Clinical trial results:
A Proof-of-Concept Study of Guselkumab in the Treatment of Subjects with New-onset or Relapsing Giant Cell Arteritis

Summary

EudraCT number	2020-000622-26
Trial protocol	FR DE PL BE IT
Global end of trial date	22 May 2024

Results information

Result version number	v1 (current)
This version publication date	04 June 2025
First version publication date	04 June 2025

Trial information

Trial identification

Sponsor protocol code	CNTO1959GCA2001

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04633447
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Janssen-Cilag International NV
Sponsor organisation address	Turnhoutseweg 30, B-2340 Beerse, Belgium, 2170
Public contact	Clinical Registry group, Janssen-Cilag International NV, ClinicalTrialsEU@its.jnj.com
Scientific contact	Clinical Registry group, Janssen-Cilag International NV, ClinicalTrialsEU@its.jnj.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	22 May 2024
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	22 May 2024
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

The main objective of the trial was to evaluate the efficacy of guselkumab compared to placebo, in combination with a 26-week glucocorticoid (GC) taper regimen, in adult subjects with new-onset or relapsing giant cell arteritis (GCA).

Protection of trial subjects:

This study was conducted in accordance with the ethical principles that have their origin in the Declaration of Helsinki and that are consistent with Good Clinical Practices and applicable regulatory requirements.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	12 October 2020
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Israel: 4
Country: Number of subjects enrolled	Belgium: 4
Country: Number of subjects enrolled	France: 3
Country: Number of subjects enrolled	Germany: 5
Country: Number of subjects enrolled	Italy: 10
Country: Number of subjects enrolled	Poland: 2
Country: Number of subjects enrolled	Spain: 13
Country: Number of subjects enrolled	Canada: 12
Worldwide total number of subjects	53
EEA total number of subjects	37

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	0

months)	
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	9
From 65 to 84 years	43
85 years and over	1

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

A total of 53 subjects were enrolled and randomised in this study, of these 35 subjects were randomised to guselkumab treatment arm and 18 to the placebo arm.

Period 1

Period 1 title	Main study (from Week 0 Up to Week 60)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator

Arms

Are arms mutually exclusive?	Yes
Arm title	Main Study: Guselkumab

Arm description:

Initially, subjects received 3 intravenous (IV) induction doses of Guselkumab 400 milligrams (mg) every 4 weeks starting from Week 0 up to Week 8 followed by a subcutaneous (SC) maintenance regimen of Guselkumab 200 mg every 4 weeks starting from Week 12 until Week 48 in the main study along with a protocol defined 26-week Glucocorticoid (GC) taper regimen. Subjects were then followed up for safety for 12 weeks until Week 60. With protocol amendment 5, IV induction was discontinued, and subjects enrolled from that point onwards received Guselkumab 200 mg subcutaneously every 4 weeks from Week 0 until Week 48 (end of treatment). Subjects who did not enter LTE continued in the main study till Week 60.

Arm type	Active comparator
Investigational medicinal product name	Guselkumab
Investigational medicinal product code	
Other name	CNTO1959
Pharmaceutical forms	Solution for infusion
Routes of administration	Intravenous use

Dosage and administration details:

Subjects received 3 intravenous (IV) induction doses of Guselkumab 400 mg every 4 weeks starting from Week 0 until Week 8.

Investigational medicinal product name	Guselkumab
Investigational medicinal product code	CNTO1959
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Subjects received Guselkumab 200 mg injection every 4 weeks starting from Week 12 until Week 48.

Arm title	Main Study: Placebo

Arm description:

Initially, subjects received 3 IV induction doses of Placebo matching to Guselkumab 400 mg every 4 weeks starting from Week 0 up to Week 8 followed by a SC maintenance regimen of placebo matching to Guselkumab 200 mg every 4 weeks starting from Week 12 until Week 48 in the main study along with a protocol defined 26-week GC taper regimen. Subjects were then followed up for safety for 12 weeks until Week 60. With protocol amendment 5, IV induction was discontinued, and subjects enrolled from that point onwards received placebo matching to guselkumab 200 mg subcutaneously every 4 weeks from Week 0 until Week 48 (end of treatment). Subjects who did not enter LTE continued in the main study till Week 60.

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:

Subjects received placebo matching to Guselkumab 200 mg injection every 4 weeks starting from Week 12 until Week 48.

Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Infusion
Routes of administration	Intravenous use

Dosage and administration details:

Subjects received 3 IV induction doses of Placebo matching to Guselkumab 400 mg every 4 weeks starting from Week 0 until Week 8.

Number of subjects in period 1	Main Study: Guselkumab	Main Study: Placebo
Started	35	18
Treated post PA5 by Week 0 (W0): PBO	0 [1]	11 [2]
Treated post PA5 by W0:Gus 200 mg	19 [3]	0 [4]
Completed	22	12
Not completed	13	6
Consent withdrawn by subject	2	-
Physician decision	-	1
Adverse event, non-fatal	8	2
Study Terminated by Sponsor	3	3

Notes:

[1] - The number of subjects at this milestone seems inconsistent with the number of subjects in the arm. It is expected that the number of subjects will be greater than, or equal to the number that completed, minus those who left.

Justification: Only reported subjects were planned to be included in this milestone.

[2] - The number of subjects at this milestone seems inconsistent with the number of subjects in the arm. It is expected that the number of subjects will be greater than, or equal to the number that completed, minus those who left.

Justification: Only reported subjects were planned to be included in this milestone.

[3] - The number of subjects at this milestone seems inconsistent with the number of subjects in the arm. It is expected that the number of subjects will be greater than, or equal to the number that completed, minus those who left.

Justification: Only reported subjects were planned to be included in this milestone.

[4] - The number of subjects at this milestone seems inconsistent with the number of subjects in the arm. It is expected that the number of subjects will be greater than, or equal to the number that completed, minus those who left.

Justification: Only reported subjects were planned to be included in this milestone.

Period 2

Period 2 title	LTE Period (Week 52 up to Week 112)
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator

Arms

Are arms mutually exclusive?	Yes
Arm title	LTE Period: Guselkumab

Arm description:

At Week 48, subjects from main study who were in GC-free remission and consented for the long term extension (LTE) period, continued to receive Guselkumab 200 mg subcutaneously every 4 weeks starting from Week 52 (LTE Week 0) until Week 100 (LTE Week 48). Subjects were then followed up for safety for 12 weeks after the last dose (up to Week 112).

Arm type	Experimental
Investigational medicinal product name	Guselkumab
Investigational medicinal product code	CNTO1959
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Subjects received Guselkumab 200 mg injection every 4 weeks starting from Week 52 (LTE Week 0) until Week 100 (LTE Week 48) in LTE period.

Arm title	LTE Period: Placebo

Arm description:

At Week 48, subjects from main study who were in GC-free remission and consented for the LTE period, continued to receive placebo matching to guselkumab 200 mg subcutaneously every 4 weeks starting from Week 52 (LTE Week 0) until Week 100 (LTE Week 48). Subjects were then followed up for safety for 12 weeks after the last dose (up to Week 112).

Arm type	Active comparator
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:

Subjects received placebo matching to Guselkumab 200 mg injection every 4 weeks starting from Week 52 (LTE Week 0) until Week 100 (LTE Week 48) in LTE period.

Number of subjects in period 2[5]	LTE Period: Guselkumab	LTE Period: Placebo
Started	9	6
Completed	5	3
Not completed	4	3
Adverse event, non-fatal	1	1
Study Terminated by Sponsor	3	2

Notes:

[5] - The number of subjects starting the period is not consistent with the number completing the preceding period. It is expected the number of subjects starting the subsequent period will be the same as the number completing the preceding period.

Justification: Only reported subjects were planned to be included in this period.

Baseline characteristics

Reporting groups

Reporting group title	Main Study: Guselkumab

Reporting group description:

Initially, subjects received 3 intravenous (IV) induction doses of Guselkumab 400 milligrams (mg) every 4 weeks starting from Week 0 up to Week 8 followed by a subcutaneous (SC) maintenance regimen of Guselkumab 200 mg every 4 weeks starting from Week 12 until Week 48 in the main study along with a protocol defined 26-week Glucocorticoid (GC) taper regimen. Subjects were then followed up for safety for 12 weeks until Week 60. With protocol amendment 5, IV induction was discontinued, and subjects enrolled from that point onwards received Guselkumab 200 mg subcutaneously every 4 weeks from Week 0 until Week 48 (end of treatment). Subjects who did not enter LTE continued in the main study till Week 60.

Reporting group title	Main Study: Placebo

Reporting group description:

Initially, subjects received 3 IV induction doses of Placebo matching to Guselkumab 400 mg every 4 weeks starting from Week 0 up to Week 8 followed by a SC maintenance regimen of placebo matching to Guselkumab 200 mg every 4 weeks starting from Week 12 until Week 48 in the main study along with a protocol defined 26-week GC taper regimen. Subjects were then followed up for safety for 12 weeks until Week 60. With protocol amendment 5, IV induction was discontinued, and subjects enrolled from that point onwards received placebo matching to guselkumab 200 mg subcutaneously every 4 weeks from Week 0 until Week 48 (end of treatment). Subjects who did not enter LTE continued in the main study till Week 60.

Reporting group values	Main Study: Guselkumab	Main Study: Placebo	Total
Number of subjects	35	18	53
Age categorical			
Units: Subjects			
In Utero	0	0	0
Preterm newborn infants (gestional 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
12 - 17 years	0	0	0
Adults (18 - 64 years)	6	3	9
From 65 - 84 years	28	15	43
85 years and over	1	0	1
Age continuous			
years			
Units: years			
arithmetic mean	71.9	70.8	
standard deviation	± 7.65	± 7.14	-
Gender categorical			
Units: Subjects			
Male	10	6	16
Female	25	12	37

End points

End points reporting groups

Reporting group title	Main Study: Guselkumab

Reporting group description:

Initially, subjects received 3 intravenous (IV) induction doses of Guselkumab 400 milligrams (mg) every 4 weeks starting from Week 0 up to Week 8 followed by a subcutaneous (SC) maintenance regimen of Guselkumab 200 mg every 4 weeks starting from Week 12 until Week 48 in the main study along with a protocol defined 26-week Glucocorticoid (GC) taper regimen. Subjects were then followed up for safety for 12 weeks until Week 60. With protocol amendment 5, IV induction was discontinued, and subjects enrolled from that point onwards received Guselkumab 200 mg subcutaneously every 4 weeks from Week 0 until Week 48 (end of treatment). Subjects who did not enter LTE continued in the main study till Week 60.

Reporting group title	Main Study: Placebo

Reporting group description:

Initially, subjects received 3 IV induction doses of Placebo matching to Guselkumab 400 mg every 4 weeks starting from Week 0 up to Week 8 followed by a SC maintenance regimen of placebo matching to Guselkumab 200 mg every 4 weeks starting from Week 12 until Week 48 in the main study along with a protocol defined 26-week GC taper regimen. Subjects were then followed up for safety for 12 weeks until Week 60. With protocol amendment 5, IV induction was discontinued, and subjects enrolled from that point onwards received placebo matching to guselkumab 200 mg subcutaneously every 4 weeks from Week 0 until Week 48 (end of treatment). Subjects who did not enter LTE continued in the main study till Week 60.

Reporting group title	LTE Period: Guselkumab

Reporting group description:

At Week 48, subjects from main study who were in GC-free remission and consented for the long term extension (LTE) period, continued to receive Guselkumab 200 mg subcutaneously every 4 weeks starting from Week 52 (LTE Week 0) until Week 100 (LTE Week 48). Subjects were then followed up for safety for 12 weeks after the last dose (up to Week 112).

Reporting group title	LTE Period: Placebo

Reporting group description:

At Week 48, subjects from main study who were in GC-free remission and consented for the LTE period, continued to receive placebo matching to guselkumab 200 mg subcutaneously every 4 weeks starting from Week 52 (LTE Week 0) until Week 100 (LTE Week 48). Subjects were then followed up for safety for 12 weeks after the last dose (up to Week 112).

Primary: Main study: Percentage of Subjects Achieving Glucocorticoid (GC)-Free Remission at Week 28

End point title	Main study: Percentage of Subjects Achieving Glucocorticoid (GC)-Free Remission at Week 28

End point description:

GC free remission at Week 28 was defined as (1) no signs or symptoms of active Giant cell arteritis (GCA) at Week 28; (2) absence of GCA flare from first dose of the study drug through Week 28; and (3) adherence to the protocol specified 26-week GC taper regimen. GCA flare was defined as the recurrence of signs and symptoms of active GCA, with or without elevation of inflammatory markers, and with the necessity for an increase in GC dose for GCA. Full analysis set (FAS) included all randomised subjects who received at least 1 administration of study intervention.

End point type	Primary

End point timeframe:

Week 28

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Percentage of subjects				
number (not applicable)	40.0	33.3		

Statistical analyses

Statistical analysis title	Guselkumab Vs Placebo
Comparison groups	Main Study: Guselkumab v Main Study: Placebo
Number of subjects included in analysis	53
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.638
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Percentage
Point estimate	6.6
Confidence interval	
level	90 %
sides	2-sided
lower limit	-14.7
upper limit	27.9

Secondary: Main study: Percentage of Subjects Achieving GC-Free Remission at Weeks 28, 32, 36, 40, 44, 48 and 52

End point title	Main study: Percentage of Subjects Achieving GC-Free Remission at Weeks 28, 32, 36, 40, 44, 48 and 52

End point description:

GC free remission was defined as (1) no signs or symptoms of active GCA at Weeks 28, 32, 36, 40, 44, 48 and 52 respectively; (2) absence of GCA flare from first dose of the study drug through Weeks 28, 32, 36, 40, 44, 48 and 52; (3) adherence to the protocol specified 26-week GC taper regimen. GCA flare was defined as the recurrence of signs and symptoms of active GCA, with or without elevation of inflammatory markers, and with the necessity for an increase in GC dose for GCA. FAS included all randomised subjects who received at least 1 administration of study intervention.

End point type	Secondary

End point timeframe:

Weeks 28, 32, 36, 40, 44, 48 and 52

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Percentage of subjects				
number (not applicable)				
At Week 28	40.0	33.3		

At Week 32	34.3	33.3		
At Week 36	34.3	33.3		
At Week 40	34.3	33.3		
At Week 44	34.3	33.3		
At Week 48	31.4	27.8		
At Week 52	25.7	27.8		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Percentage of Subjects Achieving Both GC-Free Remission and Normalization of Erythrocyte Sedimentation Rate (ESR) at Weeks 28, 32, 36, 40, 44, 48 and 52

End point title	Main study: Percentage of Subjects Achieving Both GC-Free Remission and Normalization of Erythrocyte Sedimentation Rate (ESR) at Weeks 28, 32, 36, 40, 44, 48 and 52

End point description:

GC-free remission at Weeks 28, 32, 36, 40, 44, 48 and 52 was defined as (1) no signs or symptoms of active GCA at Weeks 28, 32, 36, 40, 44, 48 and 52 respectively; (2) absence of GCA flare from first dose of the study drug through Weeks 28, 32, 36, 40, 44, 48; and 52 (3) adherence to the protocol specified 26-week GC taper regimen. Normalization of ESR was defined as ESR less than (<) 30 millimeter per hour (mm/hr) at Weeks 28, 32, 36, 40, 44, 48 and 52. GCA flare was defined as the recurrence of signs and symptoms of active GCA, with or without elevation of inflammatory markers, and with the necessity for an increase in GC dose for GCA. FAS included all randomised subjects who received at least 1 administration of study intervention.

End point type	Secondary

End point timeframe:

Weeks 28, 32, 36, 40, 44, 48 and 52

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Percentage of Subjects				
number (not applicable)				
At Week 28	22.9	5.6		
At Week 32	22.9	11.1		
At Week 36	22.9	16.7		
At Week 40	25.7	16.7		
At Week 44	22.9	11.1		
At Week 48	20.0	22.2		
At Week 52	22.9	16.7		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Percentage of Subjects Achieving Both GC-Free Remission and Normalization of C-Reactive Protein (CRP)

End point title	Main study: Percentage of Subjects Achieving Both GC-Free Remission and Normalization of C-Reactive Protein (CRP)

End point description:

GC-free remission at Weeks 28, 32, 36, 40, 44, 48 and 52 was defined as (1) no signs or symptoms of active Giant cell arteritis (GCA) at Weeks 28, 32, 36, 40, 44, 48 and 52 respectively; (2) absence of GCA flare from first dose of the study drug through Weeks 28, 32, 36, 40, 44, 48 and 52; (3) adherence to the protocol specified 26-week GC taper regimen. Normalization of CRP was defined as CRP <10 milligrams per liter (mg/L) or <1 milligrams per deciliter (mg/dL). GCA flare was defined as the recurrence of signs and symptoms of active GCA, with or without elevation of inflammatory markers, and with the necessity for an increase in GC dose for GCA. FAS included all randomised subjects who received at least 1 administration of study intervention.

End point type	Secondary

End point timeframe:

Weeks 28, 32, 36, 40, 44, 48 and 52

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Percentage of Subjects				
number (not applicable)				
At Week 28	22.9	16.7		
At Week 32	20.0	16.7		
At Week 36	25.7	22.2		
At Week 40	28.6	33.3		
At Week 44	25.7	27.8		
At Week 48	20.0	27.8		
At Week 52	17.1	22.2		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Percentage of Subjects Achieving Both GC-Free Remission and Normalization of Both ESR and CRP

End point title	Main study: Percentage of Subjects Achieving Both GC-Free Remission and Normalization of Both ESR and CRP

End point description:

GC-free remission at Weeks 28, 32, 36, 40, 44, 48 and 52 was defined as (1) no signs or symptoms of active Giant cell arteritis (GCA) at Weeks 28, 32, 36, 40, 44, 48 and 52 respectively; (2) absence of GCA flare from first dose of the study drug through Weeks 28, 32, 36, 40, 44, 48 and 52; (3) adherence to the protocol specified 26-week GC taper regimen. normalization of ESR is defined as ESR < 30 mm/hr at Weeks 28, 32, 36, 40, 44, 48 and 52. (5) Normalization of CRP was defined as CRP <10 mg/L or <1 mg/dL. GCA flare was defined as the recurrence of signs and symptoms of active GCA, with or without elevation of inflammatory markers, and with the necessity for an increase in GC dose for GCA. FAS included all randomised subjects who received at least 1 administration of study intervention.

End point type	Secondary

End point timeframe:

Weeks 28, 32, 36, 40, 44, 48 and 52

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Percentage of Subjects				
number (not applicable)				
At Week 28	14.3	5.6		
At Week 32	17.1	11.1		
At Week 36	20.0	16.7		
At Week 40	22.9	16.7		
At Week 44	17.1	11.1		
At Week 48	14.3	22.2		
At Week 52	17.1	16.7		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Cumulative Glucocorticoid (GC) Dose

End point title	Main study: Cumulative Glucocorticoid (GC) Dose

End point description:

Total cumulative GC dose administered included GCA taper, GC rescue therapy as well as for all other indications (any oral GC) from baseline (Day 1) up to Weeks 28 and 52 . FAS included all randomised subjects who received at least 1 administration of study intervention.

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Weeks 28 and 52

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Milligrams (mg)				
median (full range (min-max))				
Baseline (Day 1) up to Week 28	2231.0 (1315 to 4146)	2205.0 (1736 to 6010)		
Baseline (Day 1) up to Week 52	2418.5 (1315 to 4319)	2902.1 (1736 to 7345)		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Time to First GCA Disease Flare or Discontinuation of Study Intervention Due to Adverse Event (AE) of Worsening of GCA

End point title	Main study: Time to First GCA Disease Flare or Discontinuation of Study Intervention Due to Adverse Event (AE) of Worsening of GCA

End point description:

Time to occurrence of GCA disease flare was defined as the time from first dose of the study agent to the occurrence of the first observation of GCA disease flare or discontinuation due to AE of worsening of GCA. GCA flare was defined as the recurrence of signs and symptoms of active GCA, with or without elevation of inflammatory markers, and with the necessity for an increase in GC dose for GCA. FAS included all randomised subjects who received at least 1 administration of study intervention. "99999" indicated that median and upper limit of 90% confidence interval (CI) could not be estimated due to low number of subjects with events. Here, N (Number of Subjects analyzed) signifies subjects with at least 1 disease flare or discontinuation of study intervention due to AE of Worsening of GCA.

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Weeks 28 and 52

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Weeks				
median (confidence interval 90%)				
Baseline (Day 1) up to Week 28	99999 (27.71 to 99999)	29.71 (20.14 to 99999)		
Baseline (Day 1) up to Week 52	99999 (27.71 to 99999)	30.07 (20.14 to 99999)		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Number of Subjects With GCA Disease Flares or Discontinuation of Study Intervention Due to AE of Worsening of GCA

End point title	Main study: Number of Subjects With GCA Disease Flares or Discontinuation of Study Intervention Due to AE of Worsening of GCA

End point description:

Number of subjects with GCA disease flares or discontinuation of study intervention due to AE of worsening of GCA was reported. GCA flare was defined as the recurrence of signs and symptoms of active GCA, with or without elevation of inflammatory markers, and with the necessity for an increase in GC dose for GCA. FAS included all randomised subjects who received at least 1 administration of study intervention.

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Weeks 28 and 52

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Subjects				
Baseline (Day 1) up to Week 28: 1 Flare	10	8		
Baseline (Day 1) up to Week 28: 2 Flare	0	0		
Baseline (Day 1) up to Week 28: >3 Flare	0	0		
Baseline up to Week 52: 1 Flare	13	7		
Baseline up to Week 52: 2 Flares	3	3		
Baseline up to Week 52: >=3 Flares	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Number of Subjects With Treatment-emergent Adverse Events (TEAEs)

End point title	Main study: Number of Subjects With Treatment-emergent Adverse Events (TEAEs)

End point description:

Number of subjects with TEAEs (including serious and non-serious AEs) were reported. An adverse event (AE) was any untoward medical occurrence in a subject participating in a clinical study that does not necessarily have a causal relationship with the pharmaceutical/ biological agent under study. Any AE occurring at or after the initial administration of study intervention through the end of the main study was considered to be treatment emergent. Safety analysis set included all subjects who received at least 1 dose of study intervention.

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Week 60

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	17		
Units: Subjects	34	17		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Number of Subjects With TEAEs by System Organ Class

(SOC) With a Frequency Threshold of 5 Percent (%) or More

End point title	Main study: Number of Subjects With TEAEs by System Organ Class (SOC) With a Frequency Threshold of 5 Percent (%) or More

End point description:

Number of subjects with TEAEs (including serious and non-serious AEs) by SOC with a frequency threshold of 5 percent (%) or more were reported. An adverse event (AE) was any untoward medical occurrence in a subject participating in a clinical study that does not necessarily have a causal relationship with the pharmaceutical/biological agent under study. Any AE occurring at or after the initial administration of study intervention through the end of the main study was considered to be treatment emergent. Safety analysis set included all subjects who received at least 1 dose of study intervention. Neoplasms benign, malignant (N B and M)

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Week 60

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Subjects				
Infections and infestations	21	11		
Musculoskeletal and connective tissue disorders	19	5		
Vascular disorders	18	11		
Gastrointestinal disorders	10	2		
General disorder & administration site conditions	10	6		
Nervous system disorders	9	9		
Eye disorders	8	3		
Respiratory, thoracic and mediastinal disorders	8	4		
Skin and subcutaneous tissue disorders	8	1		
Injury, poisoning and procedural complications	7	2		
Investigations	6	0		
Endocrine disorders	5	0		
Psychiatric disorders	4	1		
Metabolism and nutrition disorders	3	1		
N B and M and unspecified(incl cysts and polyps)	3	1		
Cardiac disorders	2	2		
Renal and urinary disorders	2	1		
Reproductive system and breast disorders	1	1		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Number of Subjects With Treatment-emergent Serious Adverse Event (SAEs)

End point title	Main study: Number of Subjects With Treatment-emergent Serious Adverse Event (SAEs)

End point description:

Number of subjects with treatment emergent SAEs were reported. An SAE was an AE resulting in any of the following outcomes or deemed significant for any other reason: death; initial or prolonged inpatient hospitalization; life threatening experience (immediate risk of dying); persistent or significant disability/incapacity; congenital anomaly. Any AE occurred at or after the initial administration of study intervention through the end of the main study was considered to be treatment emergent. Safety analysis set included all subjects who received at least 1 dose of study intervention.

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Week 60

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Subjects	6	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Number of Subjects With Clinically Significant Abnormalities in Vital Signs

End point title	Main study: Number of Subjects With Clinically Significant Abnormalities in Vital Signs

End point description:

Clinically significant abnormal vital signs criteria: Pulse rate (PR) : <50 beats per minutes (bpm) and with greater than (>) 20 bpm decrease from baseline, >115 bpm and with >30 bpm increase from baseline; Systolic blood pressure (SBP): <90 millimeters of mercury [mmHg] and with >30 mmHg decrease from baseline, >150 mmHg and with >40 mmHg increase from baseline; Diastolic blood pressure (DBP): <50 mmHg and with >20 mmHg decrease from baseline, >95 mmHg and with >30 mmHg increase from baseline; Interarm blood pressure: Interarm blood pressure difference greater than or equal to (>=) 15 mmHg in systolic blood pressure at 3 consecutive visits; Temperature (Temp): >38.4 Degree Celsius (C) and with >=1 C increase from baseline; Weight (kilogram [kg]): decrease 10 percent (%) from baseline, increase 10% from baseline; Respiratory Rate: >20 breaths per minute. Safety analysis set included all subjects who received at least 1 dose of study intervention.

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Week 60

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Subjects				
PR: <50 bpm and with >20 bpm decrease(n=35, 18)	1	0		
PR: >115 bpm and with >30 bpm increase(n=35, 18)	0	0		
SBP: <90 mmHg and >30 mmHg decrease(n=35, 18)	2	0		
SBP: >150 mmHg and >40 mmHg increase(n=35, 18)	0	2		
DBP: <50 mmHg and >20 mmHg decrease(n=35, 18)	2	0		
DBP: >95 mmHg and >30 mmHg increase(n=35, 18)	1	1		
Interarm BP:BP difference >=15 mmHg SBP(n=35,18)	2	2		
Temp:>38.4 & >=1C increase from baseline(n=35,18)	0	0		
Weight: Decrease 10% from baseline (n=30, 18)	0	1		
Weight: Increase 10% from baseline (n=30, 18)	6	2		
Respiratory Rate:>20 breaths per minute(n=35,18)	1	4		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Number of Subjects With Clinically Significant Abnormalities in Laboratory Parameters

End point title	Main study: Number of Subjects With Clinically Significant Abnormalities in Laboratory Parameters

End point description:

Number of subjects National Cancer Institute Common Terminology Criteria for Adverse Events (NCI CTCAE) grade 3 or 4 abnormalities in clinical laboratory tests: hematology and chemistry were reported. Clinical laboratory abnormalities of living subjects were assessed as per NCI CTCAE version 5, grades (0-4), where Grade 0-Normal, Grade 1- Mild, Grade 2- Moderate, Grade 3- Severe or medically significant but not immediately life-threatening, Grade 4- Life-threatening consequences. Higher grades showed severe abnormality. As per the discretion of investigator, laboratory abnormalities with NCI CTCAE Grade 3 or 4 were considered clinically significant. Combined data of Grade 3 and 4 abnormalities are reported as planned. Only those categories in which at least 1 subject had data were reported. Safety analysis set included all subjects who received at least 1 dose of study intervention."

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Week 60

End point values	Main Study: Guselkumab	Main Study: Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	35	18		
Units: Subjects				
Chemistry: Creatinine Increased	1	0		
Chemistry: Alanine Aminotransferase Increased	1	0		
Hematology: Lymphocyte Count Decreased	3	3		

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Serum Concentrations of Guselkumab

End point title	Main study: Serum Concentrations of Guselkumab[1]

End point description:

Serum concentrations of Guselkumab over time was reported. Pharmacokinetics (PK) analysis set included all subjects who received at least 1 administration of Guselkumab and had at least one valid post dose blood sample drawn for PK analysis. Here, N (number of subjects analyzed) signifies number of subjects evaluable for this endpoint and "n" signifies number of subjects evaluable at specified timepoints. This endpoint was planned to be analyzed for Guselkumab arm only.

End point type	Secondary

End point timeframe:

Pre-dose and 1 hour post dose on Week 0 (Day 1), Week 4 (Day 28), Week 8 (Day 56) and Week 12 (Day 84), Week 16 (Day 112), Week 28 (Day 196), Week 52 (Day 364)

Notes:

[1] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: No inferential statistics was done. Only descriptive statistics was performed.

End point values	Main Study: Guselkumab			
Subject group type	Reporting group			
Number of subjects analysed	35			
Units: Microgram per milliliter (mcg/mL)				
arithmetic mean (standard deviation)				
Pre dose on Week 0 (Day 1)(n=34)	0.00 (± 0.000)			
1 Hour Post Dose on Week 0 (Day 1) (n=15)	130.93 (± 45.522)			
Pre dose on Week 4 (Day 28) (n=32)	11.21 (± 6.616)			
1 Hour Post Dose on Week 4 (Day 28) (n=12)	150.21 (± 34.952)			
Pre dose on Week 8 (Day 56)(n=30)	19.71 (± 23.002)			
1 Hour Post Dose on Week 8 (Day 56) (n=9)	127.14 (± 68.157)			
Week 12 (Day 84) (n=31)	19.16 (± 17.831)			
Week 16 (Day 112) (n=29)	15.81 (± 9.644)			

Week 28 (Day 196) (n=25)	12.63 (± 4.824)			
Week 52 (Day 364) (n=19)	12.55 (± 4.701)			

Statistical analyses

No statistical analyses for this end point

Secondary: Main study: Number of Subjects With Antibodies to Guselkumab

End point title	Main study: Number of Subjects With Antibodies to Guselkumab[2]

End point description:

Number of subjects with antibodies to Guselkumab were reported. Immunogenicity analysis set included all subjects who received at least 1 administration of guselkumab and have at least one post-dose sample collection. This endpoint was planned to be analyzed for Guselkumab arm only.

End point type	Secondary

End point timeframe:

Baseline (Day 1) up to Weeks 28 and 52

Notes:

[2] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: No inferential statistics was done. Only descriptive statistics was performed.

End point values	Main Study: Guselkumab			
Subject group type	Reporting group			
Number of subjects analysed	35			
Units: Subjects				
Baseline (Day 1) up to Week 28	1			
Baseline (Day 1) up to Week 52	3			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Main study: All-Cause Mortality: From Screening (-6 weeks) up to Week 60; SAEs & Other AEs: Baseline (Day 1) up to Week 60. LTE Period: From Week 52 (LTE Week 0) up to Week 112 (LTE Week 48)

Adverse event reporting additional description:

Safety analysis set included all subjects who received at least 1 dose of study intervention.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	26.1

Reporting groups

Reporting group title	Main Study: Guselkumab

Reporting group description:

Initially, subjects received 3 intravenous (IV) induction doses of Guselkumab 400 milligrams (mg) every 4 weeks starting from Week 0 up to Week 8 followed by a subcutaneous (SC) maintenance regimen of Guselkumab 200 mg every 4 weeks starting from Week 12 until Week 48 in the main study along with a protocol defined 26-week Glucocorticoid (GC) taper regimen. Subjects were then followed up for safety for 12 weeks until Week 60. With protocol amendment 5, IV induction was discontinued, and subjects enrolled from that point onwards received Guselkumab 200 mg subcutaneously every 4 weeks from Week 0 until Week 48 (end of treatment). Subjects who did not enter LTE continued in the main study till Week 60.

Reporting group title	LTE Period: Placebo

Reporting group description:

At Week 48, subjects from main study who were in GC-free remission and consented for the LTE period, continued to receive placebo matching to guselkumab 200 mg subcutaneously every 4 weeks starting from Week 52 (LTE Week 0) until Week 100 (LTE Week 48). Subjects were then followed up for safety for 12 weeks after the last dose (up to Week 112).

Reporting group title	LTE Period: Guselkumab

Reporting group description:

At Week 48, subjects from main study who were in GC-free remission and consented for the long term extension (LTE) period, continued to receive Guselkumab 200 mg subcutaneously every 4 weeks starting from Week 52 (LTE Week 0) until Week 100 (LTE Week 48). Subjects were then followed up for safety for 12 weeks after the last dose (up to Week 112).

Reporting group title	Main Study: Placebo

Reporting group description:

Initially, subjects received 3 IV induction doses of Placebo matching to Guselkumab 400 mg every 4 weeks starting from Week 0 up to Week 8 followed by a SC maintenance regimen of placebo matching to Guselkumab 200 mg every 4 weeks starting from Week 12 until Week 48 in the main study along with a protocol defined 26-week GC taper regimen. Subjects were then followed up for safety for 12 weeks until Week 60. With protocol amendment 5, IV induction was discontinued, and subjects enrolled from that point onwards received placebo matching to guselkumab 200 mg subcutaneously every 4 weeks from Week 0 until Week 48 (end of treatment). Subjects who did not enter LTE continued in the main study till Week 60.

Serious adverse events	Main Study: Guselkumab	LTE Period: Placebo	LTE Period: Guselkumab
Total subjects affected by serious adverse events			
subjects affected / exposed	6 / 35 (17.14%)	0 / 6 (0.00%)	0 / 9 (0.00%)
number of deaths (all causes)	1	0	0
number of deaths resulting from adverse events	0	0	0

Investigations			
Alanine Aminotransferase Increased			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Aspartate Aminotransferase Increased			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Injury, poisoning and procedural complications			
Fractured Sacrum			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vascular disorders			
Peripheral Artery Stenosis			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 2	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			
Pulmonary Embolism			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Renal and urinary disorders			
Acute Kidney Injury			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Abdominal Sepsis			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Urosepsis			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 1	0 / 0	0 / 0

Serious adverse events	Main Study: Placebo		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 18 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Investigations			
Alanine Aminotransferase Increased			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Aspartate Aminotransferase Increased			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Injury, poisoning and procedural complications			
Fractured Sacrum			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Vascular disorders			
Peripheral Artery Stenosis			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Pulmonary Embolism			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Renal and urinary disorders			

Acute Kidney Injury			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Abdominal Sepsis			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Urosepsis			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		

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

Non-serious adverse events	Main Study: Guselkumab	LTE Period: Placebo	LTE Period: Guselkumab
Total subjects affected by non-serious adverse events			
subjects affected / exposed	31 / 35 (88.57%)	5 / 6 (83.33%)	6 / 9 (66.67%)
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Lipoma			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Vascular disorders			
Hypertension			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Arteriosclerosis			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Giant Cell Arteritis			
subjects affected / exposed	17 / 35 (48.57%)	1 / 6 (16.67%)	0 / 9 (0.00%)
occurrences (all)	20	1	0
Haematoma			

subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Hot Flush			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
General disorders and administration site conditions			
Influenza Like Illness			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Fatigue			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Complication Associated with Device			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Chest Pain			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	1	0	0
Malaise			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	1	0	0
Pyrexia			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Peripheral Swelling			
subjects affected / exposed	3 / 35 (8.57%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	4	0	0
Oedema Peripheral			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Non-Cardiac Chest Pain			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Reproductive system and breast disorders			

Vulvovaginal Discomfort			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Respiratory, thoracic and mediastinal disorders			
Tonsillar Hypertrophy			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Sleep Apnoea Syndrome			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Oropharyngeal Pain			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Nasal Polyps			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Nasal Congestion			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Dyspnoea			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Dysphonia			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Cough			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Chronic Obstructive Pulmonary Disease			
subjects affected / exposed	0 / 35 (0.00%)	1 / 6 (16.67%)	0 / 9 (0.00%)
occurrences (all)	0	1	0
Psychiatric disorders			
Insomnia			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	1	0	0
Investigations			

C-Reactive Protein Increased			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Weight Increased			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Injury, poisoning and procedural complications			
Foot Fracture			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Fall			
subjects affected / exposed	2 / 35 (5.71%)	1 / 6 (16.67%)	0 / 9 (0.00%)
occurrences (all)	5	1	0
Limb Injury			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Tendon Rupture			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Cardiac disorders			
Myocarditis			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Ventricular Extrasystoles			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Ventricular Tachycardia			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Nervous system disorders			
Paraesthesia			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Brain Fog			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0

Cognitive Disorder			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Dizziness Postural			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Headache			
subjects affected / exposed	6 / 35 (17.14%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	8	0	0
Hypotonia			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Somnolence			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Sciatica			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Eye disorders			
Cataract Nuclear			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Myopia			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Visual Field Defect			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Blepharitis			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Cataract			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Macular Degeneration			

subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Gastrointestinal disorders			
Abdominal Mass			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Abdominal Pain			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Abdominal Pain Upper			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Nausea			
subjects affected / exposed	3 / 35 (8.57%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	4	0	0
Diarrhoea			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Anal Fistula			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Skin and subcutaneous tissue disorders			
Alopecia			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Skin Fragility			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Ecchymosis			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Eczema			
subjects affected / exposed	0 / 35 (0.00%)	1 / 6 (16.67%)	0 / 9 (0.00%)
occurrences (all)	0	1	0
Erythema			

subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Pruritus			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Renal and urinary disorders			
Haemorrhage Urinary Tract			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Endocrine disorders			
Cushingoid			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	6 / 35 (17.14%)	1 / 6 (16.67%)	1 / 9 (11.11%)
occurrences (all)	9	1	1
Back Pain			
subjects affected / exposed	4 / 35 (11.43%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	4	0	0
Bursitis			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Greater Trochanteric Pain Syndrome			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Joint Swelling			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Muscle Spasms			
subjects affected / exposed	3 / 35 (8.57%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	4	0	0
Osteoarthritis			
subjects affected / exposed	5 / 35 (14.29%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	5	0	0
Musculoskeletal Pain			

subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Muscular Weakness			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Osteoporosis			
subjects affected / exposed	0 / 35 (0.00%)	1 / 6 (16.67%)	0 / 9 (0.00%)
occurrences (all)	0	1	0
Polymyalgia Rheumatica			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Rotator Cuff Syndrome			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Spinal Osteoarthritis			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0
Myalgia			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	3	0	0
Infections and infestations			
Covid-19			
subjects affected / exposed	8 / 35 (22.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	8	0	0
Bronchitis			
subjects affected / exposed	3 / 35 (8.57%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	3	0	1
Acute Sinusitis			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Gastroenteritis			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Influenza			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1

Nasopharyngitis			
subjects affected / exposed	4 / 35 (11.43%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	4	0	0
Oral Herpes			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	6	0	1
Pharyngitis			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Pneumonia			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Urinary Tract Infection			
subjects affected / exposed	4 / 35 (11.43%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	6	0	0
Upper Respiratory Tract Infection			
subjects affected / exposed	4 / 35 (11.43%)	2 / 6 (33.33%)	2 / 9 (22.22%)
occurrences (all)	7	2	2
Tonsillitis			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Tinea Pedis			
subjects affected / exposed	0 / 35 (0.00%)	1 / 6 (16.67%)	0 / 9 (0.00%)
occurrences (all)	0	1	0
Sinusitis			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	1 / 9 (11.11%)
occurrences (all)	2	0	1
Respiratory Tract Infection			
subjects affected / exposed	1 / 35 (2.86%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	1	0	0
Metabolism and nutrition disorders			
Diabetes Mellitus			
subjects affected / exposed	0 / 35 (0.00%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Dyslipidaemia			

subjects affected / exposed	0 / 35 (0.00%)	1 / 6 (16.67%)	0 / 9 (0.00%)
occurrences (all)	0	1	0
Hyperglycaemia			
subjects affected / exposed	2 / 35 (5.71%)	0 / 6 (0.00%)	0 / 9 (0.00%)
occurrences (all)	2	0	0

Non-serious adverse events	Main Study: Placebo		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	17 / 18 (94.44%)		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Lipoma			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Vascular disorders			
Hypertension			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Arteriosclerosis			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Giant Cell Arteritis			
subjects affected / exposed	10 / 18 (55.56%)		
occurrences (all)	14		
Haematoma			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Hot Flush			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
General disorders and administration site conditions			
Influenza Like Illness			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Fatigue			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		

Complication Associated with Device subjects affected / exposed occurrences (all) Chest Pain subjects affected / exposed occurrences (all) Malaise subjects affected / exposed occurrences (all) Pyrexia subjects affected / exposed occurrences (all) Peripheral Swelling subjects affected / exposed occurrences (all) Oedema Peripheral subjects affected / exposed occurrences (all) Non-Cardiac Chest Pain subjects affected / exposed occurrences (all)	1 / 18 (5.56%) 1 1 / 18 (5.56%) 1 2 / 18 (11.11%) 2 1 / 18 (5.56%) 1 0 / 18 (0.00%) 0 1 / 18 (5.56%) 1 1 / 18 (5.56%) 1		
Reproductive system and breast disorders Vulvovaginal Discomfort subjects affected / exposed occurrences (all)	1 / 18 (5.56%) 1		
Respiratory, thoracic and mediastinal disorders Tonsillar Hypertrophy subjects affected / exposed occurrences (all) Sleep Apnoea Syndrome subjects affected / exposed occurrences (all) Oropharyngeal Pain subjects affected / exposed occurrences (all) Nasal Polyps	0 / 18 (0.00%) 0 0 / 18 (0.00%) 0 1 / 18 (5.56%) 1		

subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Nasal Congestion			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Dyspnoea			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Dysphonia			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Cough			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Chronic Obstructive Pulmonary Disease			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	2		
Psychiatric disorders			
Insomnia			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Investigations			
C-Reactive Protein Increased			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Weight Increased			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Injury, poisoning and procedural complications			
Foot Fracture			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Fall			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Limb Injury			

subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Tendon Rupture			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Cardiac disorders			
Myocarditis			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Ventricular Extrasystoles			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Ventricular Tachycardia			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Nervous system disorders			
Paraesthesia			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Brain Fog			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Cognitive Disorder			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Dizziness Postural			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Headache			
subjects affected / exposed	7 / 18 (38.89%)		
occurrences (all)	11		
Hypotonia			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Somnolence			

subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Sciatica			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Eye disorders			
Cataract Nuclear			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Myopia			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Visual Field Defect			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Blepharitis			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Cataract			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Macular Degeneration			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Gastrointestinal disorders			
Abdominal Mass			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Abdominal Pain			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Abdominal Pain Upper			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Nausea			

subjects affected / exposed occurrences (all) Diarrhoea subjects affected / exposed occurrences (all) Anal Fistula subjects affected / exposed occurrences (all)	0 / 18 (0.00%) 0 1 / 18 (5.56%) 2 1 / 18 (5.56%) 1		
Skin and subcutaneous tissue disorders Alopecia subjects affected / exposed occurrences (all) Skin Fragility subjects affected / exposed occurrences (all) Ecchymosis subjects affected / exposed occurrences (all) Eczema subjects affected / exposed occurrences (all) Erythema subjects affected / exposed occurrences (all) Pruritus subjects affected / exposed occurrences (all)	 0 / 18 (0.00%) 0 0 / 18 (0.00%) 0 1 / 18 (5.56%) 1 0 / 18 (0.00%) 0 0 / 18 (0.00%) 0 0 / 18 (0.00%) 0		
Renal and urinary disorders Haemorrhage Urinary Tract subjects affected / exposed occurrences (all)	 1 / 18 (5.56%) 1		
Endocrine disorders Cushingoid subjects affected / exposed occurrences (all)	 0 / 18 (0.00%) 0		
Musculoskeletal and connective tissue disorders			

Arthralgia				
subjects affected / exposed	0 / 18 (0.00%)			
occurrences (all)	0			
Back Pain				
subjects affected / exposed	1 / 18 (5.56%)			
occurrences (all)	1			
Bursitis				
subjects affected / exposed	0 / 18 (0.00%)			
occurrences (all)	0			
Greater Trochanteric Pain Syndrome				
subjects affected / exposed	1 / 18 (5.56%)			
occurrences (all)	1			
Joint Swelling				
subjects affected / exposed	0 / 18 (0.00%)			
occurrences (all)	0			
Muscle Spasms				
subjects affected / exposed	0 / 18 (0.00%)			
occurrences (all)	0			
Osteoarthritis				
subjects affected / exposed	0 / 18 (0.00%)			
occurrences (all)	0			
Musculoskeletal Pain				
subjects affected / exposed	1 / 18 (5.56%)			
occurrences (all)	1			
Muscular Weakness				
subjects affected / exposed	0 / 18 (0.00%)			
occurrences (all)	0			
Osteoporosis				
subjects affected / exposed	1 / 18 (5.56%)			
occurrences (all)	1			
Polymyalgia Rheumatica				
subjects affected / exposed	1 / 18 (5.56%)			
occurrences (all)	2			
Rotator Cuff Syndrome				
subjects affected / exposed	0 / 18 (0.00%)			
occurrences (all)	0			

Spinal Osteoarthritis			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Myalgia			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Infections and infestations			
Covid-19			
subjects affected / exposed	5 / 18 (27.78%)		
occurrences (all)	5		
Bronchitis			
subjects affected / exposed	2 / 18 (11.11%)		
occurrences (all)	3		
Acute Sinusitis			
subjects affected / exposed	2 / 18 (11.11%)		
occurrences (all)	2		
Gastroenteritis			
subjects affected / exposed	2 / 18 (11.11%)		
occurrences (all)	2		
Influenza			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Nasopharyngitis			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Oral Herpes			
subjects affected / exposed	1 / 18 (5.56%)		
occurrences (all)	1		
Pharyngitis			
subjects affected / exposed	2 / 18 (11.11%)		
occurrences (all)	2		
Pneumonia			
subjects affected / exposed	0 / 18 (0.00%)		
occurrences (all)	0		
Urinary Tract Infection			

subjects affected / exposed occurrences (all)	2 / 18 (11.11%) 3		
Upper Respiratory Tract Infection subjects affected / exposed occurrences (all)	1 / 18 (5.56%) 1		
Tonsillitis subjects affected / exposed occurrences (all)	0 / 18 (0.00%) 0		
Tinea Pedis subjects affected / exposed occurrences (all)	0 / 18 (0.00%) 0		
Sinusitis subjects affected / exposed occurrences (all)	1 / 18 (5.56%) 1		
Respiratory Tract Infection subjects affected / exposed occurrences (all)	1 / 18 (5.56%) 1		
Metabolism and nutrition disorders Diabetes Mellitus subjects affected / exposed occurrences (all)	1 / 18 (5.56%) 1		
Dyslipidaemia subjects affected / exposed occurrences (all)	0 / 18 (0.00%) 0		
Hyperglycaemia subjects affected / exposed occurrences (all)	0 / 18 (0.00%) 0		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
25 May 2022	The sponsor decided to no longer pursue a treatment regimen that included IV induction doses. Newly enrolled subjects were to be treated with a full subcutaneous (SC) dosing regimen. Sample size reduced while maintaining sufficient statistical power. Updated inclusion/exclusion criteria.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
24 March 2022	An urgent safety measure triggered by 2 venous thromboembolism (VTE) events lead to pausing the enrollment and after additional investigation, VTEs were shown to be unrelated to drug, study was resumed.	03 June 2022

Notes:

Limitations and caveats

None reported