EU Clinical Trials Register

Clinical trial results:
A Phase III, Randomized, Double-Blind, Placebo-Controlled, Multicenter Study To Evaluate Efficacy, Safety, Pharmacokinetics, And Pharmacodynamics Of Satralizumab In Patients With Generalized Myasthenia Gravis

Summary

EudraCT number	2020-004436-21
Trial protocol	DK DE NL FR PL IT ES
Global end of trial date	02 September 2024

Results information

Result version number	v1
This version publication date	22 February 2025
First version publication date	22 February 2025

Trial information

Trial identification

Sponsor protocol code	WN42636

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04963270
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	F. Hoffmann-La Roche AG
Sponsor organisation address	Grenzacherstrasse 124, Basel, Switzerland, CH-4058
Public contact	F. Hoffmann-La Roche AG, F. Hoffmann-La Roche AG, +41 616878333, global.trial_information@roche.com
Scientific contact	F. Hoffmann-La Roche AG, F. Hoffmann-La Roche AG, +41 616878333, global.trial_information@roche.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?	Yes

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	02 September 2024
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	02 September 2024
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

The main objective of the study is to evaluate the efficacy, safety, pharmacokinetics, and pharmacodynamics of satralizumab compared with placebo in participants with generalized myasthenia gravis (gMG).

Protection of trial subjects:

All study subjects were required to read and sign an Informed Consent Form (ICF).

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	19 October 2021
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	Argentina: 39
Country: Number of subjects enrolled	Australia: 2
Country: Number of subjects enrolled	Brazil: 15
Country: Number of subjects enrolled	Canada: 1
Country: Number of subjects enrolled	China: 28
Country: Number of subjects enrolled	Germany: 6
Country: Number of subjects enrolled	Denmark: 5
Country: Number of subjects enrolled	Spain: 4
Country: Number of subjects enrolled	France: 4
Country: Number of subjects enrolled	Italy: 10
Country: Number of subjects enrolled	Japan: 15
Country: Number of subjects enrolled	Korea, Republic of: 9
Country: Number of subjects enrolled	Poland: 28
Country: Number of subjects enrolled	Russian Federation: 2
Country: Number of subjects enrolled	Türkiye: 5
Country: Number of subjects enrolled	Taiwan: 6
Country: Number of subjects enrolled	United States: 9
Worldwide total number of subjects	188
EEA total number of subjects	57

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)	3
Adults (18-64 years)	156
From 65 to 84 years	29
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

A total of 188 participants with generalized myasthenia gravis (gMG) took part in the study across 76 investigational sites in 17 countries. Of the 188, 2 adolescent participants were randomized after the last adult participant was enrolled in the study and therefore were not part of efficacy analysis.

Pre-assignment

Screening details:

Study consists of 2 periods: Double-blind (DB) period where participants were randomized in a 1:1 ratio to receive satralizumab or placebo & an open-label extension (OLE) period where all participants who completed DB period received satralizumab. Participants were on a stable dose of background therapy (for gMG) through DB & until Week 12 of OLE.

Period 1

Period 1 title	Double-Blind Period (24 weeks)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Monitor, Carer, Data analyst, Assessor

Arms

Are arms mutually exclusive?	Yes
Arm title	Placebo

Arm description:

Participants received satralizumab matched placebo, subcutaneously (SC), at Weeks 0, 2, 4, and every 4 weeks (Q4W) thereafter until the end of the DB period.

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

Dosage and administration details:

Placebo, SC at Weeks 0, 2, 4 and Q4W thereafter until the end of DB period.

Arm title	Satralizumab

Arm description:

Participants received satralizumab 120 milligrams (mg) or 180 mg, based on body weight, SC, at Weeks 0, 2, 4 (loading doses), and Q4W (maintenance doses) thereafter until the end of the DB period.

Arm type	Experimental
Investigational medicinal product name	Satralizumab
Investigational medicinal product code	RO5333787
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants who weighed ≤ 100 kilograms (kg) received Satralizumab 120 mg, SC and participants who weighed > 100 kg received Satralizumab 180 mg, SC at Weeks 0, 2, 4 and Q4W thereafter.

Number of subjects in period 1	Placebo	Satralizumab
Started	92	96
Completed	88	92
Not completed	4	4
Adverse Event	1	2
Reason Not Specified	1	1
Withdrawal by Subject	-	1
Study Terminated by Sponsor	2	-

Period 2

Period 2 title	Open Label Extension Period (92 weeks)
Is this the baseline period?	No
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Placebo (DB) to Satralizumab (OLE)

Arm description:

After completion of the DB period, participants entered the OLE period where they received satralizumab, 120 mg or 180 mg, based on body weight, SC at Weeks 0, 2, and 4 (loading doses), and Q4W thereafter (maintenance doses) during the OLE period.

Arm type	Experimental
Investigational medicinal product name	RO5333787
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants who weighed ≤ 100 kilograms (kg) received Satralizumab 120 mg, SC and participants who weighed > 100 kg received Satralizumab 180 mg, SC at Weeks 0, 2, 4 and Q4W thereafter until the end of OLE period.

Arm title	Satralizumab (DB) to Satralizumab (OLE)

Arm description:

After completion of the DB period, participants entered the OLE period and continued receiving satralizumab 120 mg or 180 mg, based on body weight, SC until the end of the OLE period. Participants received a placebo injection on Week 2 of OLE to maintain blinding to DB treatment assignment.

Arm type	Experimental
Investigational medicinal product name	RO5333787
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants who weighed ≤ 100 kilograms (kg) received Satralizumab 120 mg, SC and participants who weighed > 100 kg received Satralizumab 180 mg, SC Q4W until the end of OLE period.

Number of subjects in period 2	Placebo (DB) to Satralizumab (OLE)	Satralizumab (DB) to Satralizumab (OLE)
Started	88	92
Completed	0	0
Not completed	88	92
Physician decision	1	1
Reason Unknown	-	1
Adverse Event	-	1
Reason Not Specified	-	1
Pregnancy	1	-
Withdrawal by Subject	2	6
Study Terminated by Sponsor	82	81
Lost to follow-up	2	-
Lack of efficacy	-	1

Baseline characteristics

Reporting groups

Reporting group title	Placebo
Reporting group description:	
Participants received satralizumab matched placebo, subcutaneously (SC), at Weeks 0, 2, 4, and every 4 weeks (Q4W) thereafter until the end of the DB period.	
Reporting group title	Satralizumab
Reporting group description:	
Participants received satralizumab 120 milligrams (mg) or 180 mg, based on body weight, SC, at Weeks 0, 2, 4 (loading doses), and Q4W (maintenance doses) thereafter until the end of the DB period.	

Reporting group values	Placebo	Satralizumab	Total
Number of subjects	92	96	188
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)	2	1	3
Adults (18-64 years)	77	79	156
From 65-84 years	13	16	29
85 years and over	0	0	0
Age Continuous			
Units: years			
arithmetic mean	45.9	47.0	
standard deviation	± 16.3	± 14.4	-
Sex: Female, Male			
Units: participants			
Female	56	63	119
Male	36	33	69
Race (NIH/OMB)			
Units: Subjects			
American Indian or Alaska Native	1	0	1
Asian	27	32	59
Native Hawaiian or Other Pacific Islander	0	0	0
Black or African American	3	1	4
White	56	59	115
More than one race	1	1	2
Unknown or Not Reported	4	3	7
Ethnicity (NIH/OMB)			
Units: Subjects			
Hispanic or Latino	30	24	54
Not Hispanic or Latino	54	70	124
Unknown or Not Reported	8	2	10

End points

End points reporting groups

Reporting group title	Placebo
Reporting group description:	
Participants received satralizumab matched placebo, subcutaneously (SC), at Weeks 0, 2, 4, and every 4 weeks (Q4W) thereafter until the end of the DB period.	
Reporting group title	Satralizumab
Reporting group description:	
Participants received satralizumab 120 milligrams (mg) or 180 mg, based on body weight, SC, at Weeks 0, 2, 4 (loading doses), and Q4W (maintenance doses) thereafter until the end of the DB period.	
Reporting group title	Placebo (DB) to Satralizumab (OLE)
Reporting group description:	
After completion of the DB period, participants entered the OLE period where they received satralizumab, 120 mg or 180 mg, based on body weight, SC at Weeks 0, 2, and 4 (loading doses), and Q4W thereafter (maintenance doses) during the OLE period.	
Reporting group title	Satralizumab (DB) to Satralizumab (OLE)
Reporting group description:	
After completion of the DB period, participants entered the OLE period and continued receiving satralizumab 120 mg or 180 mg, based on body weight, SC until the end of the OLE period. Participants received a placebo injection on Week 2 of OLE to maintain blinding to DB treatment assignment.	
Subject analysis set title	Placebo Matched to 120 mg Satralizumab
Subject analysis set type	Full analysis
Subject analysis set description:	
Participants received placebo matched to satralizumab, SC, at Weeks 0, 2, 4, and Q4W thereafter until the end of the DB period.	
Subject analysis set title	Satralizumab 120 mg
Subject analysis set type	Full analysis
Subject analysis set description:	
Participants received satralizumab 120 mg, based on body weight, SC, at Weeks 0, 2, 4 (loading doses), and Q4W (maintenance doses) thereafter until the end of the DB period.	
Subject analysis set title	Placebo Matched to 180 mg Satralizumab
Subject analysis set type	Full analysis
Subject analysis set description:	
Participants received placebo matched to satralizumab, SC, at Weeks 0, 2, 4, and Q4W thereafter until the end of the DB period.	
Subject analysis set title	Satralizumab 180 mg
Subject analysis set type	Full analysis
Subject analysis set description:	
Participants received satralizumab 180 mg, based on body weight, SC, at Weeks 0, 2, 4 (loading doses), and Q4W (maintenance doses) thereafter until the end of the DB period.	

Primary: DB Period: Mean Change From Baseline in Total Myasthenia Gravis Activities of Daily Living (MGADL) Score in the AChR+ Population

End point title	DB Period: Mean Change From Baseline in Total Myasthenia Gravis Activities of Daily Living (MGADL) Score in the AChR+ Population

End point description:

The MGADL scale was used to assess the degree of gMG symptoms (six items: diplopia, ptosis, difficulties with chewing, swallowing, talking, and respiratory problems) and functional limitations in carrying out activities of daily living (two items: ability to brush teeth or comb hair and impairment in the ability to arise from a chair) that are present and clinically relevant in gMG participants. Each of the eight items was ranked on a 03 scale, with 3 representing the most severe symptoms or impaired performance and 0 representing no symptoms or impaired performance. The total MG-ADL score was calculated as the sum of each item score, with a maximum score ranging from 0 (least severe symptoms/impairment) to 24 (most severe symptoms/impairment). Higher scores indicate greater

disease severity. AChR+ population included all participants in the study who were AChR+.

End point type	Primary
End point timeframe:	
At Week 24	

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: score on a scale				
arithmetic mean (standard error)	-2.57 (± 0.35)	-3.59 (± 0.29)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0196
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-1.02
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.88
upper limit	-0.16
Variability estimate	Standard error of the mean
Dispersion value	0.44

Secondary: DB Period: Mean Change From Baseline in Total MGADL Score in the Overall Population (OP) at Week 24

End point title	DB Period: Mean Change From Baseline in Total MGADL Score in the Overall Population (OP) at Week 24

End point description:

MG-ADL scale was used to assess degree of gMG symptoms (6 items: diplopia, ptosis, difficulties with chewing, swallowing, talking, & respiratory problems) & functional limitations in carrying out activities of daily living (2 items: ability to brush teeth/comb hair & impairment in ability to arise from a chair) that are present & clinically relevant in gMG participants. Each of the 8 items was ranked on a 0-3 scale, with 3=most severe symptoms or impaired performance & 0=no symptoms or impaired performance. Total MG-ADL score was calculated as the sum of each item score, with a maximum score ranging from 0 (least severe symptoms/impairment) to 24 (most severe symptoms/impairment). Higher scores=greater disease severity. Modified intent-to-treat (mIIT) population=all participants that were part of the ITT & had a baseline & at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: score on a scale				
arithmetic mean (standard error)	-2.52 (± 0.32)	-3.54 (± 0.28)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0123
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-1.02
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.82
upper limit	-0.22
Variability estimate	Standard error of the mean
Dispersion value	0.41

Secondary: DB Period: Percentage of Participants With a ≥ 2-point Reduction From Baseline in Total MG-ADL Score in AChR+ Population at Week 24

End point title	DB Period: Percentage of Participants With a ≥ 2-point Reduction From Baseline in Total MG-ADL Score in AChR+ Population at Week 24

End point description:

The MGADL scale was used to assess the degree of gMG symptoms (six items: diplopia, ptosis, difficulties with chewing, swallowing, talking, and respiratory problems) and functional limitations in carrying out activities of daily living (two items: ability to brush teeth or comb hair and impairment in the ability to arise from a chair) that are present and clinically relevant in gMG participants. Each of the eight items was ranked on a 03 scale, with 3 representing the most severe symptoms or impaired performance and 0 representing no symptoms or impaired performance. The total MG-ADL score was calculated as the sum of each item score, with a maximum score ranging from 0 (least severe symptoms/impairment) to 24 (most severe symptoms/impairment). Higher scores indicate greater disease severity. Participants who received rescue therapy were considered non-responders. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: percentage of participants				
number (confidence interval 95%)	58.8 (47.9 to 69.6)	70.9 (61.2 to 80.6)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Statistical analysis description:	
Stratified Analysis	
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.088
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	-12.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-27.3
upper limit	1.9

Secondary: DB Period: Percentage of Participants With a ≥ 2-point Reduction From Baseline in Total MG-ADL Score in OP at Week 24

End point title	DB Period: Percentage of Participants With a ≥ 2-point Reduction From Baseline in Total MG-ADL Score in OP at Week 24

End point description:

MG-ADL scale was used to assess degree of gMG symptoms (6 items: diplopia, ptosis, difficulties with chewing, swallowing, talking, & respiratory problems) & functional limitations in carrying out activities of daily living (2 items: ability to brush teeth/comb hair & impairment in ability to arise from a chair) that are present & clinically relevant in gMG participants. Each of the 8 items was ranked on a 0-3 scale, with 3=most severe symptoms or impaired performance & 0=no symptoms or impaired performance. Total MG-ADL score was calculated as the sum of each item score, with a maximum score ranging from 0 (least severe symptoms/impairment) to 24 (most severe symptoms/impairment). Higher scores=greater disease severity. mIIT population included all participants that were part of the ITT & had a baseline & at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: percentage of participants				
number (confidence interval 95%)	60.7 (50.4 to 70.9)	69.8 (60.5 to 79)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Statistical analysis description:	
Stratified Analysis	
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.137
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	-10.5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-24.2
upper limit	3.3

Secondary: DB Period: Mean Change From Baseline in Quantitative Myasthenia Gravis (QMG) Score in AChR+ Population at Week 24

End point title	DB Period: Mean Change From Baseline in Quantitative Myasthenia Gravis (QMG) Score in AChR+ Population at Week 24

End point description:

The QMG is a 13-item direct physician assessment scoring system that quantifies disease severity based on impairments of body functions and structures. The 13-items are: ptosis, diplopia, orbicularis oculi weakness, swallowing, speech disruption, percent forced vital capacity, arm and leg endurance (four items), grip strength (two items), and neck flexion strength. Each of the 13 item was quantitatively assessed and scored on a scale from 0=None to 3=Severe, providing a total QMG score (sum of each item score) ranging from 0 to 39 where higher scores indicate greater disease severity. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: score on a scale				
arithmetic mean (standard error)	-1.78 (± 0.46)	-3.41 (± 0.41)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0062
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-1.63
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.8
upper limit	-0.46
Variability estimate	Standard error of the mean
Dispersion value	0.6

Secondary: DB Period: Mean Change From Baseline in QMG Score in OP at Week 24

End point title	DB Period: Mean Change From Baseline in QMG Score in OP at Week 24

End point description:

The QMG is a 13-item direct physician assessment scoring system that quantifies disease severity based on impairments of body functions and structures. The 13-items are: ptosis, diplopia, orbicularis oculi weakness, swallowing, speech disruption, percent forced vital capacity, arm and leg endurance (four items), grip strength (two items), and neck flexion strength. Each of the 13 item was quantitatively assessed and scored on a scale from 0=None to 3=Severe, providing a total QMG score (sum of each item score) ranging from 0 to 39 where higher scores indicate greater disease severity. mIIT population included all participants that were part of the ITT and had a baseline and at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: score on a scale				
arithmetic mean (standard error)	-1.74 (± 0.43)	-3.42 (± 0.39)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0034
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-1.68
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.8
upper limit	-0.56
Variability estimate	Standard error of the mean
Dispersion value	0.57

Secondary: DB Period: Mean Change From Baseline in Myasthenia Gravis Quality of Life 15 Scale (Revised) (MGQOL 15r) Total Score in AChR+ Population at Week 24

End point title	DB Period: Mean Change From Baseline in Myasthenia Gravis Quality of Life 15 Scale (Revised) (MGQOL 15r) Total Score in AChR+ Population at Week 24

End point description:

The MG-QOL-15r is a disease-specific health-related QoL measure that consists of 15 items: mobility (9 items), symptoms (3 items), and contentment and emotional well-being (3 items). Items were scored on a scale from 0=Not at all to 2=Very much with the total score ranging from 0 to 30 and higher scores indicate worse health-related quality of life (HRQoL). AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: score on a scale				
arithmetic mean (standard error)	-4.69 (± 0.71)	-6.20 (± 0.69)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.1094
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-1.51
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.36
upper limit	0.34
Variability estimate	Standard error of the mean
Dispersion value	0.94

Secondary: DB Period: Mean Change From Baseline in MGQOL 15r Total Score in OP at Week 24

End point title	DB Period: Mean Change From Baseline in MGQOL 15r Total Score in OP at Week 24

End point description:

The MG-QOL-15r is a disease-specific health-related QoL measure that consists of 15 items: mobility (9 items), symptoms (3 items), and contentment and emotional well-being (3 items). Items are scored on a scale from 0=Not at all to 2=Very much, with the total score ranging from 0 to 30 and higher scores indicate worse HRQoL. mIIT population included all participants that were part of the ITT and had a baseline and at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: score on a scale				
arithmetic mean (standard error)	-4.73 (± 0.65)	-6.13 (± 0.63)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0999
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-1.39
Confidence interval	
level	95 %
sides	2-sided
lower limit	-3.05
upper limit	0.27
Variability estimate	Standard error of the mean
Dispersion value	0.85

Secondary: DB Period: Mean Change From Baseline in Quality of Life in Neurological Disorders (NeuroQoL) Fatigue Subscale Total Score in AChR+ Population at Week 24

End point title	DB Period: Mean Change From Baseline in Quality of Life in Neurological Disorders (NeuroQoL) Fatigue Subscale Total Score in AChR+ Population at Week 24

End point description:

The Neuro−QoL is a validated tool designed to evaluate the HRQoL in participants with chronic neurological disease. The Fatigue Subscale is implemented as an eight-item, stand-alone short form that assesses the multi-dimensional aspects of fatigue ranging from general tiredness to debilitating exhaustion that Impacts activities of daily living. Each item was assessed using a 5-level Likert scale ranging between 1=never to 5=always. Raw scores range from 8 to 40, higher values indicate greater fatigue. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: score on a scale				
arithmetic mean (standard error)	-3.29 (± 0.90)	-5.50 (± 0.75)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0456
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-2.2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.36
upper limit	-0.04
Variability estimate	Standard error of the mean
Dispersion value	1.1

Secondary: DB Period: Mean Change From Baseline in NeuroQoL Fatigue Subscale Total Score in OP at Week 24

End point title	DB Period: Mean Change From Baseline in NeuroQoL Fatigue Subscale Total Score in OP at Week 24

End point description:

The Neuro−QoL is a validated tool designed to evaluate the HRQoL in participants with chronic neurological disease. The Fatigue Subscale is implemented as an eight-item, stand-alone short form that assesses the multi-dimensional aspects of fatigue ranging from general tiredness to debilitating exhaustion that Impacts activities of daily living. Each item was assessed using a 5-level Likert scale ranging between 1=never to 5=always. Raw scores range from 8 to 40, higher values indicate greater fatigue. mIIT population included all participants that were part of the ITT and had a baseline and at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: score on a scale				
arithmetic mean (standard error)	-3.45 (± 0.83)	-5.56 (± 0.69)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0382
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-2.11
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.1
upper limit	-0.11
Variability estimate	Standard error of the mean
Dispersion value	1.02

Secondary: DB Period: Percentage of Participants With a ≥ 3-point Reduction From Baseline in QMG Score in AChR+ Population at Week 24

End point title	DB Period: Percentage of Participants With a ≥ 3-point Reduction From Baseline in QMG Score in AChR+ Population at Week 24

End point description:

The QMG is a 13-item direct physician assessment scoring system that quantifies disease severity based on impairments of body functions and structures. The 13-items are: ptosis, diplopia, orbicularis oculi weakness, swallowing, speech disruption, percent forced vital capacity, arm and leg endurance (four items), grip strength (two items), and neck flexion strength. Each of the 13 item was quantitatively assessed and scored on a scale from 0=None to 3=Severe, providing a total QMG score (sum of each item score) ranging from 0 to 39 where higher scores indicate greater disease severity. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: percentage of participants				
number (confidence interval 95%)	28.7 (18.7 to 38.8)	47.7 (37 to 58.3)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.013
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	-18.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-33.5
upper limit	-3.9

Secondary: DB Period: Percentage of Participants With a ≥ 3-point Reduction From Baseline in QMG Score in OP at Week 24

End point title	DB Period: Percentage of Participants With a ≥ 3-point Reduction From Baseline in QMG Score in OP at Week 24

End point description:

The QMG is a 13-item direct physician assessment scoring system that quantifies disease severity based on impairments of body functions and structures. The 13-items are: ptosis, diplopia, orbicularis oculi weakness, swallowing, speech disruption, percent forced vital capacity, arm and leg endurance (four items), grip strength (two items), and neck flexion strength. Each of the 13 item was quantitatively assessed and scored on a scale from 0=None to 3=Severe, providing a total QMG score (sum of each item score) ranging from 0 to 39 where higher scores indicate greater disease severity. mIIT population included all participants that were part of the ITT and had a baseline and at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: percentage of participants				
number (confidence interval 95%)	28.1 (18.7 to 37.5)	50.0 (39.9 to 60.1)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.002
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	-22
Confidence interval	
level	95 %
sides	2-sided
lower limit	-36.2
upper limit	-7.9

Secondary: DB Period: Mean Change From Baseline in Total Myasthenia Gravis Composite (MGC) Score in AChR+ Population at Week 24

End point title	DB Period: Mean Change From Baseline in Total Myasthenia Gravis Composite (MGC) Score in AChR+ Population at Week 24

End point description:

The MGC is a composite measure consisting of items drawn from the MG-ADL (chewing, swallowing, speech, and breathing), QMG (diplopia and ptosis), and Manual Muscle Test (hip flexion strength, neck, facial, and shoulder abduction) in an effort to include both clinician- and participant-reported elements in a single measure. Each of the ten items contribute to a total score ranging from 0 to 50, with higher values indicating greater disease severity. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: score on a scale				
arithmetic mean (standard error)	-4.14 (± 0.62)	-7.13 (± 0.58)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0002
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-2.99
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.57
upper limit	-1.41
Variability estimate	Standard error of the mean
Dispersion value	0.81

Secondary: DB Period: Mean Change From Baseline in Total MGC Score in OP at Week 24

End point title	DB Period: Mean Change From Baseline in Total MGC Score in OP at Week 24

End point description:

The MGC is a composite measure consisting of items drawn from the MG-ADL (chewing, swallowing, speech, and breathing), QMG (diplopia and ptosis), and Manual Muscle Test (hip flexion strength, neck, facial, and shoulder abduction) in an effort to include both clinician- and participant-reported elements in a single measure. Each of the ten items contribute to a total score ranging from 0 to 50, with higher values indicating greater disease severity. mIIT population included all participants that were part of the ITT and had a baseline and at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: score on a scale				
arithmetic mean (standard error)	-4.18 (± 0.57)	-7.18 (± 0.55)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	< 0.0001
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	-3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.47
upper limit	-1.53
Variability estimate	Standard error of the mean
Dispersion value	0.75

Secondary: DB Period: Percentage of Participants With a ≥ 3-point Reduction From Baseline in Total MGC Score in AChR+ Population at Week 24

End point title	DB Period: Percentage of Participants With a ≥ 3-point Reduction From Baseline in Total MGC Score in AChR+ Population at Week 24

End point description:

The MGC is a composite measure consisting of items drawn from the MG-ADL (chewing, swallowing, speech, and breathing), QMG (diplopia and ptosis), and Manual Muscle Test (hip flexion strength, neck, facial, and shoulder abduction) in an effort to include both clinician- and participant-reported elements in a single measure. Each of the ten items contribute to a total score ranging from 0 to 50, with higher values indicating greater disease severity. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: percentage of participants				
number (confidence interval 95%)	55.0 (44 to 66)	75.6 (66.4 to 84.7)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.004
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	-21
Confidence interval	
level	95 %
sides	2-sided
lower limit	-35.4
upper limit	-6.6

Secondary: DB Period: Percentage of Participants With a ≥ 3-point Reduction From Baseline in Total MGC Score in OP at Week 24

End point title	DB Period: Percentage of Participants With a ≥ 3-point Reduction From Baseline in Total MGC Score in OP at Week 24

End point description:

The QMG is a 13-item direct physician assessment scoring system that quantifies disease severity based on impairments of body functions and structures. The 13-items are: ptosis, diplopia, orbicularis oculi weakness, swallowing, speech disruption, percent forced vital capacity, arm and leg endurance (four items), grip strength (two items), and neck flexion strength. Each of the 13 item was quantitatively assessed and scored on a scale from 0=None to 3=Severe, providing a total QMG score (sum of each item score) ranging from 0 to 39 where higher scores indicate greater disease severity. mIIT population included all participants that were part of the ITT and had a baseline and at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: percentage of participants				
number (confidence interval 95%)	57.3 (46.9 to 67.7)	76.0 (67.4 to 84.6)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.005
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	-19.4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-32.8
upper limit	-5.9

Secondary: DB Period: Percentage of Participants Who Achieved Minimal Symptom Expression (Total MGADL Score of 0 or 1) in AChR+ Population at Week 24

End point title	DB Period: Percentage of Participants Who Achieved Minimal Symptom Expression (Total MGADL Score of 0 or 1) in AChR+ Population at Week 24

End point description:

The MG-ADL scale was used to assess the degree of gMG symptoms (six items: diplopia, ptosis, difficulties with chewing, swallowing, talking, and respiratory problems) and functional limitations in carrying out activities of daily living (two items: ability to brush teeth or comb hair and impairment in the ability to arise from a chair) that are present and clinically relevant in gMG participants. Each of the eight items was ranked on a 0-3 scale, with 3 representing the most severe symptoms or impaired performance and 0 representing no symptoms or impaired performance. The total MG-ADL score was calculated as the sum of each item score, with a maximum score ranging from 0 (least severe symptoms/impairment) to 24 (most severe symptoms/impairment). Higher scores indicate greater disease severity. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: percentage of participants				
number (confidence interval 95%)	12.5 (-4.8 to 29.8)	14.0 (6.6 to 21.3)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.847
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	-1.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-19.4
upper limit	15.9

Secondary: DB Period: Percentage of Participants Who Achieved Minimal Symptom Expression (Total MGADL Score of 0 or 1) in OP at Week 24

End point title	DB Period: Percentage of Participants Who Achieved Minimal Symptom Expression (Total MGADL Score of 0 or 1) in OP at Week 24

End point description:

MG-ADL scale was used to assess degree of gMG symptoms (6 items: diplopia, ptosis, difficulties with chewing, swallowing, talking, & respiratory problems) & functional limitations in carrying out activities of daily living (2 items: ability to brush teeth/comb hair & impairment in ability to arise from a chair) that are present & clinically relevant in gMG participants. Each of the 8 items was ranked on a 0-3 scale, with 3=most severe symptoms or impaired performance & 0=no symptoms or impaired performance. Total MG-ADL score was calculated as the sum of each item score, with a maximum score ranging from 0 (least severe symptoms/impairment) to 24 (most severe symptoms/impairment). Higher scores=greater disease severity. Modified intent-to-treat (mIIT) population=all participants that were part of the ITT & had a baseline & at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

At Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: percentage of participants				
number (confidence interval 95%)	12.4 (4.2 to 20.5)	15.6 (8.3 to 22.9)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.441
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	-4.3
Confidence interval	
level	95 %
sides	2-sided
lower limit	-15.4
upper limit	6.7

Secondary: DB Period: Percentage of Participants With at Least One gMGrelated Exacerbation Between Baseline and Week 24 in AChR+ Population

End point title	DB Period: Percentage of Participants With at Least One gMGrelated Exacerbation Between Baseline and Week 24 in AChR+ Population

End point description:

gMG-related exacerbation was defined as one of the following: MG crisis; Substantial symptomatic worsening that requires immediate therapy; or health in jeopardy if rescue therapy is not given. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

Baseline up to Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: percentage of participants				
number (confidence interval 95%)	17.5 (9.1 to 25.9)	9.3 (3.1 to 15.5)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.115
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	8.5
Confidence interval	
level	95 %
sides	2-sided
lower limit	-2.1
upper limit	19

Secondary: DB Period: Percentage of Participants With at Least One gMGrelated Exacerbation Between Baseline and Week 24 in OP

End point title	DB Period: Percentage of Participants With at Least One gMGrelated Exacerbation Between Baseline and Week 24 in OP

End point description:

gMG-related exacerbation was defined as one of the following: MG crisis; Substantial symptomatic worsening that requires immediate therapy; or health in jeopardy if rescue therapy is not given. mIIT population included all participants that were part of the ITT and had a baseline and at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

Baseline up to Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: percentage of participants				
number (confidence interval 95%)	16.9 (9 to 24.7)	8.3 (2.8 to 13.9)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab
Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.077
Method	Cochran-Mantel-Haenszel
Parameter estimate	Difference in Response Rate
Point estimate	8.8
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1
upper limit	18.6

Secondary: DB Period: Percentage of Participants in AChR+ Population Receiving Rescue Therapy Between Baseline and Week 24

End point title	DB Period: Percentage of Participants in AChR+ Population Receiving Rescue Therapy Between Baseline and Week 24

End point description:

The percentage of participants receiving rescue therapy during DBP analyzed the variable that encodes whether a participant received rescue therapy during DBP or not. If a participant stopped the study drug but received rescue therapy during the safety follow-up and this occurred within 24 weeks of baseline then this was counted as having received rescue therapy. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

