Clinical trial results:
A Phase 2, Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Efficacy and Safety of ANB019 in the Treatment of Subjects With Ichthyosis

Summary

EudraCT number	2020-003476-41
Trial protocol	PL
Global end of trial date	19 November 2021

Results information

Result version number	v1 (current)
This version publication date	12 May 2023
First version publication date	12 May 2023

Trial information

Trial identification

Sponsor protocol code	ANB019-206

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04697056
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	AnaptysBio Inc.
Sponsor organisation address	10770 Wateridge Circle, Suite 210, San Diego, CA, United States, 92121
Public contact	Bruce Randazzo, AnaptysBio Inc., 001 (858) 362-6343, brandazzo@anaptysbio.com
Scientific contact	Bruce Randazzo, AnaptysBio Inc., 001 (858) 362-6343, brandazzo@anaptysbio.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	19 November 2021
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	19 November 2021
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

To assess the effect of imsidolimab (ANB019) compared with placebo in adolescent and adult participants with ichthyosis as measured by Ichthyosis Area Severity Index (IASI) total score.

Protection of trial subjects:

This study was performed in compliance with ethical principles that have their origin in the Declaration of Helsinki and that are consistent with International Council for Harmonisation of Technical Requirements for Pharmaceuticals for Human Use (ICH) Good Clinical Practice (GCP) and the applicable laws and regulations.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	25 January 2021
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	United States: 5
Worldwide total number of subjects	5
EEA total number of subjects	0

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)	1
Adults (18-64 years)	3
From 65 to 84 years	1
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Participants with confirmed diagnosis of ichthyosis by genetic testing of ichthyosis were enrolled into the study.

Pre-assignment

Screening details:

7 participants were screened for eligibility and 5 participants were randomized into the study.

Period 1

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

Blinding implementation details:

The Sponsor, Investigator, and participants were blinded to treatment assignment of imsidolimab or placebo. An unblinded pharmacist was responsible for study treatment dispensing.

Arms

Are arms mutually exclusive?	Yes
Arm title	Imsidolimab

Arm description:

Participants received a starting dose of 400 milligrams (mg) of imsidolimab on Day 1 followed by 200 mg imsidolimab every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.

Arm type	Experimental
Investigational medicinal product name	Imsidolimab
Investigational medicinal product code	ANB019
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Imsidolimab was administered by clinic staff trained in best practices for subcutaneous administration at starting dose of 400 mg on Day 1 followed by 200 mg imsidolimab every 4 weeks (Days 29, 57 and 85).

Arm title	Placebo

Arm description:

Participants received imsidolimab matching placebo on Day 1 and thereafter, every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants received imsidolimab matching placebo on Day 1 and thereafter, every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.

Number of subjects in period 1	Imsidolimab	Placebo
Started	4	1
Completed	0	0
Not completed	4	1
Study termination	4	1

Baseline characteristics

Reporting groups	
Reporting group title	Imsidolimab
Reporting group description:	
Participants received a starting dose of 400 milligrams (mg) of imsidolimab on Day 1 followed by 200 mg imsidolimab every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.	
Reporting group title	Placebo
Reporting group description:	
Participants received imsidolimab matching placebo on Day 1 and thereafter, every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.	

Reporting group values	Imsidolimab	Placebo	Total
Number of subjects	4	1	5
Age categorical Units: Subjects			
Age continuous			
99999 indicates standard deviation is not estimable because age data is reported for only 1 participant in the placebo group.			
Units: years			
arithmetic mean	39.0	66.0	
standard deviation	± 20.15	± 99999	-
Gender categorical Units: Subjects			
Female	3	0	3
Male	1	1	2
Ethnicity Units: Subjects			
Not Hispanic or Latino	4	1	5
Hispanic or Latino	0	0	0
Unknown or Not Reported	0	0	0
Race Units: Subjects			
Asian	2	1	3
Black or African American	1	0	1
White	1	0	1

End points

End points reporting groups

Reporting group title	Imsidolimab
Reporting group description:	
Participants received a starting dose of 400 milligrams (mg) of imsidolimab on Day 1 followed by 200 mg imsidolimab every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.	
Reporting group title	Placebo
Reporting group description:	
Participants received imsidolimab matching placebo on Day 1 and thereafter, every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.	

Primary: Change From Baseline in Ichthyosis Area Severity Index (IASI) Total Score at Week 16

End point title	Change From Baseline in Ichthyosis Area Severity Index (IASI) Total Score at Week 16[1]
End point description:	
IASI quantified the severity of participants ichthyosis based on severity of erythema/scaling & percentage of body surface area (BSA) affected. Degree of erythema & scaling scored from 0 (none) to 4 (very severe) for each of 4 body regions (BR) [A1: head & neck (H&N), A2: upper limbs (UL), A3: trunk (T), A4: lower limbs (LL)]. Percentage of BSA involved for each BR (B1: % in H&N, B2: % in UL, B3: % in T, B4: % in LL). Percentage involvement was assigned numerical value (0= 0, 1%-9%= 1, 10%-29%= 2, 30%-49%= 3, 50%-69%= 4, 70%-89%= 5, 90%-100%= 6).Total extent was determined using multiplier considering % of total BSA by each BR (C1= 0.1 for H&N; C2= 0.2 for UL; C3= 0.3 for T; C4= 0.4 for LL). IASI-Erythema (E)= A1E x B1 x C1 + A2E x B2 x C2 + A3E x B3 x C3 + A4E x B4 x C4 (score 0 to 24) IASI-Scaling (S)= A1S x B1 X C1 + A2S x B2 x C2 + A3S x B3 x C3 + A4S x B4 x C4 (score 0 to 24) IASI total score= IASI-E + IASIS score ranged from 0 - 48, higher score indicated worse disease state.	
End point type	Primary
End point timeframe:	
Baseline and Week 16	

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 the primary endpoint. Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

End point values	Imsidolimab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	0[2]	0[3]		
Units: units on a scale				
arithmetic mean (standard deviation)	()	()		

Notes:

[2] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

[3] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

Statistical analyses

No statistical analyses for this end point

Secondary: Percent Change From Baseline in IASI Total Score at Week 16

End point title	Percent Change From Baseline in IASI Total Score at Week 16

End point description:

IASI quantified the severity of participants ichthyosis based on severity of erythema/scaling, & percentage of BSA affected. Degree of erythema & scaling scored from 0 (none) to 4 (very severe) for each of 4 BR (A1: H&N, A2: UL, A3: T, A4: LL). Percentage of BSA involved for each BR (B1: % in H&N, B2: % in UL, B3: % in T, B4: % in LL). Percentage involvement was assigned numerical value (0= 0, 1%-9%= 1, 10%-29%= 2, 30%-49%= 3, 50%-69%= 4, 70%-89%=5, 90%-100%= 6). Total extent was determined using a multiplier considering % of total BSA by each BR (C1= 0.1 for H&N; C2= 0.2 for UL; C3= 0.3 for T; C4= 0.4 for LL).
IASI-E= A1E x B1 x C1 + A2E x B2 x C2 + A3E x B3 x C3 + A4E x B4 x C4 (score 0 to 24)
IASI-S= A1S x B1 X C1 + A2S x B2 x C2 + A3S x B3 x C3 + A4S x B4 x C4 (score 0 to 24)
IASI total score= IASI-E + IASI-S score ranged from 0 - 48, higher score indicated worse disease state.

End point type	Secondary

End point timeframe:

Baseline and Week 16

End point values	Imsidolimab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	0[4]	0[5]		
Units: percent change				
arithmetic mean (standard deviation)	()	()		

Notes:

[4] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

[5] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Participants Achieving an Improvement of 50% From Baseline in IASI (IASI50) at Week 16

End point title	Percentage of Participants Achieving an Improvement of 50% From Baseline in IASI (IASI50) at Week 16

End point description:

IASI quantified the severity of participants ichthyosis based on severity of erythema/scaling, & percentage of BSA affected. Degree of erythema & scaling scored from 0 (none) to 4 (very severe) for each of 4 BR (A1: H&N, A2: UL, A3: T, A4: LL). Percentage of BSA involved for each BR (B1: % in H&N, B2: % in UL, B3: % in T, B4: % in LL). Percentage involvement was assigned numerical value (0= 0, 1%-9%= 1, 10%-29%= 2, 30%-49%= 3, 50%-69%= 4, 70%-89%=5, 90%-100%= 6). Total extent was determined using a multiplier considering % of total BSA by each BR (C1= 0.1 for H&N; C2= 0.2 for UL; C3= 0.3 for T; C4= 0.4 for LL).

IASI-E= A1E x B1 x C1 + A2E x B2 x C2 + A3E x B3 x C3 + A4E x B4 x C4 (score 0 to 24)

IASI-S= A1S x B1 X C1 + A2S x B2 x C2 + A3S x B3 x C3 + A4S x B4 x C4 (score 0 to 24)

IASI total score= IASI-E + IASI-S score ranged from 0 - 48, higher score indicated worse disease state.

End point type	Secondary

End point timeframe:

Week 16

End point values	Imsidolimab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	0[6]	0[7]		
Units: percentage of participants				
number (not applicable)				

Notes:

[6] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

[7] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in IASI-E Scores at Week 16

End point title	Change From Baseline in IASI-E Scores at Week 16

End point description:

IASI quantified the severity of participants ichthyosis based on severity of erythema/scaling, & percentage of BSA affected. Degree of erythema & scaling scored from 0 (none) to 4 (very severe) for each of 4 BR (A1: H&N, A2: UL, A3: T, A4: LL). Percentage of BSA involved for each BR (B1: % in H&N, B2: % in UL, B3: % in T, B4: % in LL). Percentage involvement was assigned numerical value (0= 0, 1%-9%= 1, 10%-29%= 2, 30%-49%= 3, 50%-69%= 4, 70%-89%=5, 90%-100%= 6). Total extent was determined using a multiplier considering % of total BSA by each BR (C1= 0.1 for H&N; C2= 0.2 for UL; C3= 0.3 for T; C4= 0.4 for LL).

IASI-E= A1E x B1 x C1 + A2E x B2 x C2 + A3E x B3 x C3 + A4E x B4 x C4

IASI-E score ranged from 0 - 24, higher score indicated worse disease state.

End point type	Secondary

End point timeframe:

Baseline and Week 16

End point values	Imsidolimab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	0[8]	0[9]		
Units: units on a scale				
arithmetic mean (standard deviation)	()	()		

Notes:

[8] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

[9] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

Statistical analyses

No statistical analyses for this end point

Secondary: Change From Baseline in IASI-S Scores at Week 16

End point title	Change From Baseline in IASI-S Scores at Week 16

End point description:

IASI quantified the severity of participants ichthyosis based on severity of erythema/scaling, & percentage of BSA affected. Degree of erythema & scaling scored from 0 (none) to 4 (very severe) for each of 4 BR (A1: H&N, A2: UL, A3: T, A4: LL). Percentage of BSA involved for each BR (B1: % in H&N, B2: % in UL, B3: % in T, B4: % in LL). Percentage involvement was assigned numerical value (0= 0, 1%-9%= 1, 10%-29%= 2, 30%-49%= 3, 50%-69%= 4, 70%-89%=5, 90%-100%= 6). Total extent

was determined using a multiplier considering % of total BSA by each BR (C1= 0.1 for H&N; C2= 0.2 for UL; C3= 0.3 for T; C4= 0.4 for LL).

IASI-S= A1S x B1 X C1 + A2S x B2 x C2 + A3S x B3 x C3 + A4S x B4 x C4

IASI-S score ranged from 0 - 24, higher score indicated worse disease state.

End point type	Secondary

End point timeframe:

Baseline and Week 16

End point values	Imsidolimab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	0[10]	0[11]		
Units: units on a scale				
arithmetic mean (standard deviation)	()	()		

Notes:

[10] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

[11] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

Statistical analyses

No statistical analyses for this end point

Secondary: Percent Change From Baseline in IASI-E Scores at Week 16

End point title	Percent Change From Baseline in IASI-E Scores at Week 16

End point description:

IASI quantified the severity of participants ichthyosis based on severity of erythema/scaling, & percentage of BSA affected. Degree of erythema & scaling scored from 0 (none) to 4 (very severe) for each of 4 BR (A1: H&N, A2: UL, A3: T, A4: LL). Percentage of BSA involved for each BR (B1: % in H&N, B2: % in UL, B3: % in T, B4: % in LL). Percentage involvement was assigned numerical value (0= 0, 1%-9%= 1, 10%-29%= 2, 30%-49%= 3, 50%-69%= 4, 70%-89%=5, 90%-100%= 6). Total extent was determined using a multiplier considering % of total BSA by each BR (C1= 0.1 for H&N; C2= 0.2 for UL; C3= 0.3 for T; C4= 0.4 for LL).

IASI-E= A1E x B1 x C1 + A2E x B2 x C2 + A3E x B3 x C3 + A4E x B4 x C4

IASI-E score ranged from 0 - 24, higher score indicated worse disease state.

End point type	Secondary

End point timeframe:

Baseline and Week 16

End point values	Imsidolimab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	0[12]	0[13]		
Units: percent change				
arithmetic mean (standard deviation)	()	()		

Notes:

[12] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

[13] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

Statistical analyses

No statistical analyses for this end point

Secondary: Percent Change From Baseline in IASI-S Scores at Week 16

End point title	Percent Change From Baseline in IASI-S Scores at Week 16

End point description:

IASI quantified the severity of participants ichthyosis based on severity of erythema/scaling, & percentage of BSA affected. Degree of erythema & scaling scored from 0 (none) to 4 (very severe) for each of 4 BR (A1: H&N, A2: UL, A3: T, A4: LL). Percentage of BSA involved for each BR (B1: % in H&N, B2: % in UL, B3: % in T, B4: % in LL). Percentage involvement was assigned numerical value (0= 0, 1%-9%= 1, 10%-29%= 2, 30%-49%= 3, 50%-69%= 4, 70%-89%=5, 90%-100%= 6). Total extent was determined using a multiplier considering % of total BSA by each BR (C1= 0.1 for H&N; C2= 0.2 for UL; C3= 0.3 for T; C4= 0.4 for LL).

IASI-S= A1S x B1 X C1 + A2S x B2 x C2 + A3S x B3 x C3 + A4S x B4 x C4

IASI-S score ranged from 0 - 24, higher score indicated worse disease state.

End point type	Secondary

End point timeframe:

Baseline and Week 16

End point values	Imsidolimab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	0[14]	0[15]		
Units: percent change				
arithmetic mean (standard deviation)	()	()		

Notes:

[14] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

[15] - Due to study termination before primary endpoint, efficacy data was not collected nor analyzed.

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants With Treatment Emergent Adverse Events (TEAEs)

End point title	Number of Participants With Treatment Emergent Adverse Events (TEAEs)

End point description:

An AE was any untoward medical occurrence in a participant temporally associated with the use of a study treatment, whether or not considered related to the study treatment. An AE could therefore be any unfavorable and unintended sign (including abnormal laboratory finding), symptom, or disease temporally associated with use of study treatment that did not necessarily have a causal relationship with this treatment. An AE was considered "serious" if there was any of the following outcomes: death, life-threatening adverse event, Inpatient hospitalization or prolongation of existing hospitalization, persistent or significant incapacity or substantial disruption of the ability to conduct normal life functions, congenital anomaly/birth defect, other important medical events. An adverse event was considered TE if the date of onset was during or after first dose of study treatment, or if the AE present at baseline worsened in either intensity or frequency after first dose of study treatment.

End point type	Secondary

End point timeframe:

From first dose up to study termination (maximum up to 9.4 weeks)

End point values	Imsidolimab	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	4	1		
Units: participants				
number (not applicable)				
Any TEAEs	1	1		
Serious TEAEs	0	0		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events:	
From first dose up to study termination (maximum up to 9.4 weeks)	
Adverse event reporting additional description:	
Safety analysis set included all randomized participants who received at least 1 dose of imsidolimab or placebo.	
Assessment type	Systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	24.1

Reporting groups	
Reporting group title	Imsidolimab
Reporting group description:	
Participants received a starting dose of 400 milligrams (mg) of imsidolimab on Day 1 followed by 200 mg imsidolimab every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.	
Reporting group title	Placebo
Reporting group description:	
Participants received imsidolimab matching placebo on Day 1 and thereafter, every 4 weeks (Days 29, 57 and 85) by subcutaneous injection.	

Serious adverse events	Imsidolimab	Placebo	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 4 (0.00%)	0 / 1 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	Imsidolimab	Placebo	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	1 / 4 (25.00%)	1 / 1 (100.00%)	
Injury, poisoning and procedural complications			
Procedural pain			
subjects affected / exposed	0 / 4 (0.00%)	1 / 1 (100.00%)	
occurrences (all)	0	1	
Nervous system disorders			
Headache			

subjects affected / exposed	1 / 4 (25.00%)	0 / 1 (0.00%)	
occurrences (all)	1	0	
General disorders and administration site conditions			
Fatigue			
subjects affected / exposed	1 / 4 (25.00%)	0 / 1 (0.00%)	
occurrences (all)	1	0	
Peripheral swelling			
subjects affected / exposed	0 / 4 (0.00%)	1 / 1 (100.00%)	
occurrences (all)	0	1	
Skin and subcutaneous tissue disorders			
Night sweats			
subjects affected / exposed	0 / 4 (0.00%)	1 / 1 (100.00%)	
occurrences (all)	0	1	
Skin lesion			
subjects affected / exposed	0 / 4 (0.00%)	1 / 1 (100.00%)	
occurrences (all)	0	1	
Musculoskeletal and connective tissue disorders			
Inguinal mass			
subjects affected / exposed	0 / 4 (0.00%)	1 / 1 (100.00%)	
occurrences (all)	0	1	
Infections and infestations			
Herpes simplex reactivation			
subjects affected / exposed	1 / 4 (25.00%)	0 / 1 (0.00%)	
occurrences (all)	1	0	

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? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

As a result of insufficient recruitment of participants, this study was terminated.

Notes: