Clinical trial results:
A Phase 1/2 Study of ANV419 as Monotherapy or in Combination With Anti PD-1 or Anti-CTLA-4 Antibody Following Anti PD 1/Anti-PD-L1 Antibody Treatment in Patients With Unresectable or Metastatic Cutaneous Melanoma

Summary

EudraCT number	2021-006711-29
Trial protocol	DE ES IT
Global end of trial date	01 August 2024

Results information

Result version number	v1 (current)
This version publication date	27 July 2025
First version publication date	27 July 2025

Trial information

Trial identification

Sponsor protocol code	ANV419-101

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT05578872
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Anaveon AG
Sponsor organisation address	Technologiepark Basel, Hochbergerstrasse 60c, Basel, Switzerland, 4057
Public contact	Anaveon Medical Director, Anaveon AG, +41 615218383, AnaveonClinicalTrials@anaveon.com
Scientific contact	Anaveon Medical Director, Anaveon AG, +41 615218383, AnaveonClinicalTrials@anaveon.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	01 August 2024
Is this the analysis of the primary completion data?	Yes
Primary completion date	01 August 2024
Global end of trial reached?	Yes
Global end of trial date	01 August 2024
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The purpose of this multi-site, open-label, randomized, parallel arm, Phase 1/2 adaptive study is to evaluate the efficacy and safety of ANV419 as a monotherapy and in combination with anti-PD1 antibody or anti-CTLA4 antibody in patients aged 18 years or older with advanced Cutaneous Melanoma who have previously been treated with an anti-PD-1/anti-PD-L1 antibody.

Protection of trial subjects:

The study was conducted in accordance with the Declaration of Helsinki and with all applicable laws and regulations of the locales and countries where the study was conducted, and in compliance with Good Clinical Practice Guidelines.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	16 December 2022
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: 2
Country: Number of subjects enrolled	Spain: 7
Country: Number of subjects enrolled	France: 13
Country: Number of subjects enrolled	Germany: 5
Country: Number of subjects enrolled	Italy: 2
Worldwide total number of subjects	29
EEA total number of subjects	27

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)	20
From 65 to 84 years	9
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

This was a multi-center study with a total of 12 sites located in the United States, France, Spain, Italy and Germany. A total of 29 patients were enrolled in the study.

Pre-assignment

Screening details:

N/A

Period 1

Period 1 title	ANV419 Monotherapy Dose Expansion (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	ANV419 Single Agent, Dose 1

Arm description:

ANV419 administered by intravenous (IV) infusion

Arm type	Experimental
Investigational medicinal product name	ANV419
Investigational medicinal product code	ANV419
Other name	
Pharmaceutical forms	Concentrate and solvent for solution for infusion
Routes of administration	Concentrate for solution for infusion

Dosage and administration details:

ANV419 administered by intravenous (IV) infusion.

Arm title	ANV419 Single Agent, Dose 2

Arm description:

ANV419 administered by intravenous (IV) infusion

Arm type	Experimental
Investigational medicinal product name	ANV419
Investigational medicinal product code	ANV419
Other name	
Pharmaceutical forms	Concentrate and solvent for solution for infusion
Routes of administration	Concentrate for solution for infusion

Dosage and administration details:

ANV419 administered by intravenous (IV) infusion.

Number of subjects in period 1	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2
Started	14	15
Completed	0	0
Not completed	14	15
Consent withdrawn by subject	2	1

Physician decision	1	2
Adverse event, non-fatal	1	1
Toxicity and patient's decision	-	1
Progressive disease	10	9
Sponsor decision	-	1

Baseline characteristics

Reporting groups	
Reporting group title	ANV419 Single Agent, Dose 1
Reporting group description: ANV419 administered by intravenous (IV) infusion	
Reporting group title	ANV419 Single Agent, Dose 2
Reporting group description: ANV419 administered by intravenous (IV) infusion	

Reporting group values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2	Total
Number of subjects	14	15	29
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	10	10	20
From 65-84 years	4	5	9
85 years and over	0	0	0
Age continuous Units: years			
arithmetic mean	59.70	59.80	
standard deviation	± 14.15	± 13.92	-
Gender categorical Units: Subjects			
Female	5	5	10
Male	9	10	19

End points

End points reporting groups

Reporting group title	ANV419 Single Agent, Dose 1
Reporting group description: ANV419 administered by intravenous (IV) infusion	
Reporting group title	ANV419 Single Agent, Dose 2
Reporting group description: ANV419 administered by intravenous (IV) infusion	
Subject analysis set title	ANV419 Single Agent, Dose 1
Subject analysis set type	Full analysis
Subject analysis set description: The efficacy population included patients who receive at least 1 dose of study drug and have at least 1 post-baseline tumor assessment.	
Subject analysis set title	ANV419 Single Agent, Dose 2
Subject analysis set type	Full analysis
Subject analysis set description: The efficacy population included patients who receive at least 1 dose of study drug and have at least 1 post-baseline tumor assessment.	

Primary: Monotherapy Dose Expansion: Objective Response Rate (ORR) as Defined by RECIST v1.1

End point title	Monotherapy Dose Expansion: Objective Response Rate (ORR) as Defined by RECIST v1.1[1]
End point description: Proportion of participants with a complete response (CR) or partial response (PR) to treatment as defined by RECIST v1.1 (ORR = CR + PR).	
End point type	Primary
End point timeframe: Day 1 up to 12 months.	

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 patients achieved CR or PR.

End point values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	14	14		
Units: Count of Participants	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Monotherapy Dose Expansion: Duration of Response (DOR) According to RECIST v1.1

End point title	Monotherapy Dose Expansion: Duration of Response (DOR) According to RECIST v1.1

End point description:

Time from first time measurement criteria are met for complete response (CR) or (PR) until the progressive disease or death.

End point type	Secondary

End point timeframe:

Day 1 up to 12 months.

End point values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	14	14		
Units: Count of Participants	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Monotherapy Dose Expansion: Disease Control Rate (DCR) According to RECIST v1.1

End point title	Monotherapy Dose Expansion: Disease Control Rate (DCR) According to RECIST v1.1

End point description:

Percentage of participants who have achieved Complete Response (CR), Partial Response (PR) and Stable Disease (SD).

End point type	Secondary

End point timeframe:

Day 1 up to 12 months.

End point values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	14	14		
Units: Count of Participants	5	7		

Statistical analyses

No statistical analyses for this end point

Secondary: Monotherapy Dose Expansion: Progression-free Survival (PFS) According to RECIST v1.1

End point title	Monotherapy Dose Expansion: Progression-free Survival (PFS) According to RECIST v1.1

End point description:	
Length of time participants lived with the disease without progressing (PD). The safety population is defined as all patients who receive at least 1 dose (or partial dose) of study drug(s).	
End point type	Secondary
End point timeframe:	
Day 1 up to 12 months.	

End point values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	14	15		
Units: Months				
median (full range (min-max))	2.2 (1.8 to 2.6)	2.4 (1.4 to 4.4)		

Statistical analyses

No statistical analyses for this end point

Secondary: Monotherapy Dose Expansion: Overall Survival (OS) Rate

End point title	Monotherapy Dose Expansion: Overall Survival (OS) Rate
End point description:	
Proportion of participants who are alive at 6 months. This is an estimation based on Kaplan-Meier method. The Safety Population is defined as all patients who receive at least 1 dose (or partial dose) of study drug(s).	
End point type	Secondary
End point timeframe:	
Day 1 up to 6 months	

End point values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	14	15		
Units: Proportion of participants				
number (confidence interval 95%)	0.8 (0.5 to 0.9)	0.8 (0.5 to 0.9)		

Statistical analyses

No statistical analyses for this end point

Secondary: Monotherapy Dose Expansion: Frequency of Treatment-Emergent Adverse Events (TEAEs)

End point title	Monotherapy Dose Expansion: Frequency of Treatment-Emergent Adverse Events (TEAEs)

End point description:

Number of participants with TEAEs. The Safety Population is defined as all patients who receive at least 1 dose (or partial dose) of study drug(s).

End point type	Secondary

End point timeframe:

Day 1 up to 13 months.