Baseline up to Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: percentage of participants				
number (confidence interval 95%)	13.8 (5.58 to 21.92)	7.0 (1.01 to 12.94)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab

Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.1314
Method	Cochran-Mantel-Haenszel
Parameter estimate	Risk Difference
Point estimate	-6.77
Confidence interval	
level	95 %
sides	2-sided
lower limit	-17.25
upper limit	3.7

Secondary: DB Period: Percentage of Participants in OP Receiving Rescue Therapy Between Baseline and Week 24

End point title	DB Period: Percentage of Participants in OP Receiving Rescue Therapy Between Baseline and Week 24

End point description:

The percentage of participants receiving rescue therapy during DBP analyzed the variable that encodes whether a participant received rescue therapy during DBP or not. If a participant stopped the study drug but received rescue therapy during the safety follow-up and this occurred within 24 weeks of baseline then this was counted as having received rescue therapy. mIIT population included all participants that were part of the ITT and had a baseline and at least one post-baseline MG-ADL assessment during the DB period. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

Baseline up to Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: percentage of participants				
number (confidence interval 95%)	12.4 (4.96 to 19.76)	7 (1.57 to 13.01)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab

Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.2264
Method	Cochran-Mantel-Haenszel
Parameter estimate	Risk Difference
Point estimate	-5.07
Confidence interval	
level	95 %
sides	2-sided
lower limit	-14.74
upper limit	4.61

Secondary: DB Period: Duration of Meaningful Improvement, Defined as ≥ 2point Reduction From Baseline in Total MGADL Score in AChR+ Population

End point title	DB Period: Duration of Meaningful Improvement, Defined as ≥ 2point Reduction From Baseline in Total MGADL Score in AChR+ Population

End point description:

The duration was the difference in weeks between the two visits defining the start & end (or Week 24) of reduction from baseline. The MGADL scale was used to assess the degree of gMG symptoms (six items: diplopia,ptosis,difficulties with chewing,swallowing, talking, & respiratory problems) & functional limitations in carrying out activities of daily living (two items: ability to brush teeth or comb hair & impairment in the ability to arise from a chair) that are present & clinically relevant in gMG participants. Each of the eight items was ranked on a 03 scale, with 3 representing the most severe symptoms or impaired performance and 0 representing no symptoms or impaired performance. The total MG-ADL score was calculated as the sum of each item score, with a maximum score ranging from 0 (least severe symptoms/impairment) to 24 (most severe symptoms/impairment). Higher scores indicate greater disease severity. AChR+ population included all participants in the study who were AChR+.

End point type	Secondary

End point timeframe:

Baseline, Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	80	86		
Units: weeks				
arithmetic mean (standard error)	7.46 (± 1.00)	10.90 (± 1.05)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab

Number of subjects included in analysis	166
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0179
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	3.44
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.59
upper limit	6.29
Variability estimate	Standard error of the mean
Dispersion value	1.45

Secondary: DB Period: Duration of Meaningful Improvement, Defined as ≥ 2point Reduction From Baseline in Total MGADL Score in OP

End point title	DB Period: Duration of Meaningful Improvement, Defined as ≥ 2point Reduction From Baseline in Total MGADL Score in OP

End point description:

Duration was difference in weeks between two visits defining start and end (or Week 24) of reduction from baseline. MG-ADL scale was used to assess degree of gMG symptoms (6 items: diplopia, ptosis, difficulties with chewing, swallowing, talking, & respiratory problems) & functional limitations in carrying out activities of daily living (2 items: ability to brush teeth/comb hair & impairment in ability to arise from a chair) that are present & clinically relevant in gMG participants. Each of the 8 items was ranked on a 0-3 scale, with 3=most severe symptoms or impaired performance & 0=no symptoms or impaired performance. Total MG-ADL score was calculated as the sum of each item score, with a maximum score ranging from 0 (least severe symptoms/impairment) to 24 (most severe symptoms/impairment). Higher scores indicates greater disease severity. Modified intent-to-treat (mIIT) population. This excludes adolescents who joined the study after the last adult participant was randomized.

End point type	Secondary

End point timeframe:

Baseline, Week 24

End point values	Placebo	Satralizumab		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	89	96		
Units: weeks				
arithmetic mean (standard error)	7.29 (± 0.95)	11.02 (± 0.98)		

Statistical analyses

Statistical analysis title	Placebo vs Satralizumab
Comparison groups	Placebo v Satralizumab

Number of subjects included in analysis	185
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0066
Method	ANCOVA and Conditional Mean Imputation
Parameter estimate	Difference in Adjusted Mean
Point estimate	3.73
Confidence interval	
level	95 %
sides	2-sided
lower limit	1.04
upper limit	6.42
Variability estimate	Standard error of the mean
Dispersion value	1.37

Secondary: DB Period: Number of Participants With Adverse Events (AEs)

End point title	DB Period: Number of Participants With Adverse Events (AEs)[1]

End point description:

An AE was any untoward medical occurrence in a clinical investigation participant administered a pharmaceutical product, regardless of causal attribution. An AE can be any unfavorable and unintended sign (including an abnormal laboratory finding), symptoms, or disease temporarily associated with the use of a medicinal product, whether or not considered related to the medicinal product. Safety-evaluable (SE) population included all enrolled participants who received at least one dose of study drug, with participants grouped according to treatment received.

End point type	Secondary

End point timeframe:

Day 1 up to approximately 24 weeks

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: Adverse event data is reported per dose of satralizumab. Hence, subject analysis sets have been used here.

End point values	Placebo	Satralizumab 120 mg	Satralizumab 180 mg	
Subject group type	Reporting group	Subject analysis set	Subject analysis set	
Number of subjects analysed	92	87	9	
Units: participants	67	78	8	

Statistical analyses

No statistical analyses for this end point

Secondary: DB Period: Serum Levels of Interleukin-6 (IL-6)

End point title	DB Period: Serum Levels of Interleukin-6 (IL-6)

End point description:

SE Population included all enrolled participants who received at least one dose of study drug, with participants grouped according to treatment received. Number analyzed is the number of participants with data available for analyses. n= number of participants with data available for analyses at the specified timepoints.

End point type	Secondary

End point timeframe:

Baseline, Weeks 2, 4, 8, 12, 16, 20 and 24

End point values	Placebo Matched to 120 mg Satralizumab	Satralizumab 120 mg	Placebo Matched to 180 mg Satralizumab	Satralizumab 180 mg
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	75	87	16	9
Units: nanograms/milliliters (ng/mL)				
geometric mean (geometric coefficient of variation)				
Baseline (n=75, 87, 16, 9)	1.97 (± 70.7)	2.19 (± 79.3)	3.65 (± 124.3)	4.87 (± 87.7)
Week 2 (n=71, 83, 16, 8)	2.30 (± 90.8)	17.45 (± 100.6)	3.08 (± 118.5)	35.23 (± 91.8)
Week 4 (n=73, 86, 16, 9)	2.10 (± 81.0)	20.31 (± 119.7)	2.66 (± 63.3)	46.49 (± 87.1)
Week 8 (n=75, 84, 16, 9)	2.37 (± 92.3)	19.40 (± 100.8)	2.46 (± 84.5)	38.59 (± 37.9)
Week 12 (n=69, 83, 16, 8)	2.11 (± 78.3)	16.59 (± 93.0)	3.90 (± 81.4)	41.72 (± 45.5)
Week 16 (n=67, 80, 13, 9)	2.17 (± 91.0)	18.02 (± 100.2)	2.65 (± 71.8)	30.13 (± 67.1)
Week 20 (n=72, 80, 16, 9)	2.24 (± 93.4)	15.50 (± 112.7)	2.96 (± 98.7)	26.10 (± 220.1)
Week 24 (n=71, 81, 16, 9)	2.18 (± 99.5)	15.75 (± 95.7)	2.26 (± 77.1)	29.57 (± 161.2)

Statistical analyses

No statistical analyses for this end point

Secondary: DB Period: Serum Levels of Soluble Interleukin-6 Receptors (sIL-6R)

End point title	DB Period: Serum Levels of Soluble Interleukin-6 Receptors (sIL-6R)

End point description:

SE Population included all enrolled participants who received at least one dose of study drug, with participants grouped according to treatment received. n= number of participants with data available for analyses at the specified timepoints.

End point type	Secondary

End point timeframe:

Baseline, Weeks 2, 4, 8, 12, 16, 20 and 24

End point values	Placebo Matched to 120 mg Satralizumab	Satralizumab 120 mg	Placebo Matched to 180 mg Satralizumab	Satralizumab 180 mg
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	76	87	16	9
Units: ng/mL				
geometric mean (geometric coefficient of variation)				
Baseline (n= 76, 87, 16, 9)	36.39 (± 27.3)	35.95 (± 24.8)	34.52 (± 27.9)	41.90 (± 24.4)
Week 2 (n= 72, 85, 16, 8)	36.08 (± 25.8)	461.84 (± 18.1)	35.51 (± 24.0)	441.03 (± 32.9)
Week 4 (n= 73, 87, 16, 9)	34.88 (± 26.0)	608.26 (± 18.1)	35.65 (± 23.3)	558.11 (± 27.3)
Week 8 (n= 75, 87, 16, 9)	35.26 (± 27.9)	659.47 (± 19.4)	33.04 (± 28.1)	653.33 (± 23.6)
Week 12 (n= 70, 84, 16, 8)	36.54 (± 26.9)	643.91 (± 26.3)	33.45 (± 26.2)	646.65 (± 25.2)
Week 16 (n= 68, 81, 14, 9)	35.58 (± 25.1)	646.92 (± 25.9)	35.80 (± 29.6)	600.54 (± 40.2)
Week 20 (n= 73, 82, 16, 9)	34.58 (± 24.6)	637.30 (± 23.9)	33.30 (± 24.8)	430.87 (± 124.1)
Week 24 (n= 71, 83, 16, 9)	37.46 (± 58.7)	634.58 (± 25.8)	34.12 (± 24.1)	374.27 (± 158.9)

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Participants With Anti-drug Antibodies (ADAs) to Satralizumab

End point title	Number of Participants With Anti-drug Antibodies (ADAs) to Satralizumab[2]

End point description:

Percentage of ADA-positive participants after drug administration were determined for participants exposed to satralizumab. For determining post-baseline incidence, participants were considered to be ADA-positive if they were ADA-negative or had missing data at baseline but developed an ADA response following study drug exposure, or if they were ADA-positive at baseline and titer of 1 or more post-baseline samples was at least 0.60 titer units (t.u.) greater than baseline titer result. Participants were considered to be ADA-negative if they were ADA-negative or had missing data at baseline and all post-baseline samples were negative, or if they were ADA positive at baseline but did not have any post-baseline samples with a titer that is at least 4-fold (0.60 titer unit) greater than titer of the baseline sample. Immunogenicity-analysis population was used for analysis. Number of participants analyzed is the number of participants with data available for analyses.

End point type	Secondary

End point timeframe:

Baseline to Week 24

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: ADA data is analyzed for participants receiving satralizumab. Hence, the placebo arm is not required here.

End point values	Satralizumab			
Subject group type	Reporting group			
Number of subjects analysed	94			
Units: participants				
Participants with ADA postive sample	23			
Participants with ADA negative sample	71			

Statistical analyses

No statistical analyses for this end point

Secondary: Serum Concentrations of Satralizumab

End point title	Serum Concentrations of Satralizumab

End point description:

Pharmacokinetic (PK)-evaluable population included all participants randomly assigned to study treatment who received at least one dose and had sufficient sampling to permit PK evaluation. Number analyzed is the number of participants with data available for analysis at the specified timepoints. 9999=Geometric Mean and Geometric Coefficient of Variation was not evaluable as samples were below limit of quantification.

End point type	Secondary

End point timeframe:

Weeks 0, 2, 4, 8, 12, 16, 20 and 24

End point values	Satralizumab 120 mg	Satralizumab 180 mg		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	87	9		
Units: mg				
arithmetic mean (standard deviation)				
Week 0 (n=87, 8)	9999 (± 9999)	9999 (± 9999)		
Week 2 (n=85, 8)	9740 (± 5270)	9620 (± 5210)		
Week 4 (n=86, 9)	19000 (± 8530)	18900 (± 7290)		
Week 8 (n=87, 9)	17300 (± 9550)	21700 (± 9690)		
Week 12 (n=84, 9)	15600 (± 9030)	19300 (± 13000)		
Week 16 (n=82, 9)	15800 (± 9710)	14500 (± 10100)		
Week 20 (n=82, 9)	14900 (± 9180)	15100 (± 10100)		
Week 24 (n=83, 9)	14800 (± 10100)	14800 (± 10900)		

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

DB Period Arms: Day 1 up to approximately 24 weeks;

Satralizumab in DB: Day 1 in DB up to end of OLE (approximately 116 weeks);

Placebo in DB: Day 1 in OLE up to end of OLE (approximately 92 weeks)

Adverse event reporting additional description:

DB Period: SE Population; All Treated Participants Set=all participants who received atleast 1 dose of satralizumab in DB &OLE. As pre-specified in SAP, AEs were reported for DB & OST period. OST=data for all participants from 1st dose of satralizumab (in DB for participants receiving satralizumab &in OLE for participants receiving placebo in DB).

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	26.1

Reporting groups

Reporting group title	DB Period: Placebo

Reporting group description:

Participants received satralizumab matched placebo, SC, at Weeks 0, 2, 4, and Q4W thereafter until the end of the DB period.

Reporting group title	DB Period: Satralizumab 120mg

Reporting group description:

Participants received satralizumab 120 mg, SC, at Weeks 0, 2, 4 (loading doses), and Q4W (maintenance doses) thereafter until the end of the DB period.

Reporting group title	DB Period: Satralizumab 180mg

Reporting group description:

Participants received satralizumab 180 mg, SC, at Weeks 0, 2, 4 (loading doses), and Q4W (maintenance doses) thereafter until the end of the DB period.

Reporting group title	Overall Satralizumab 120mg

Reporting group description:

Participants who received satralizumab 120 mg, SC, at Weeks 0, 2, 4 (loading doses), and Q4W (maintenance doses) thereafter until the end of the DB period continued receiving satralizumab 120 mg, Q4W in the OLE period. Participants who received placebo in the DB period received satralizumab, 120 mg at Weeks 0, 2, and 4 (loading doses), and Q4W thereafter (maintenance doses) in the OLE period. Participants continuing satralizumab treatment from the DB period received a placebo injection on Week 2 of OLE to maintain blinding to DB treatment assignment.

Reporting group title	Overall Satralizumab 180mg

Reporting group description:

Participants who received satralizumab 180 mg, SC, at Weeks 0, 2, 4 (loading doses), and 4 Q4W (maintenance doses) thereafter until the end of the DB period continued receiving satralizumab 180 mg, Q4W in the OLE period. Participants who received placebo in the DB period received satralizumab, 180 mg at Weeks 0, 2, and 4 (loading doses), and Q4W thereafter (maintenance doses) in the OLE period. Participants continuing satralizumab treatment from the DB period received a placebo injection on Week 2 of OLE to maintain blinding to DB treatment assignment.

Serious adverse events	DB Period: Placebo	DB Period: Satralizumab 120mg	DB Period: Satralizumab 180mg
Total subjects affected by serious adverse events			
subjects affected / exposed	6 / 92 (6.52%)	3 / 87 (3.45%)	0 / 9 (0.00%)
number of deaths (all causes)	0	0	0

number of deaths resulting from adverse events	0	0	0
Investigations			
Lipase increased			
subjects affected / exposed	0 / 92 (0.00%)	1 / 87 (1.15%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Uterine leiomyoma			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Prostate cancer			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Lipoma			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Injury, poisoning and procedural complications			
Post procedural haemorrhage			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Meniscus injury			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pregnancy, puerperium and perinatal conditions			
Abortion spontaneous			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nervous system disorders			

Myasthenia gravis crisis			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
General disorders and administration site conditions			
Chest pain			
subjects affected / exposed	1 / 92 (1.09%)	0 / 87 (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
Eye disorders			
Cataract			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Pancreatitis			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Incarcerated inguinal hernia			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Haemorrhoids			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Enterocolitis			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hepatobiliary disorders			
Liver disorder			

subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Skin and subcutaneous tissue disorders			
Rosacea			
subjects affected / exposed	1 / 92 (1.09%)	0 / 87 (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
Musculoskeletal and connective tissue disorders			
Back pain			
subjects affected / exposed	1 / 92 (1.09%)	0 / 87 (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
Infections and infestations			
Infective tenosynovitis			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Chronic sinusitis			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
COVID-19 pneumonia			
subjects affected / exposed	1 / 92 (1.09%)	0 / 87 (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
COVID-19			
subjects affected / exposed	2 / 92 (2.17%)	0 / 87 (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
Anal abscess			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Neurological infection			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia			
subjects affected / exposed	0 / 92 (0.00%)	1 / 87 (1.15%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urinary tract infection bacterial			
subjects affected / exposed	1 / 92 (1.09%)	0 / 87 (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
Pyelonephritis			
subjects affected / exposed	0 / 92 (0.00%)	1 / 87 (1.15%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia influenzal			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Overall Satralizumab 120mg	Overall Satralizumab 180mg	
Total subjects affected by serious adverse events			
subjects affected / exposed	18 / 159 (11.32%)	5 / 25 (20.00%)	
number of deaths (all causes)	1	0	
number of deaths resulting from adverse events	0	0	
Investigations			
Lipase increased			
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Uterine leiomyoma			

subjects affected / exposed	0 / 159 (0.00%)	1 / 25 (4.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Prostate cancer			
subjects affected / exposed	0 / 159 (0.00%)	1 / 25 (4.00%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Lipoma			
subjects affected / exposed	0 / 159 (0.00%)	1 / 25 (4.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Injury, poisoning and procedural complications			
Post procedural haemorrhage			
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Meniscus injury			
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pregnancy, puerperium and perinatal conditions			
Abortion spontaneous			
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Nervous system disorders			
Myasthenia gravis crisis			
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
General disorders and administration site conditions			
Chest pain			

subjects affected / exposed	0 / 159 (0.00%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Eye disorders		
Cataract		
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Gastrointestinal disorders		
Pancreatitis		
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Incarcerated inguinal hernia		
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Haemorrhoids		
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Enterocolitis		
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Hepatobiliary disorders		
Liver disorder		
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Skin and subcutaneous tissue disorders		
Rosacea		

subjects affected / exposed	0 / 159 (0.00%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Musculoskeletal and connective tissue disorders

Back pain

subjects affected / exposed	0 / 159 (0.00%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Infections and infestations

Infective tenosynovitis

subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Chronic sinusitis

subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

COVID-19 pneumonia

subjects affected / exposed	0 / 159 (0.00%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

COVID-19

subjects affected / exposed	0 / 159 (0.00%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Anal abscess

subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Neurological infection

subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Pneumonia		
subjects affected / exposed	2 / 159 (1.26%)	1 / 25 (4.00%)
occurrences causally related to treatment / all	2 / 2	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0
Urinary tract infection bacterial		
subjects affected / exposed	0 / 159 (0.00%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Pyelonephritis		
subjects affected / exposed	1 / 159 (0.63%)	0 / 25 (0.00%)
occurrences causally related to treatment / all	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0
Pneumonia influenzal		
subjects affected / exposed	0 / 159 (0.00%)	1 / 25 (4.00%)
occurrences causally related to treatment / all	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0

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

Non-serious adverse events	DB Period: Placebo	DB Period: Satralizumab 120mg	DB Period: Satralizumab 180mg
Total subjects affected by non-serious adverse events			
subjects affected / exposed	40 / 92 (43.48%)	48 / 87 (55.17%)	8 / 9 (88.89%)
Vascular disorders			
Hypertension			
subjects affected / exposed	4 / 92 (4.35%)	4 / 87 (4.60%)	1 / 9 (11.11%)
occurrences (all)	5	4	1
Respiratory, thoracic and mediastinal disorders			
Upper-airway cough syndrome			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Psychiatric disorders			
Insomnia			
subjects affected / exposed	2 / 92 (2.17%)	3 / 87 (3.45%)	0 / 9 (0.00%)
occurrences (all)	4	3	0
Investigations			

Alanine aminotransferase increased			
subjects affected / exposed	2 / 92 (2.17%)	2 / 87 (2.30%)	1 / 9 (11.11%)
occurrences (all)	3	2	1
Platelet count decreased			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Weight increased			
subjects affected / exposed	1 / 92 (1.09%)	4 / 87 (4.60%)	0 / 9 (0.00%)
occurrences (all)	1	4	0
Injury, poisoning and procedural complications			
Intercepted medication error			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Nervous system disorders			
Headache			
subjects affected / exposed	9 / 92 (9.78%)	9 / 87 (10.34%)	0 / 9 (0.00%)
occurrences (all)	17	16	0
Ear and labyrinth disorders			
Vertigo			
subjects affected / exposed	1 / 92 (1.09%)	2 / 87 (2.30%)	0 / 9 (0.00%)
occurrences (all)	1	2	0
Eye disorders			
Diplopia			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	1 / 9 (11.11%)
occurrences (all)	0	0	1
Dry eye			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	2 / 9 (22.22%)
occurrences (all)	0	0	2
Gastrointestinal disorders			
Abdominal pain upper			
subjects affected / exposed	2 / 92 (2.17%)	0 / 87 (0.00%)	1 / 9 (11.11%)
occurrences (all)	2	0	1
Diarrhoea			
subjects affected / exposed	5 / 92 (5.43%)	3 / 87 (3.45%)	1 / 9 (11.11%)
occurrences (all)	7	3	1
Nausea			

subjects affected / exposed	1 / 92 (1.09%)	4 / 87 (4.60%)	0 / 9 (0.00%)
occurrences (all)	1	4	0
Large intestine polyp			
subjects affected / exposed	0 / 92 (0.00%)	1 / 87 (1.15%)	1 / 9 (11.11%)
occurrences (all)	0	1	1
Hepatobiliary disorders			
Hepatic steatosis			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Skin and subcutaneous tissue disorders			
Pruritus			
subjects affected / exposed	0 / 92 (0.00%)	4 / 87 (4.60%)	0 / 9 (0.00%)
occurrences (all)	0	4	0
Renal and urinary disorders			
Haematuria			
subjects affected / exposed	2 / 92 (2.17%)	1 / 87 (1.15%)	1 / 9 (11.11%)
occurrences (all)	2	1	2
Musculoskeletal and connective tissue disorders			
Osteoarthritis			
subjects affected / exposed	0 / 92 (0.00%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences (all)	0	0	0
Arthralgia			
subjects affected / exposed	6 / 92 (6.52%)	3 / 87 (3.45%)	2 / 9 (22.22%)
occurrences (all)	7	4	2
Back pain			
subjects affected / exposed	3 / 92 (3.26%)	2 / 87 (2.30%)	0 / 9 (0.00%)
occurrences (all)	3	2	0
Myalgia			
subjects affected / exposed	3 / 92 (3.26%)	3 / 87 (3.45%)	0 / 9 (0.00%)
occurrences (all)	4	4	0
Infections and infestations			
Nasopharyngitis			
subjects affected / exposed	4 / 92 (4.35%)	6 / 87 (6.90%)	0 / 9 (0.00%)
occurrences (all)	4	6	0
COVID-19			

subjects affected / exposed	7 / 92 (7.61%)	11 / 87 (12.64%)	1 / 9 (11.11%)
occurrences (all)	7	11	1
Conjunctivitis			
subjects affected / exposed	1 / 92 (1.09%)	0 / 87 (0.00%)	0 / 9 (0.00%)
occurrences (all)	1	0	0
Upper respiratory tract infection			
subjects affected / exposed	8 / 92 (8.70%)	6 / 87 (6.90%)	0 / 9 (0.00%)
occurrences (all)	8	7	0
Pharyngitis			
subjects affected / exposed	2 / 92 (2.17%)	5 / 87 (5.75%)	0 / 9 (0.00%)
occurrences (all)	2	5	0
Urinary tract infection			
subjects affected / exposed	6 / 92 (6.52%)	4 / 87 (4.60%)	1 / 9 (11.11%)
occurrences (all)	6	5	1

Non-serious adverse events	Overall Satralizumab 120mg	Overall Satralizumab 180mg	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	95 / 159 (59.75%)	16 / 25 (64.00%)	
Vascular disorders			
Hypertension			
subjects affected / exposed	9 / 159 (5.66%)	2 / 25 (8.00%)	
occurrences (all)	10	2	
Respiratory, thoracic and mediastinal disorders			
Upper-airway cough syndrome			
subjects affected / exposed	0 / 159 (0.00%)	1 / 25 (4.00%)	
occurrences (all)	0	1	
Psychiatric disorders			
Insomnia			
subjects affected / exposed	8 / 159 (5.03%)	0 / 25 (0.00%)	
occurrences (all)	8	0	
Investigations			
Alanine aminotransferase increased			
subjects affected / exposed	10 / 159 (6.29%)	3 / 25 (12.00%)	
occurrences (all)	13	4	
Platelet count decreased			

subjects affected / exposed	2 / 159 (1.26%)	1 / 25 (4.00%)	
occurrences (all)	2	1	
Weight increased			
subjects affected / exposed	8 / 159 (5.03%)	0 / 25 (0.00%)	
occurrences (all)	8	0	
Injury, poisoning and procedural complications			
Intercepted medication error			
subjects affected / exposed	0 / 159 (0.00%)	2 / 25 (8.00%)	
occurrences (all)	0	2	
Nervous system disorders			
Headache			
subjects affected / exposed	20 / 159 (12.58%)	1 / 25 (4.00%)	
occurrences (all)	40	1	
Ear and labyrinth disorders			
Vertigo			
subjects affected / exposed	2 / 159 (1.26%)	2 / 25 (8.00%)	
occurrences (all)	2	2	
Eye disorders			
Diplopia			
subjects affected / exposed	0 / 159 (0.00%)	1 / 25 (4.00%)	
occurrences (all)	0	1	
Dry eye			
subjects affected / exposed	2 / 159 (1.26%)	3 / 25 (12.00%)	
occurrences (all)	2	3	
Gastrointestinal disorders			
Abdominal pain upper			
subjects affected / exposed	1 / 159 (0.63%)	1 / 25 (4.00%)	
occurrences (all)	1	1	
Diarrhoea			
subjects affected / exposed	11 / 159 (6.92%)	1 / 25 (4.00%)	
occurrences (all)	11	2	
Nausea			
subjects affected / exposed	8 / 159 (5.03%)	0 / 25 (0.00%)	
occurrences (all)	9	0	
Large intestine polyp			

subjects affected / exposed	2 / 159 (1.26%)	1 / 25 (4.00%)
occurrences (all)	2	1

Hepatobiliary disorders		
Hepatic steatosis		
subjects affected / exposed	0 / 159 (0.00%)	2 / 25 (8.00%)
occurrences (all)	0	2

Skin and subcutaneous tissue disorders		
Pruritus		
subjects affected / exposed	8 / 159 (5.03%)	0 / 25 (0.00%)
occurrences (all)	8	0

Renal and urinary disorders		
Haematuria		
subjects affected / exposed	1 / 159 (0.63%)	2 / 25 (8.00%)
occurrences (all)	1	3

Musculoskeletal and connective tissue disorders		
Osteoarthritis		
subjects affected / exposed	1 / 159 (0.63%)	2 / 25 (8.00%)
occurrences (all)	1	2
Arthralgia		
subjects affected / exposed	6 / 159 (3.77%)	4 / 25 (16.00%)
occurrences (all)	7	4
Back pain		
subjects affected / exposed	9 / 159 (5.66%)	2 / 25 (8.00%)
occurrences (all)	9	2
Myalgia		
subjects affected / exposed	6 / 159 (3.77%)	2 / 25 (8.00%)
occurrences (all)	7	2

Infections and infestations		
Nasopharyngitis		
subjects affected / exposed	18 / 159 (11.32%)	2 / 25 (8.00%)
occurrences (all)	23	4
COVID-19		
subjects affected / exposed	22 / 159 (13.84%)	2 / 25 (8.00%)
occurrences (all)	24	2
Conjunctivitis		

subjects affected / exposed	1 / 159 (0.63%)	2 / 25 (8.00%)
occurrences (all)	1	3

Upper respiratory tract infection

subjects affected / exposed	23 / 159 (14.47%)	3 / 25 (12.00%)
occurrences (all)	34	5

Pharyngitis

subjects affected / exposed	8 / 159 (5.03%)	1 / 25 (4.00%)
occurrences (all)	12	1

Urinary tract infection

subjects affected / exposed	13 / 159 (8.18%)	1 / 25 (4.00%)
occurrences (all)	19	1

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
16 February 2021	1. An additional exclusion criterion was added to ensure that participants treated with methotrexate had a washout period of at least 8 weeks before enrolling in this study
10 November 2021	1. The sample size for the pharmacokinetic interim analysis was updated so that it was performed when approximately 30 participants had completed a minimum of 8 weeks of DB treatment, with the option to include up to 10 additional participants, if needed, for the independent Data Monitoring Committee (iDMC) to make a decision with regard to dose based upon the adequate precision in the clearance estimate of satralizumab 2. Exclusion criteria pertaining to previous or concomitant therapies and assessments were clarified 3. Information on a new study drug formulation of a 0.5 mL prefilled syringe (PFS) corresponding to 60 mg satralizumab (once available) was included 4. In the OLE period schedule of assessments, the efficacy assessments (Myasthenia Gravis Activities of Daily Living, QMG, MGC, Myasthenia Gravis Quality of Life 15 Scale, Quality of Life in Neurological Disorders Fatigue Subscale, and EuroQoL EQ-5D-5L) was removed from the SFU/end-of-study (EOS) visit
01 March 2023	1. The hierarchy of secondary endpoints were included 2. It was clarified that each efficacy analysis will be conducted on all randomized participants that have completed at least one postbaseline MG-ADL assessment 3. The inclusion criterion for participants receiving ongoing gMG treatment at a stable dose was clarified that the dose received cannot exceed the maximum allowed dose 4. The window for Week 4 of the OLE period was corrected from 7 days to 3 days 8. The timing of the collection of serum sample for biomarkers was updated to no longer occur every 24 weeks after Week 24 of the OLE period and to occur during re-loading dose visits 2 and 3
21 July 2023	1. The study sample size was reduced from 240 to approximately 185 participants 2. A new section on adolescent enrollment was added to reflect adolescent participant enrollment into the OLE period at study start, and the protocol was revised throughout 3. The pharmacokinetic interim analysis was completed, and the text was revised accordingly 4. Text regarding a China extended enrollment phase was removed as the participant target was reached

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

 None reported