Clinical trial results:
ANV419 First in Human Study Phase 1: Open-label, Dose Escalation Study of ANV419 as single agent and in combination with ipilimumab in Patients with Relapsed/Refractory Advanced Solid Tumors

Summary

EudraCT number	2020-004569-37
Trial protocol	ES
Global end of trial date	18 July 2024

Results information

Result version number	v1 (current)
This version publication date	23 July 2025
First version publication date	23 July 2025

Trial information

Trial identification

Sponsor protocol code	ANV419-001

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04855929
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	ANAVEON AG
Sponsor organisation address	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	18 July 2024
Is this the analysis of the primary completion data?	Yes
Primary completion date	18 July 2024
Global end of trial reached?	Yes
Global end of trial date	18 July 2024
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

- Part A and Part B (ANV419 single agent dose escalation using single patient cohorts and AN419 single agent dose escalation by 3+3 design, respectively): To evaluate the safety and tolerability of ANV419, and to determine the maximum tolerated dose (MTD) and the recommended Phase 2 dose (RP2D) of ANV419
- Part C (ANV419 single agent dose intensification in non-small cell lung cancer [NSCLC]): To evaluate safety and tolerability of ANV419 administered with initial dose intensification
- Part D (ANV419 dose escalation in combination with ipilimumab): To evaluate safety and tolerability, MTD and RP2D of ANV419 in combination with ipilimumab

Protection of trial subjects:

In addition of frequent safety parameters collection, functional status and well-being in the study were evaluated by the EQ-5D-5L patient-reported outcome (PRO) and the EORTC QLQ-C30.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	01 March 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	Spain: 23
Country: Number of subjects enrolled	Switzerland: 28
Country: Number of subjects enrolled	United Kingdom: 4
Worldwide total number of subjects	55
EEA total number of subjects	23

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)	36
From 65 to 84 years	19
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Study Initiated (first patient dosed): 08 Jun 2021
Study Completed (last patient contact): 18 Jul 2024
Countries: Spain, Switzerland and the United Kingdom

Pre-assignment

Screening details:

13 patients were considered as Screening failure due to the following criteria:
Exclusion 12 (2)
Inclusion 05 (1)
Exclusion 10 (2)
Inclusion 09 (2)
Exclusion 05 (2)
Inclusion 03 (1)
Inclusion 11 (1)
Inclusion 09 / Exclusion 04 (1)
Inclusion 09 / Inclusion 11 / Exclusion 03 (1)

Period 1

Period 1 title	Overall Trial (overall period)
Is this the baseline period?	Yes
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Blinding implementation details:

Open label

Arms

Arm title	ANV419

Arm description:

ANV419 in monotherapy or in combination with ipilimumab

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

Dosage and administration details:

Part A and B: The starting dose of ANV419 was 3 µg/kg body weight. The dose was increased based on the CRC decision upon review of the safety data. The doses ranged from 3 to 24 µg/kg Q2W in Part A and from 24 to 364 µg/kg Q2W and 243 µg/kg Q3W in Part B.
Part C: The dose of ANV419 was 162 µg/kg given Q1W for 4 weeks, followed by 243 µg/kg Q2W.
Part D: The starting dose of ANV419 in combination with ipilimumab (Part D) was 72 µg/kg given Q3W in combination with ipilimumab 1 mg/kg on Day 1 of every cycle.

Number of subjects in period 1	ANV419
Started	55
Part A+B	40
Part C	6
Part D	9
Completed	0
Not completed	55
Consent withdrawn by subject	5
Objective Disease Progression	36
Adverse event, non-fatal	2
Clinical Disease Progression	10
Sponsor Decision	2

Baseline characteristics

Reporting groups	
Reporting group title	Overall Trial

Reporting group description: -

Reporting group values	Overall Trial	Total	
Number of subjects	55	55	
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)	36	36	
From 65-84 years	19	19	
85 years and over	0	0	
Age continuous			
Age (years)			
Units: years			
median	60.0		
full range (min-max)	30 to 79	-	
Gender categorical			
Gender			
Units: Subjects			
Female	17	17	
Male	38	38	
Disease Stage at Current Diagnosis			
Disease Stage at Current Diagnosis			
Units: Subjects			
Stage 0	0	0	
Stage I	0	0	
Stage II	0	0	
Stage III	1	1	
Stage IV	54	54	
Unknown	0	0	
Primary Tumor Type			
Primary Tumor Type			
Units: Subjects			
Melanoma	14	14	
NSCLC	10	10	
Colorectal cancer	8	8	
Renal Cell Carcinoma	7	7	
Head and Neck Cancer	5	5	
Pancreatic Carcinoma	5	5	

Other	6	6	
ECOG Performance Status			
ECOG Performance Status			
Units: Subjects			
Status of 0	25	25	
Status of 1	30	30	
Ethnicity Units: Subjects			
Hispanic or Latino	2	2	
Not Hispanic or Latino	52	52	
Not Reported	1	1	
Race Units: Subjects			
American Indian or Alaska Native	0	0	
Asian	1	1	
Black or African American	0	0	
Native Hawaiian or Other Pacific Islander	0	0	
White	54	54	
Other	0	0	
Not Reported	0	0	
Smoking Status Units: Subjects			
Never Smoked	26	26	
Currently Smokes	7	7	
Previously Smoked	22	22	
Missing	0	0	
Number of Prior Systemic Therapy Regimens			
Number of Prior Systemic Therapy Regimens			
Units: N/A			
median	2.0		
full range (min-max)	1 to 8	-	

Subject analysis sets

Subject analysis set title	Full analysis set
Subject analysis set type	Full analysis

Subject analysis set description:

A total of 55 patients were included in the Safety Population and Response Evaluable Population

Reporting group values	Full analysis set		
Number of subjects	55		
Age categorical 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)	36		
From 65-84 years	19		
85 years and over	0		
Age continuous			
Age (years)			
Units: years			
median	60.0		
full range (min-max)	30 to 79		
Gender categorical			
Gender			
Units: Subjects			
Female	17		
Male	38		
Disease Stage at Current Diagnosis			
Disease Stage at Current Diagnosis			
Units: Subjects			
Stage 0	0		
Stage I	0		
Stage II	0		
Stage III	1		
Stage IV	54		
Unknown	0		
Primary Tumor Type			
Primary Tumor Type			
Units: Subjects			
Melanoma	14		
NSCLC	10		
Colorectal cancer	8		
Renal Cell Carcinoma	7		
Head and Neck Cancer	5		
Pancreatic Carcinoma	5		
Other	6		
ECOG Performance Status			
ECOG Performance Status			
Units: Subjects			
Status of 0	25		
Status of 1	30		
Ethnicity Units: Subjects			
Hispanic or Latino	2		
Not Hispanic or Latino	52		
Not Reported	1		
Race Units: Subjects			
American Indian or Alaska Native	0		
Asian	1		
Black or African American	0		
Native Hawaiian or Other Pacific Islander	0		
White	54		
Other	0		

Not Reported	0		
Smoking Status Units: Subjects			
Never Smoked	26		
Currently Smokes	7		
Previously Smoked	22		
Missing	0		
Number of Prior Systemic Therapy Regimens			
Number of Prior Systemic Therapy Regimens			
Units: N/A			
median	2.0		
full range (min-max)	1 to 8		

End points

End points reporting groups

Reporting group title	ANV419
Reporting group description: ANV419 in monotherapy or in combination with ipilimumab	
Subject analysis set title	Full analysis set
Subject analysis set type	Full analysis
Subject analysis set description: A total of 55 patients were included in the Safety Population and Response Evaluable Population	

Primary: Number of patients experiencing DLTs during the DLT assessment period in patients administered ANV419 monotherapy, and ANV419 in combination with ipilimumab

End point title	Number of patients experiencing DLTs during the DLT assessment period in patients administered ANV419 monotherapy, and ANV419 in combination with ipilimumab[1]
End point description:	
End point type	Primary
End point timeframe: Parts A, B and D	

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 DLT Evaluable Population consisted of all patients who completed at least 1 cycle of ANV419 or discontinued from ANV419 due to a DLT. The DLT Evaluable Population was used for the DLT analyses.

End point values	ANV419	Full analysis set		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	49	49		
Units: Patients	2	2		

Statistical analyses

No statistical analyses for this end point

Primary: Incidence and severity of AEs and serious adverse events (SAEs)

End point title	Incidence and severity of AEs and serious adverse events (SAEs)[2]
End point description: Incidence and severity of AEs and serious adverse events (SAEs), their causal relatedness to ANV419, changes from Baseline in laboratory, vital signs, electrocardiogram (ECG), and physical examination parameters	
End point type	Primary
End point timeframe: Parts A, B, C and D	

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: Safety Population: The Safety Population consisted of all patients who received at least 1 dose (or partial dose) of ANV419. The Safety Population was used for safety and pharmacodynamic analyses.

End point values	ANV419	Full analysis set		
Subject group type	Reporting group	Subject analysis set		
Number of subjects analysed	55			
Units: patients				
Patients with TEAEs	55	55		
Patients with ANV419 related TEAEs	53	53		
Patients with TESAEs	31	31		
Patients with ANV419 TESAEs	17	17		

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).

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	23.1

Reporting groups

Reporting group title	Safety population

Reporting group description:

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

Serious adverse events	Safety population		
Total subjects affected by serious adverse events			
subjects affected / exposed	31 / 55 (56.36%)		
number of deaths (all causes)	22		
number of deaths resulting from adverse events	2		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Tumour pain			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Vascular disorders			
Hypotension			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			
Pyrexia			
subjects affected / exposed	4 / 55 (7.27%)		
occurrences causally related to treatment / all	4 / 4		
deaths causally related to treatment / all	0 / 0		
Asthenia			

subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Chest pain			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Fatigue			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
General physical health deterioration			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Generalised oedema			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Lethargy			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Immune system disorders			
Cytokine release syndrome			
subjects affected / exposed	7 / 55 (12.73%)		
occurrences causally related to treatment / all	10 / 10		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Pneumonitis			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	1 / 2		
deaths causally related to treatment / all	0 / 0		

Investigations			
Blood bilirubin increased			
subjects affected / exposed	3 / 55 (5.45%)		
occurrences causally related to treatment / all	2 / 3		
deaths causally related to treatment / all	0 / 0		
Blood creatinine increased			
subjects affected / exposed	2 / 55 (3.64%)		
occurrences causally related to treatment / all	2 / 2		
deaths causally related to treatment / all	0 / 0		
Alanine aminotransferase increased			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Aspartate aminotransferase increased			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Transaminases increased			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Injury, poisoning and procedural complications			
Hip fracture			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Seizure			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Abdominal pain			

subjects affected / exposed	3 / 55 (5.45%)			
occurrences causally related to treatment / all	0 / 4			
deaths causally related to treatment / all	0 / 0			
Nausea				
subjects affected / exposed	3 / 55 (5.45%)			
occurrences causally related to treatment / all	1 / 3			
deaths causally related to treatment / all	0 / 0			
Ascites				
subjects affected / exposed	1 / 55 (1.82%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Diarrhoea				
subjects affected / exposed	1 / 55 (1.82%)			
occurrences causally related to treatment / all	1 / 2			
deaths causally related to treatment / all	0 / 0			
Gastrointestinal motility disorder				
subjects affected / exposed	1 / 55 (1.82%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Intestinal obstruction				
subjects affected / exposed	1 / 55 (1.82%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Large intestinal obstruction				
subjects affected / exposed	1 / 55 (1.82%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Rectal haemorrhage				
subjects affected / exposed	1 / 55 (1.82%)			
occurrences causally related to treatment / all	0 / 1			
deaths causally related to treatment / all	0 / 0			
Vomiting				

subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Hepatobiliary disorders			
Biliary tract disorder			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hepatic pain			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Skin and subcutaneous tissue disorders			
Rash maculo-papular			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Back pain			
subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Pneumonia			
subjects affected / exposed	3 / 55 (5.45%)		
occurrences causally related to treatment / all	0 / 3		
deaths causally related to treatment / all	0 / 2		
Urinary tract infection			
subjects affected / exposed	2 / 55 (3.64%)		
occurrences causally related to treatment / all	0 / 2		
deaths causally related to treatment / all	0 / 0		
Device related infection			

subjects affected / exposed	1 / 55 (1.82%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

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

Non-serious adverse events	Safety population		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	55 / 55 (100.00%)		
General disorders and administration site conditions			
Non serious adverse event			
subjects affected / exposed	55 / 55 (100.00%)		
occurrences (all)	938		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
14 September 2021	Protocol Amendment 1
10 June 2022	Protocol Amendment 2
13 October 2022	Protocol Amendment 3
20 February 2023	Protocol Amendment 4

Notes:

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.

Adverse event data were collected and reported in the Clinical Study Report as overall and serious adverse events. Non-serious adverse events were not reported separately and cannot be entered in this template which only allows for disaggregated data

Notes:

Online references

http://www.ncbi.nlm.nih.gov/pubmed/38243906