trial results:
An Open-Label Extension Study to Evaluate the Long-Term Safety, Tolerability, Biological Activity, and Systemic Exposure of ATYR1940 in Adult Patients with Facioscapulohumeral Muscular Dystrophy (FSHD)

Summary

EudraCT number	2015-001912-36
Trial protocol	NL
Global end of trial date	14 March 2017

Results information

Result version number	v1 (current)
This version publication date	23 December 2018
First version publication date	23 December 2018
Summary attachment (see zip file)	ATYR1940-C-005 CSR synopsis (ATYR1940-C-005_CSR_Synopsis_03JAN2018.pdf)

Trial information

Trial identification

Sponsor protocol code	ATYR1940-C-005

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	-
WHO universal trial number (UTN)	-
Other trial identifiers	IND Number: 122045

Notes:

Sponsors

Sponsor organisation name	aTyr Pharma, Inc.
Sponsor organisation address	3545 John Hopkins Court, Suite #250, San Diego, CA, United States, 92121
Public contact	Clinical Trial Operations, Voisin Consulting, clinicaltrialinformation@voisinconsulting.com
Scientific contact	Clinical Trial Operations, Voisin Consulting, clinicaltrialinformation@voisinconsulting.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	03 January 2018
Is this the analysis of the primary completion data?	Yes
Primary completion date	14 March 2017
Global end of trial reached?	Yes
Global end of trial date	14 March 2017
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

Evaluate the safety, tolerability, and immunogenicity of long-term treatment with intravenous (IV) ATYR1940 in adult patients with facioscapulohumeral muscular dystrophy (FSHD) previously enrolled in clinical study ATYR1940-C-002.

All clinically significant laboratory abnormalities were reported as adverse events and therefore appear in the Adverse events section of this dataset. As a consequence, the endpoints reported in this dataset are limited to the most relevant safety endpoints.

Protection of trial subjects:

The study process, benefits and risks of participating in the study were explained to each subject. In addition, if the study drug needed to be stopped for safety, the doctor, his/her staff along with the medical monitor, were to continue to monitor participant's health and determine what treatment should be given (if any) until the symptoms or findings had resolved or until a satisfactory conclusion was reached.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	31 July 2015
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Netherlands: 5
Country: Number of subjects enrolled	Italy: 3
Country: Number of subjects enrolled	United States: 1
Worldwide total number of subjects	9
EEA total number of subjects	8

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0

Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	6
From 65 to 84 years	3
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Patients who were enrolled in ≥Cohort 3 and completed the parent study ATYR1940-C-002 through Week 13; demonstrated acceptable tolerability of study drug; were considered by the Investigator to be compliant with study drug and the study procedures; and did not meet any criterion for discontinuation.

Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Arm title	All patients - 3 mg/kg

Arm description: -

Arm type	Experimental
Investigational medicinal product name	ATYR1940
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Concentrate for solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

Study drug has been dispensed for the patient according to their last dose assignment in the parent study.

Number of subjects in period 1	All patients - 3 mg/kg
Started	9
Completed	9

Baseline characteristics

Reporting groups	
Reporting group title	Overall trial

Reporting group description: -

Reporting group values	Overall trial	Total	
Number of subjects	9	9	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	6	6	
From 65-84 years	3	3	
85 years and over	0	0	
Age continuous Units: years			
arithmetic mean	53.2		
full range (min-max)	36 to 72	-	
Gender categorical Units: Subjects			
Female	3	3	
Male	6	6	

End points

End points reporting groups

Reporting group title	All patients - 3 mg/kg

Reporting group description: -

Primary: Incidence of Treatment Emergent Adverse Events (TEAEs)

End point title	Incidence of Treatment Emergent Adverse Events (TEAEs)[1]

End point description:

End point type	Primary

End point timeframe:

All study visits until the end of the study

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: No statistical analysis was performed for any of the primary/safety endpoints.

End point values	All patients - 3 mg/kg			
Subject group type	Reporting group			
Number of subjects analysed	9			
Units: number of subjects with at least 1 TEAE	9			

Statistical analyses

No statistical analyses for this end point

Primary: Anti-drug antibodies (ADA)

End point title	Anti-drug antibodies (ADA)[2]

End point description:

End point type	Primary

End point timeframe:

Eligibility check, Weeks 2 to 4 then every 3 months, 1-week follow-up, 4-week follow-up, 12-week follow-up

Notes:

[2] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: No statistical analysis was performed for any of the primary/safety endpoints.

End point values	All patients - 3 mg/kg			
Subject group type	Reporting group			
Number of subjects analysed	9			
Units: number of confirmed positive	7			

Statistical analyses

No statistical analyses for this end point

Primary: Jo-1 antibodies

End point title	Jo-1 antibodies[3]

End point description:

End point type	Primary

End point timeframe:

Eligibility check, weekly from Week 2, 1-week follow-up, 4-week follow-up, 12-week follow-up

Notes:

[3] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: No statistical analysis was performed for any of the primary/safety endpoints.

End point values	All patients - 3 mg/kg			
Subject group type	Reporting group			
Number of subjects analysed	9			
Units: number of subjects Jo-1 positive	0			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From informed consent to End of Study visit.

Adverse event reporting additional description:

Due to the small study size (N=9), TEAEs reported for ≥ 2 patients treated with ATYR1940 are listed in the section below. The number of occurrences per TEAE is not available in the source data, the field "Occurrences all number" therefore corresponds to the number of subjects affected per TEAE.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	18.1

Reporting groups

Reporting group title	All patients - 3 mg/kg

Reporting group description: -

Serious adverse events	All patients - 3 mg/kg		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 9 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

Frequency threshold for reporting non-serious adverse events: 5 %

Non-serious adverse events	All patients - 3 mg/kg		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	9 / 9 (100.00%)		
Investigations			
Hepatic enzyme increased			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Injury, poisoning and procedural complications			
Infusion-related reaction			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Wound			

subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Nervous system disorders			
Headache			
subjects affected / exposed	6 / 9 (66.67%)		
occurrences (all)	6		
General disorders and administration site conditions			
Fatigue			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Gastrointestinal disorders			
Abdominal pain upper			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Diarrhoea			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Vomiting			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Back pain			
subjects affected / exposed	3 / 9 (33.33%)		
occurrences (all)	3		
Myalgia			
subjects affected / exposed	4 / 9 (44.44%)		
occurrences (all)	4		
Pain in extremity			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		
Infections and infestations			
Influenza			

subjects affected / exposed	3 / 9 (33.33%)		
occurrences (all)	3		
Nasopharyngitis			
subjects affected / exposed	2 / 9 (22.22%)		
occurrences (all)	2		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
04 November 2015	Version 2.0 (Amendment 1; 04 November 2015)
11 January 2016	Version 3.0 (Amendment 2; 11 January 2016)
09 April 2016	Version 4.0 (Amendment 3; 09 April 2016)

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported