Clinical trial results:
A phase II, randomized, double-blind, placebo-controlled, two-period, crossover trial to assess the efficacy and safety of begelomab in combination with standard steroid and/or immunosuppressant therapy in the treatment of patients with dermatomyositis

Summary

EudraCT number	2021-000898-83
Trial protocol	IT
Global end of trial date	16 July 2024

Results information

Result version number	v1 (current)
This version publication date	16 February 2025
First version publication date	16 February 2025

Trial information

Trial identification

Sponsor protocol code	ADN016

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	-
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	ADIENNE SA
Sponsor organisation address	Via Zurigo 46, Lugano, Switzerland, 6900
Public contact	Renata Palmieri Clinical Developmen, ADIENNE SA, 0041 0912104726, renata.palmieri@adienne.com
Scientific contact	Renata Palmieri Clinical Developmen, ADIENNE SA, 0041 0912104726, renata.palmieri@adienne.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	12 December 2024
Is this the analysis of the primary completion data?	Yes
Primary completion date	16 July 2024
Global end of trial reached?	Yes
Global end of trial date	16 July 2024
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

To assess the efficacy of adding begelomab to glucocorticoid and/or immunosuppressant therapy (methotrexate, azathioprine, mycophenolate, cyclosporine) compared with glucocorticoid and/or immunosuppressant plus placebo in the treatment of patients with dermatomyositis (DM).

Protection of trial subjects:

Written informed consent before starting any study-related procedure. Although patients were informed, they could withdraw consent at any time.

Background therapy:

Glucocorticoid and/or immunosuppressant therapy (methotrexate, azathioprine, mycophenolate, cyclosporine)

Evidence for comparator:

Placebo

Actual start date of recruitment	24 October 2023
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Italy: 4
Worldwide total number of subjects	4
EEA total number of subjects	4

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)	4
From 65 to 84 years	0

85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Since only 4 patients were enrolled compared to the 20 planned in the protocol, despite the efforts made by the centres participating in the clinical study, in screening the subjects, it was not considered plausible that the target could be achieved in a reasonable time as initially planned and the study was prematurely terminated

Pre-assignment

Screening details: -

Pre-assignment period milestones

Number of subjects started	4
Number of subjects completed	4

Period 1

Period 1 title	Period I (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Monitor

Arms

Are arms mutually exclusive?	No
Arm title	Begelomab

Arm description:

Eligible patients begun treatment in the First Period of the experimental phase with begelomab or the corresponding placebo. After 30 days, at the end of the treatment period, a wash-out period of 3 months was instituted before crossing over to the Second Period.
The Second Treatment period was identical to the First Treatment Period with the exception of IMP that was administered according to crossover design: patients treated with begelomab in the First Period were assigned to placebo and vice versa.

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

Dosage and administration details:

Begelomab 2mg/mL, each vial contains 10ml equal to 20mg; Begelomab 16 mg/m2 was administered as a 1-hour intravenous infusion once daily for five days after randomisation (Days 1-5) during the induction phase of each period.
During the Maintenance phase, patients were then administered with 16 mg/m2 begelomab three times per week (Mon, Wed, Fri) for the following three weeks and two times (Mon, Wed) on the fourth week for additional 11 administrations (Days 8, 10, 12, 15, 17, 19, 22, 24, 26, 29, 31) for a total of 16 doses

Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Concentrate for solution for infusion
Routes of administration	Concentrate for solution for infusion

Dosage and administration details:

Placebo corresponding to begelomab was administered as a 1-hour intravenous infusion once daily for five days after randomisation (Days 1-5) during the induction phase of each period.
During the Maintenance phase, patients were then administered with placebo three times per week

(Mon, Wed, Fri) for the following three weeks and two times (Mon, Wed) on the fourth week for additional 11 administrations (Days 8, 10, 12, 15, 17, 19, 22, 24, 26, 29, 31) for a total of 16 doses

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Number of subjects in period 1	Begelomab	Placebo
Started	4	3
Completed	0	0
Not completed	4	3
Study terminated by Sponsor	1	1
Adverse event, non-fatal	3	2

Baseline characteristics

Reporting groups	
Reporting group title	Period I

Reporting group description: -

Reporting group values	Period I	Total	
Number of subjects	4	4	
Age categorical			
Since only 4 patients were enrolled no statistic analysis was performed			
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)	4	4	
From 65-84 years	0	0	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female	4	4	
Male	0	0	

Subject analysis sets	
Subject analysis set title	Safety Population
Subject analysis set type	Safety analysis

Subject analysis set description:

Since only 4 patients have been enrolled compared to the 20 planned in the protocol, despite the efforts made by the centres participating in the clinical study, in screening the subjects, it was not considered plausible that the target needed for statistical analysis could be achieved in a reasonable time as initially planned and the study was prematurely terminated.

Reporting group values	Safety Population		
Number of subjects	4		
Age categorical			
Since only 4 patients were enrolled no statistic analysis was performed			
Units: Subjects			
In utero	0		
Preterm newborn infants (gestational age < 37 wks)	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)	4		

From 65-84 years	0		
85 years and over	0		

Gender categorical Units: Subjects			
Female	4		
Male			

End points

End points reporting groups

Reporting group title	Begelomab

Reporting group description:

Eligible patients begun treatment in the First Period of the experimental phase with begelomab or the corresponding placebo. After 30 days, at the end of the treatment period, a wash-out period of 3 months was instituted before crossing over to the Second Period.
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Reporting group title	Placebo

Reporting group description:

Eligible patients begun treatment in the First Period of the experimental phase with begelomab or the corresponding placebo. After 30 days, at the end of the treatment period, a wash-out period of 3 months was instituted before crossing over to the Second Period.
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Primary: Adverse Events

End point title	Adverse Events[1]

End point description:

End point type	Primary

End point timeframe:

From enrollment to the end of follow-up phase

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: The premature termination of the study, due to lack of enrolment and the very limited number of subjects enrolled prevented to conduct any of the planned efficacy and safety analyses

End point values	Begelomab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	4	3		
Units: Number	4	3		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events:	
From the first treatment administration to follow-up end	
Assessment type	Systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	26

Reporting groups	
Reporting group title	Begelomab
Reporting group description: -	
Reporting group title	Placebo
Reporting group description: -	

Serious adverse events	Begelomab	Placebo	
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	
Vascular disorders			
Hypotension			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skin and subcutaneous tissue disorders			
Rash			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

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

Non-serious adverse events	Begelomab	Placebo	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	3 / 4 (75.00%)	2 / 3 (66.67%)	
General disorders and administration site conditions			

Chest discomfort			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Chills			
subjects affected / exposed	1 / 4 (25.00%)	1 / 3 (33.33%)	
occurrences (all)	1	1	
Feeling hot			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Pyrexia			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Immune system disorders			
Hypersensitivity			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Swollen tongue			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Respiratory, thoracic and mediastinal disorders			
Cough			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Investigations			
Blood immunoglobulin E increased			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Protein C increased			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Red blood cell sedimentation rate increased			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Troponin T increased			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	

Urine Leukocyte Esterase positive			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Cardiac disorders			
Palpitations			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Nervous system disorders			
Headache			
subjects affected / exposed	2 / 4 (50.00%)	0 / 3 (0.00%)	
occurrences (all)	3	0	
Hypoesthesia			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Hypoesthesia oral			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Blood and lymphatic system disorders			
Eosinophilia			
subjects affected / exposed	1 / 4 (25.00%)	1 / 3 (33.33%)	
occurrences (all)	2	1	
Lymphopenia			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
Abdominal pain upper			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Dyspepsia			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Dysphagia			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Nausea			
subjects affected / exposed	1 / 4 (25.00%)	1 / 3 (33.33%)	
occurrences (all)	1	1	

Skin and subcutaneous tissue disorders			
Pruritus			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Rush pruritic			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Renal and urinary disorders			
Leukocyturia			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Renal colic			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Musculoskeletal and connective tissue disorders			
Back pain			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	2	0	
Fibromyalgia			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Muscular weakness			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Neck pain			
subjects affected / exposed	1 / 4 (25.00%)	0 / 3 (0.00%)	
occurrences (all)	1	0	
Infections and infestations			
Nasopharyngitis			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Urinary tract infection			
subjects affected / exposed	0 / 4 (0.00%)	1 / 3 (33.33%)	
occurrences (all)	0	1	
Metabolism and nutrition disorders			

Vitamin D deficiency subjects affected / exposed occurrences (all)	0 / 4 (0.00%) 0	1 / 3 (33.33%) 1	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
16 July 2024	The reasons for this decision lie in the difficulties encountered in enrolling patients due to the rarity of the clinical condition being tested. Since only 4 patients have been enrolled compared to the 20 foreseen by the protocol, despite the efforts made by the centres participating in the clinical study in screening the subjects, it was not considered plausible that the target necessary for statistical analysis could be achieved in a reasonable time as initially planned.	-

Notes:

Limitations and caveats

None reported