End point values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	14	15		
Units: Count of participants	14	15		

Statistical analyses

No statistical analyses for this end point

Secondary: Monotherapy Dose Expansion: Severity of TEAEs

End point title	Monotherapy Dose Expansion: Severity of TEAEs

End point description:

Number of participants with TEAEs Grade 3 or more. The Safety Population is defined as all patients who receive at least 1 dose (or partial dose) of study drug(s).

End point type	Secondary

End point timeframe:

Day 1 up to 13 months

End point values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	14	15		
Units: Count of participants	12	13		

Statistical analyses

No statistical analyses for this end point

Secondary: Monotherapy Dose Expansion: Prevalence of Specific Anti-ANV419 Antibodies (ADA) in Blood

End point title	Monotherapy Dose Expansion: Prevalence of Specific Anti-ANV419 Antibodies (ADA) in Blood

End point description:

Number of patients with positive ADA at baseline and end of study. The Immunogenicity Population is defined as all patients who receive at least 1 dose of study drug and have at least 1 evaluable

immunogenicity sample.

End point type	Secondary

End point timeframe:

Day 1 up to end of study

End point values	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	14	15		
Units: Count of participants				
Prevalence of ADA positive at baseline	5	5		
Prevalence of ADA positive at end of study	12	5		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

All AEs and SAEs were collected during the full study period from the signing of the ICF until the Safety Follow Up Visit (up to 90 days after last dose of study drug).

Adverse event reporting additional description:

[Not specified]

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	24.1

Reporting groups

Reporting group title	ANV419 Single Agent, Dose 1

Reporting group description: -

Reporting group title	ANV419 Single Agent, Dose 2

Reporting group description: -

Serious adverse events	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2	
Total subjects affected by serious adverse events			
subjects affected / exposed	10 / 14 (71.43%)	11 / 15 (73.33%)	
number of deaths (all causes)	5	5	
number of deaths resulting from adverse events	0	2	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Malignant melanoma			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Vascular disorders			
Hypotension			
subjects affected / exposed	0 / 14 (0.00%)	2 / 15 (13.33%)	
occurrences causally related to treatment / all	0 / 0	5 / 5	
deaths causally related to treatment / all	0 / 5	0 / 5	
General disorders and administration site conditions			
Condition aggravated			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	

Discomfort			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Influenza like illness			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	5 / 5	1 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Immune system disorders			
Cytokine release syndrome			
subjects affected / exposed	6 / 14 (42.86%)	3 / 15 (20.00%)	
occurrences causally related to treatment / all	8 / 8	5 / 5	
deaths causally related to treatment / all	0 / 5	0 / 5	
Respiratory, thoracic and mediastinal disorders			
Bronchial obstruction			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Chronic obstructive pulmonary disease			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 5	0 / 5	
Hypoxia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Pleural effusion			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Investigations			
Alanine aminotransferase increased			

subjects affected / exposed	2 / 14 (14.29%)	2 / 15 (13.33%)	
occurrences causally related to treatment / all	2 / 2	1 / 2	
deaths causally related to treatment / all	0 / 5	0 / 5	
Aspartate aminotransferase increased			
subjects affected / exposed	1 / 14 (7.14%)	2 / 15 (13.33%)	
occurrences causally related to treatment / all	1 / 1	1 / 2	
deaths causally related to treatment / all	0 / 5	0 / 5	
Blood bilirubin increased			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Cardiac disorders			
Atrial fibrillation			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 5	0 / 5	
Sinus tachycardia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Nervous system disorders			
Dementia Alzheimer's type			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Blood and lymphatic system disorders			
Thrombocytopenic purpura			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Gastrointestinal disorders			
Fistula of small intestine			

subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Hepatobiliary disorders			
Jaundice cholestatic			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 5	0 / 5	
Musculoskeletal and connective tissue disorders			
Osteonecrosis			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 5	0 / 5	
Infections and infestations			
Spinal cord infection			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 5	0 / 5	

Frequency threshold for reporting non-serious adverse events: 1 %

Non-serious adverse events	ANV419 Single Agent, Dose 1	ANV419 Single Agent, Dose 2	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	14 / 14 (100.00%)	15 / 15 (100.00%)	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Cancer pain			
subjects affected / exposed	0 / 14 (0.00%)	2 / 15 (13.33%)	
occurrences (all)	0	2	
Vascular disorders			
Capillary leak syndrome			
subjects affected / exposed	0 / 14 (0.00%)	2 / 15 (13.33%)	
occurrences (all)	0	2	
Flushing			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	

Hypotension			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	1	
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	8 / 14 (57.14%)	8 / 15 (53.33%)	
occurrences (all)	10	12	
Chest pain			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Chills			
subjects affected / exposed	3 / 14 (21.43%)	3 / 15 (20.00%)	
occurrences (all)	6	15	
Face oedema			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Fatigue			
subjects affected / exposed	2 / 14 (14.29%)	1 / 15 (6.67%)	
occurrences (all)	4	1	
General physical health deterioration			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Generalised oedema			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Influenza like illness			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	1	
Mucosal inflammation			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Oedema			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Oedema peripheral			

subjects affected / exposed	4 / 14 (28.57%)	2 / 15 (13.33%)	
occurrences (all)	4	2	
Pain			
subjects affected / exposed	2 / 14 (14.29%)	0 / 15 (0.00%)	
occurrences (all)	3	0	
Pyrexia			
subjects affected / exposed	5 / 14 (35.71%)	8 / 15 (53.33%)	
occurrences (all)	13	21	
Swelling face			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	2	
Immune system disorders			
Cytokine release syndrome			
subjects affected / exposed	7 / 14 (50.00%)	8 / 15 (53.33%)	
occurrences (all)	16	20	
Respiratory, thoracic and mediastinal disorders			
Chronic obstructive pulmonary disease			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	2	0	
Cough			
subjects affected / exposed	2 / 14 (14.29%)	1 / 15 (6.67%)	
occurrences (all)	4	1	
Dysphonia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Dyspnoea			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	1	
Haemoptysis			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Hypoxia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Interstitial lung disease			

subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Lung disorder			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Pleural effusion			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Productive cough			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Rhonchi			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Sneezing			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Upper-airway cough syndrome			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Psychiatric disorders			
Confusional state			
subjects affected / exposed	1 / 14 (7.14%)	2 / 15 (13.33%)	
occurrences (all)	1	2	
Investigations			
Alanine aminotransferase increased			
subjects affected / exposed	4 / 14 (28.57%)	8 / 15 (53.33%)	
occurrences (all)	11	18	
Amylase increased			
subjects affected / exposed	2 / 14 (14.29%)	0 / 15 (0.00%)	
occurrences (all)	3	0	
Aspartate aminotransferase increased			
subjects affected / exposed	4 / 14 (28.57%)	8 / 15 (53.33%)	
occurrences (all)	8	19	
Bilirubin conjugated increased			

subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	1	
Blood alkaline phosphatase decreased			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Blood alkaline phosphatase increased			
subjects affected / exposed	4 / 14 (28.57%)	3 / 15 (20.00%)	
occurrences (all)	4	4	
Blood bilirubin increased			
subjects affected / exposed	3 / 14 (21.43%)	4 / 15 (26.67%)	
occurrences (all)	4	7	
Blood calcium decreased			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Blood chloride decreased			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Blood creatine phosphokinase increased			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Blood creatinine increased			
subjects affected / exposed	1 / 14 (7.14%)	5 / 15 (33.33%)	
occurrences (all)	1	5	
Blood fibrinogen decreased			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Blood lactate dehydrogenase increased			
subjects affected / exposed	2 / 14 (14.29%)	3 / 15 (20.00%)	
occurrences (all)	2	3	
Blood phosphorus decreased			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Blood triglycerides increased			

subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	3		
Blood urea increased				
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	2		
Blood uric acid increased				
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)		
occurrences (all)	1	1		
C-reactive protein increased				
subjects affected / exposed	2 / 14 (14.29%)	6 / 15 (40.00%)		
occurrences (all)	4	8		
Fibrin D dimer increased				
subjects affected / exposed	1 / 14 (7.14%)	5 / 15 (33.33%)		
occurrences (all)	1	8		
Gamma-glutamyltransferase increased				
subjects affected / exposed	4 / 14 (28.57%)	5 / 15 (33.33%)		
occurrences (all)	6	17		
Glomerular filtration rate decreased				
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)		
occurrences (all)	1	0		
Lipase increased				
subjects affected / exposed	2 / 14 (14.29%)	2 / 15 (13.33%)		
occurrences (all)	4	7		
Haematocrit decreased				
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)		
occurrences (all)	1	0		
Lymphocyte count decreased				
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)		
occurrences (all)	1	2		
Lymphocyte count increased				
subjects affected / exposed	0 / 14 (0.00%)	3 / 15 (20.00%)		
occurrences (all)	0	4		
Neutrophil count increased				
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	2		

Platelet count decreased				
subjects affected / exposed	1 / 14 (7.14%)	2 / 15 (13.33%)		
occurrences (all)	1	2		
Platelet count increased				
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	1		
Protein total decreased				
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	5		
Protein urine present				
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	4		
Prothrombin level decreased				
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	1		
Red blood cell count decreased				
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)		
occurrences (all)	1	0		
Transaminases increased				
subjects affected / exposed	2 / 14 (14.29%)	0 / 15 (0.00%)		
occurrences (all)	4	0		
Troponin T increased				
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	1		
Troponin increased				
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)		
occurrences (all)	1	0		
Urine protein/creatinine ratio increased				
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)		
occurrences (all)	0	4		
Weight decreased				
subjects affected / exposed	3 / 14 (21.43%)	0 / 15 (0.00%)		
occurrences (all)	4	0		
Weight increased				

subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
White blood cell count increased			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Injury, poisoning and procedural complications			
Contusion			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Fall			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Infusion related reaction			
subjects affected / exposed	1 / 14 (7.14%)	2 / 15 (13.33%)	
occurrences (all)	2	3	
Cardiac disorders			
Atrial fibrillation			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Sinus tachycardia			
subjects affected / exposed	1 / 14 (7.14%)	3 / 15 (20.00%)	
occurrences (all)	2	4	
Nervous system disorders			
Dizziness			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Dysgeusia			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	3	
Headache			
subjects affected / exposed	2 / 14 (14.29%)	2 / 15 (13.33%)	
occurrences (all)	4	5	
Neuralgia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Paraesthesia			

subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	1	
Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	3 / 14 (21.43%)	7 / 15 (46.67%)	
occurrences (all)	4	17	
Coagulopathy			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	2	0	
Iron deficiency anaemia			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Leukocytosis			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	3	
Lymphadenopathy			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Lymphocytosis			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	10	
Lymphopenia			
subjects affected / exposed	1 / 14 (7.14%)	6 / 15 (40.00%)	
occurrences (all)	1	16	
Neutropenia			
subjects affected / exposed	3 / 14 (21.43%)	2 / 15 (13.33%)	
occurrences (all)	3	4	
Neutrophilia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Thrombocytopenia			
subjects affected / exposed	1 / 14 (7.14%)	3 / 15 (20.00%)	
occurrences (all)	1	3	
Eye disorders			
Blindness unilateral			

subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	2 / 14 (14.29%)	1 / 15 (6.67%)	
occurrences (all)	2	1	
Abdominal pain lower			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Colitis			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Constipation			
subjects affected / exposed	2 / 14 (14.29%)	1 / 15 (6.67%)	
occurrences (all)	3	2	
Diarrhoea			
subjects affected / exposed	0 / 14 (0.00%)	2 / 15 (13.33%)	
occurrences (all)	0	2	
Dry mouth			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	3	
Gastritis			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Nausea			
subjects affected / exposed	2 / 14 (14.29%)	9 / 15 (60.00%)	
occurrences (all)	9	20	
Paraesthesia oral			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Post-tussive vomiting			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	2	0	
Toothache			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	2	

Vomiting			
subjects affected / exposed	2 / 14 (14.29%)	5 / 15 (33.33%)	
occurrences (all)	3	23	
Hepatobiliary disorders			
Cholestasis			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Hepatic cytolysis			
subjects affected / exposed	1 / 14 (7.14%)	2 / 15 (13.33%)	
occurrences (all)	1	2	
Hyperbilirubinaemia			
subjects affected / exposed	2 / 14 (14.29%)	1 / 15 (6.67%)	
occurrences (all)	2	1	
Skin and subcutaneous tissue disorders			
Angioedema			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	1	
Dermatitis psoriasiform			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Eczema			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Erythema			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Granuloma skin			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Hyperhidrosis			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	3	
Pruritus			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Rash			

subjects affected / exposed	2 / 14 (14.29%)	2 / 15 (13.33%)	
occurrences (all)	2	3	
Rash erythematous			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	1	
Rash macular			
subjects affected / exposed	0 / 14 (0.00%)	2 / 15 (13.33%)	
occurrences (all)	0	2	
Rash maculo-papular			
subjects affected / exposed	0 / 14 (0.00%)	4 / 15 (26.67%)	
occurrences (all)	0	5	
Rash papular			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Rash pruritic			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Urticaria			
subjects affected / exposed	2 / 14 (14.29%)	2 / 15 (13.33%)	
occurrences (all)	3	3	
Renal and urinary disorders			
Acute kidney injury			
subjects affected / exposed	2 / 14 (14.29%)	2 / 15 (13.33%)	
occurrences (all)	3	2	
Chromaturia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Haematuria			
subjects affected / exposed	2 / 14 (14.29%)	1 / 15 (6.67%)	
occurrences (all)	2	2	
Polyuria			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Proteinuria			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	

Endocrine disorders			
Adrenal insufficiency			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	8	
Vitiligo			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Back pain			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	2	1	
Bone pain			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Groin pain			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Joint swelling			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Muscle spasms			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Muscular weakness			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	3	0	
Myalgia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Pain in extremity			
subjects affected / exposed	1 / 14 (7.14%)	2 / 15 (13.33%)	
occurrences (all)	2	2	
Infections and infestations			

COVID-19			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Erysipelas			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Fungal infection			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Herpes zoster			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Nasopharyngitis			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Sepsis			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Urinary tract infection			
subjects affected / exposed	1 / 14 (7.14%)	3 / 15 (20.00%)	
occurrences (all)	1	4	
Urinary tract infection bacterial			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	2	0	
Vascular device infection			
subjects affected / exposed	1 / 14 (7.14%)	0 / 15 (0.00%)	
occurrences (all)	1	0	
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	1 / 14 (7.14%)	3 / 15 (20.00%)	
occurrences (all)	3	6	
Dehydration			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Hyperchloraemia			

subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	2	
Hypercholesterolaemia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Hyperferritinaemia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	
Hypoalbuminaemia			
subjects affected / exposed	1 / 14 (7.14%)	2 / 15 (13.33%)	
occurrences (all)	1	6	
Hypocalcaemia			
subjects affected / exposed	1 / 14 (7.14%)	3 / 15 (20.00%)	
occurrences (all)	1	5	
Hypokalaemia			
subjects affected / exposed	0 / 14 (0.00%)	2 / 15 (13.33%)	
occurrences (all)	0	3	
Hypomagnesaemia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	3	
Hyponatraemia			
subjects affected / exposed	1 / 14 (7.14%)	2 / 15 (13.33%)	
occurrences (all)	1	3	
Hypophagia			
subjects affected / exposed	1 / 14 (7.14%)	1 / 15 (6.67%)	
occurrences (all)	1	1	
Hypophosphataemia			
subjects affected / exposed	1 / 14 (7.14%)	4 / 15 (26.67%)	
occurrences (all)	1	4	
Polydipsia			
subjects affected / exposed	0 / 14 (0.00%)	1 / 15 (6.67%)	
occurrences (all)	0	1	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
23 May 2022	Global amendment, protocol version 2.0
26 July 2022	Country-specific amendment in Germany. Protocol version 2.1.
28 July 2022	Global amendment, protocol version 3.0.
28 July 2022	Country-specific amendment in France. Protocol version 2.1.
12 September 2022	Country-specific amendment in Germany. Protocol version 3.1.
07 March 2023	Global amendment, protocol version 4.0.
07 March 2023	Country-specific amendment in Germany. Protocol version 4.1.
28 April 2023	Country-specific amendment in France. Protocol version 4.1.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported