Clinical trial results:
A Phase 2, Multicenter, Randomized, Placebo-Controlled, Double-Blind Study to Evaluate the Safety and Efficacy of Risankizumab in Adult Subjects With Moderate to Severe Hidradenitis Suppurativa

Summary

EudraCT number	2019-000122-21
Trial protocol	DE NL FR ES
Global end of trial date	02 August 2021

Results information

Result version number	v1 (current)
This version publication date	28 July 2022
First version publication date	28 July 2022

Trial information

Trial identification

Sponsor protocol code	M16-833

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT03926169
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	AbbVie Deutschland GmbH & Co. KG
Sponsor organisation address	AbbVie House, Vanwall Business Park, Vanwall Road,, Maidenhead, Berkshire, United Kingdom, SL6 4UB
Public contact	Global Medical Services, AbbVie, AbbVie Deutschland GmbH & Co. KG, 001 8006339110, abbvieclinicaltrials@abbvie.com
Scientific contact	Global Medical Services, AbbVie, AbbVie Deutschland GmbH & Co. KG, 001 8006339110, abbvieclinicaltrials@abbvie.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	02 August 2021
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	02 August 2021
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

The primary objective of this study is to assess the safety and efficacy of risankizumab 180 mg and 360 mg versus placebo for the treatment of signs and symptoms of moderate to severe hidradenitis suppurativa (HS) in adult participants diagnosed for at least one year before the Baseline visit.

Protection of trial subjects:

Subject and/or legal guardian read and understood the information provided about the study and gave written permission.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	03 June 2019
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	Australia: 14
Country: Number of subjects enrolled	Canada: 39
Country: Number of subjects enrolled	France: 30
Country: Number of subjects enrolled	Germany: 26
Country: Number of subjects enrolled	Japan: 12
Country: Number of subjects enrolled	Netherlands: 15
Country: Number of subjects enrolled	Spain: 23
Country: Number of subjects enrolled	United States: 84
Worldwide total number of subjects	243
EEA total number of subjects	94

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0

Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	240
From 65 to 84 years	3
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Participants who met the study's eligibility criteria were randomized at the Baseline Visit, in a 1:1:1 ratio, to receive either placebo, risankizumab 180 mg or 360 mg via a subcutaneous (SC) injection.

Period 1

Period 1 title	Period A
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Assessor

Blinding implementation details:

All AbbVie personnel with direct oversight of the conduct and management of the study (with the exception of AbbVie Drug Supply Management Team) remained blinded until the Primary Analysis at Week 16 was available.

Arms

Are arms mutually exclusive?	Yes
Arm title	Placebo

Arm description:

In Period A, participants received blinded placebo via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Arm type	Placebo
Investigational medicinal product name	placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of placebo were administered by designated and qualified study site personnel under the direction of the investigator.

Arm title	Risankizumab 180 mg

Arm description:

In Period A, participants received blinded risankizumab 180 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Arm type	Experimental
Investigational medicinal product name	risankizumab
Investigational medicinal product code	ABBV-066
Other name	SKYRIZI
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of risankizumab were administered by designated and qualified study site personnel under the direction of the investigator.

Arm title	Risankizumab 360 mg

Arm description:

In Period A, participants received blinded risankizumab 360 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Arm type	Experimental

Investigational medicinal product name	risankizumab
Investigational medicinal product code	ABBV-066
Other name	SKYRIZI
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of risankizumab were administered by designated and qualified study site personnel under the direction of the investigator.

Number of subjects in period 1	Placebo	Risankizumab 180 mg	Risankizumab 360 mg
Started	82	80	81
Never Received Study Drug	0 [1]	0 [2]	1 [3]
Completed	74	70	75
Not completed	8	10	6
Consent withdrawn by subject	2	2	2
COVID-19 Logistical Restrictions	-	2	1
Other, not specified	1	-	-
Adverse event	2	2	1
COVID-19 Infection	-	1	-
Lost to follow-up	3	1	-
Lack of efficacy	-	2	2

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: Number consists of those participants who never received study drug.

[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: Number consists of those participants who never received study drug.

[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: Number consists of those participants who never received study drug.

Period 2

Period 2 title	Period B
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator

Blinding implementation details:

The investigator, study site personnel, and the participant remained blinded to each participant's initial treatment throughout the study.

Arms

Are arms mutually exclusive?	Yes

Arm title	Placebo / Risankizumab 360 mg

Arm description:

In Period A, participants received blinded placebo via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded risankizumab 360 mg at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg every 8 weeks (q8w) at Weeks 20, 28, 36, 44, 52, and 60.

Arm type	Placebo
Investigational medicinal product name	placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of placebo were administered by designated and qualified study site personnel under the direction of the investigator.

Investigational medicinal product name	risankizumab
Investigational medicinal product code	ABBV-066
Other name	SKYRIZI
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of risankizumab were administered by designated and qualified study site personnel under the direction of the investigator.

Arm title	Risankizumab 180 mg / Risankizumab 360 mg

Arm description:

In Period A, participants received blinded risankizumab 180 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded placebo at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg q8w at Weeks 20, 28, 36, 44, 52, and 60.

Arm type	Experimental
Investigational medicinal product name	risankizumab
Investigational medicinal product code	ABBV-066
Other name	SKYRIZI
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of risankizumab were administered by designated and qualified study site personnel under the direction of the investigator.

Investigational medicinal product name	placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of placebo were administered by designated and qualified study site personnel under the direction of the investigator.

Arm title	Risankizumab 360 mg / Risankizumab 360 mg

Arm description:

In Period A, participants received blinded risankizumab 360 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded placebo at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg q8w at Weeks 20, 28, 36, 44, 52, and 60.

Arm type	Experimental
Investigational medicinal product name	risankizumab
Investigational medicinal product code	ABBV-066
Other name	SKYRIZI
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of risankizumab were administered by designated and qualified study site personnel under the direction of the investigator.

Investigational medicinal product name	placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

All SC doses of placebo were administered by designated and qualified study site personnel under the direction of the investigator.

Number of subjects in period 2	Placebo / Risankizumab 360 mg	Risankizumab 180 mg / Risankizumab 360 mg	Risankizumab 360 mg / Risankizumab 360 mg
Started	74	70	75
Entered Period B and Received Study Drug	74	70	74
Completed	4	7	4
Not completed	70	63	71
Consent withdrawn by subject	1	3	-
Other, not specified	62	57	65
Adverse event	3	1	1
Lost to follow-up	1	1	4
Lack of efficacy	3	1	1

Baseline characteristics

Reporting groups	
Reporting group title	Placebo
Reporting group description:	
In Period A, participants received blinded placebo via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.	
Reporting group title	Risankizumab 180 mg
Reporting group description:	
In Period A, participants received blinded risankizumab 180 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.	
Reporting group title	Risankizumab 360 mg
Reporting group description:	
In Period A, participants received blinded risankizumab 360 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.	

Reporting group values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg
Number of subjects	82	80	81
Age categorical Units: Subjects			
Age continuous Units: years			
arithmetic mean	37.2	38.9	38.2
standard deviation	± 11.97	± 11.45	± 11.99
Gender categorical Units: Subjects			
Female	48	53	51
Male	34	27	30
Ethnicity Units: Subjects			
Hispanic or Latino	9	10	7
Not Hispanic or Latino	73	70	74
Race Units: Subjects			
White	68	63	62
Black or African American	4	12	9
Asian	8	4	9
American Indian or Alaska Native	0	1	0
Multiple Races	2	0	1
Abscess and Inflammatory Nodule (AN) Count Units: abscess and inflammatory nodules			
arithmetic mean	15.7	13.7	12.5
standard deviation	± 28.42	± 11.42	± 8.24

Reporting group values	Total		
Number of subjects	243		

Age categorical Units: Subjects			

Age continuous Units: years arithmetic mean standard deviation	- -		
Gender categorical Units: Subjects			
Female	152		
Male	91		
Ethnicity Units: Subjects			
Hispanic or Latino	26		
Not Hispanic or Latino	217		
Race Units: Subjects			
White	193		
Black or African American	25		
Asian	21		
American Indian or Alaska Native	1		
Multiple Races	3		
Abscess and Inflammatory Nodule (AN) Count Units: abscess and inflammatory nodules arithmetic mean standard deviation	 -		

End points

End points reporting groups

Reporting group title	Placebo

Reporting group description:

In Period A, participants received blinded placebo via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Reporting group title	Risankizumab 180 mg

Reporting group description:

In Period A, participants received blinded risankizumab 180 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Reporting group title	Risankizumab 360 mg

Reporting group description:

In Period A, participants received blinded risankizumab 360 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Reporting group title	Placebo / Risankizumab 360 mg

Reporting group description:

In Period A, participants received blinded placebo via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded risankizumab 360 mg at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg every 8 weeks (q8w) at Weeks 20, 28, 36, 44, 52, and 60.

Reporting group title	Risankizumab 180 mg / Risankizumab 360 mg

Reporting group description:

In Period A, participants received blinded risankizumab 180 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded placebo at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg q8w at Weeks 20, 28, 36, 44, 52, and 60.

Reporting group title	Risankizumab 360 mg / Risankizumab 360 mg

Reporting group description:

In Period A, participants received blinded risankizumab 360 mg via SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded placebo at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg q8w at Weeks 20, 28, 36, 44, 52, and 60.

Primary: Percentage of Participants Achieving Hidradenitis Suppurativa Clinical Response (HiSCR) at Week 16

End point title	Percentage of Participants Achieving Hidradenitis Suppurativa Clinical Response (HiSCR) at Week 16

End point description:

HiSCR is defined as at least a 50% reduction from Baseline in the total abscess and inflammatory nodule (AN) count, with no increase in abscess or draining fistula counts.

Intent-to-Treat Population: all randomized participants. Non-responder imputation with multiple imputation to handle missing data due to COVID-19 (NRI-C).

End point type	Primary

End point timeframe:

Baseline (Week 0), Week 16

End point values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	82	80	81	
Units: percentage of participants				
number (confidence interval 97.5%)	41.5 (29.3 to 53.7)	46.8 (34.2 to 59.4)	43.4 (31.0 to 55.8)	

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Comparison groups	Placebo v Risankizumab 180 mg
Number of subjects included in analysis	162
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.422 [1]
Method	Cochran-Mantel-Haenszel
Parameter estimate	Adjusted response rate difference (%)
Point estimate	6
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-10.8
upper limit	22.8

Notes:

[1] - Across the strata, 97.5% confidence interval for adjusted difference and P-value were calculated according to the Cochran-Mantel-Haenszel test adjusted for the actual values stratification factors under a two-sided alpha level 0.025 for each dose.

Statistical analysis title	Statistical Analysis 2
Comparison groups	Placebo v Risankizumab 360 mg
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.858 [2]
Method	Cochran-Mantel-Haenszel
Parameter estimate	Adjusted response rate difference (%)
Point estimate	1.3
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-15.4
upper limit	18.1

Notes:

[2] - Across the strata, 97.5% confidence interval for adjusted difference and P-value were calculated according to the Cochran-Mantel-Haenszel test adjusted for the actual values stratification factors under a two-sided alpha level 0.025 for each dose.

Secondary: Percentage of Participants Achieving ≥ 30% Reduction and ≥ 1 Unit Reduction From Baseline in Patient's Global Assessment (PGA) of Skin Pain Numerical Rating Scale (NRS30) at Week 8 Among Participants With Baseline Numerical Rating Scale (NRS) ≥ 3

End point title	Percentage of Participants Achieving ≥ 30% Reduction and ≥ 1 Unit Reduction From Baseline in Patient's Global Assessment (PGA) of Skin Pain Numerical Rating Scale (NRS30) at Week 8 Among Participants With Baseline Numerical Rating Scale (NRS) ≥ 3

End point description:

NRS30 is evaluated based on worst skin pain in a 24-hour recall period (maximal daily pain), ranging from 0 (no skin pain) to 10 (skin pain as bad as you can imagine). The percentage of participants who achieved at least 30% reduction and at least 1 unit reduction from Baseline at Week 8 in the PGA of Skin Pain (NRS30) - at worst, among participants with Baseline NRS ≥ 3, is presented.

Intent-to-Treat Population: all randomized participants. Participants with Baseline NRS ≥ 3. Non-responder imputation with multiple imputation to handle missing data due to COVID-19.

End point type	Secondary

End point timeframe:

Baseline (Week 0) to Week 8

End point values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	61	61	60	
Units: percentage of participants				
number (confidence interval 97.5%)	33.0 (19.4 to 46.5)	29.2 (15.9 to 42.6)	40.0 (25.8 to 54.2)	

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Comparison groups	Placebo v Risankizumab 180 mg
Number of subjects included in analysis	122
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.725 [3]
Method	Cochran-Mantel-Haenszel
Parameter estimate	Adjusted response rate difference (%)
Point estimate	-3
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-21.8
upper limit	15.9

Notes:

[3] - Across the strata, 97.5% confidence interval for adjusted difference and P-value were calculated according to the Cochran-Mantel-Haenszel test adjusted for the actual values stratification factors under a two-sided alpha level 0.025 for each dose.

Statistical analysis title	Statistical Analysis 2

Comparison groups	Placebo v Risankizumab 360 mg
Number of subjects included in analysis	121
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.301 [4]
Method	Cochran-Mantel-Haenszel
Parameter estimate	Adjusted response rate difference (%)
Point estimate	8.8
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-10.3
upper limit	27.8

Notes:

[4] - Across the strata, 97.5% confidence interval for adjusted difference and P-value were calculated according to the Cochran-Mantel-Haenszel test adjusted for the actual values stratification factors under a two-sided alpha level 0.025 for each dose.

Secondary: Percentage of Participants Achieving ≥ 30% Reduction and ≥ 1 Unit Reduction From Baseline in PGA of Skin Pain Numerical Rating Scale (NRS30) at Week 16 Among Participants With Baseline Numerical Rating Scale (NRS) ≥ 3

End point title	Percentage of Participants Achieving ≥ 30% Reduction and ≥ 1 Unit Reduction From Baseline in PGA of Skin Pain Numerical Rating Scale (NRS30) at Week 16 Among Participants With Baseline Numerical Rating Scale (NRS) ≥ 3

End point description:

NRS30 is evaluated based on worst skin pain in a 24-hour recall period (maximal daily pain), ranging from 0 (no skin pain) to 10 (skin pain as bad as you can imagine). The percentage of participants who achieved at least 30% reduction and at least 1 unit reduction from Baseline at Week 16 in the PGA of Skin Pain (NRS30) - at worst, among participants with Baseline NRS ≥ 3, is presented.

Intent-to-Treat Population: all randomized participants. Participants with Baseline NRS ≥ 3. Non-responder imputation with multiple imputation to handle missing data due to COVID-19.

End point type	Secondary

End point timeframe:

Baseline (Week 0) to Week 16

End point values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	61	61	60	
Units: percentage of participants				
number (confidence interval 97.5%)	27.9 (15.0 to 40.7)	31.1 (17.5 to 44.7)	38.6 (24.4 to 52.7)	

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Comparison groups	Placebo v Risankizumab 180 mg

Number of subjects included in analysis	122
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.65 [5]
Method	Cochran-Mantel-Haenszel
Parameter estimate	Adjusted response rate difference (%)
Point estimate	3.7
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-14.5
upper limit	21.8

Notes:

[5] - Across the strata, 97.5% confidence interval for adjusted difference and P-value were calculated according to the Cochran-Mantel-Haenszel test adjusted for the actual values stratification factors under a two-sided alpha level 0.025 for each dose.

Statistical analysis title	Statistical Analysis 2
Comparison groups	Placebo v Risankizumab 360 mg
Number of subjects included in analysis	121
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.147
Method	Cochran-Mantel-Haenszel
Parameter estimate	Adjusted response rate difference (%)
Point estimate	12.3
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-6.7
upper limit	31.3

Secondary: Percentage of Participants Who Experienced ≥ 25% Increase in Abscess and Inflammatory Nodule (AN) Counts in Period A With a Minimum Increase of 2 Relative to Baseline

End point title	Percentage of Participants Who Experienced ≥ 25% Increase in Abscess and Inflammatory Nodule (AN) Counts in Period A With a Minimum Increase of 2 Relative to Baseline

End point description:

Intent-to-Treat Population: all randomized participants. Participants with Baseline NRS ≥ 3. Non-responder imputation.

End point type	Secondary

End point timeframe:

Baseline (Week 0) to Week 16

End point values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	82	80	81	
Units: percentage of participants				
number (confidence interval 97.5%)	29.3 (18.0 to 40.5)	22.5 (12.0 to 33.0)	18.5 (8.8 to 28.2)	

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Comparison groups	Placebo v Risankizumab 180 mg
Number of subjects included in analysis	162
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.342 [6]
Method	Cochran-Mantel-Haenszel
Parameter estimate	Adjusted response rate difference (%)
Point estimate	-6.5
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-21.8
upper limit	8.8

Notes:

[6] - Across the strata, 97.5% confidence interval for adjusted difference and P-value were calculated according to the Cochran-Mantel-Haenszel test adjusted for the actual values stratification factors under a two-sided alpha level 0.025 for each dose.

Statistical analysis title	Statistical Analysis 2
Comparison groups	Placebo v Risankizumab 360 mg
Number of subjects included in analysis	163
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.108 [7]
Method	Cochran-Mantel-Haenszel
Parameter estimate	Adjusted response rate difference (%)
Point estimate	-10.6
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-25.3
upper limit	4.2

Notes:

[7] - Across the strata, 97.5% confidence interval for adjusted difference and P-value were calculated according to the Cochran-Mantel-Haenszel test adjusted for the actual values stratification factors under a two-sided alpha level 0.025 for each dose.

Secondary: Change From Baseline in Dermatology Life Quality Index (DLQI) Score at Week 16

End point title	Change From Baseline in Dermatology Life Quality Index (DLQI) Score at Week 16

End point description:

The DLQI is a 10-item validated questionnaire used to assess the impact of HS disease symptoms and treatment on quality of life (QoL). It consists of 10 questions evaluating impact of skin diseases on different aspects of a participant's QoL over the prior week, including symptoms and feelings, daily activities, leisure, work or school, personal relationships, and the side effects of treatment. DLQI scores range from 0 to 30, with a higher score indicating a more impaired QoL.

Intent-to-Treat Population: all randomized participants. Participants with an assessment at given time point.

End point type	Secondary

End point timeframe:

Baseline (Week 0) to Week 16

End point values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	62	66	63	
Units: score on a scale				
least squares mean (confidence interval 97.5%)	-2.1 (-3.9 to -0.4)	-3.5 (-5.2 to -1.8)	-3.7 (-5.5 to -2.0)	

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Comparison groups	Placebo v Risankizumab 180 mg
Number of subjects included in analysis	128
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.179 [8]
Method	mixed-effect model repeat measures
Parameter estimate	Least Squares (LS) Mean Difference
Point estimate	-1.3
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-3.5
upper limit	0.9
Variability estimate	Standard error of the mean
Dispersion value	0.97

Notes:

[8] - Mixed-effect model repeat measures analysis with treatment, visit, treatment by visit interaction, stratification factor and baseline measurement in the model. An unstructured variance covariance matrix is used.

Statistical analysis title	Statistical Analysis 2
Comparison groups	Placebo v Risankizumab 360 mg

Number of subjects included in analysis	125
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.105 [9]
Method	mixed-effect model repeat measures
Parameter estimate	LS Mean Difference
Point estimate	-1.6
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-3.8
upper limit	0.6
Variability estimate	Standard error of the mean
Dispersion value	0.98

Notes:

[9] - Mixed-effect model repeat measures analysis with treatment, visit, treatment by visit interaction, stratification factor and baseline measurement in the model. An unstructured variance covariance matrix is used.

Secondary: Change From Baseline in HS-Related Swelling Based on the Hidradenitis Suppurativa Symptom Assessment (HSSA) Swollen Skin Score at Week 16

End point title	Change From Baseline in HS-Related Swelling Based on the Hidradenitis Suppurativa Symptom Assessment (HSSA) Swollen Skin Score at Week 16

End point description:

HSSA is a 9-item participant-reported outcome (PRO) questionnaire developed to assess the symptoms of HS. HS-related swelling is scored on an 11-point NRS, where 0 represents no symptoms and 10 represents extreme symptom experience.

Intent-to-Treat Population: all randomized participants. Participants with an assessment at given time point.

End point type	Secondary

End point timeframe:

Baseline (Week 0) to Week 16

End point values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	65	53	63	
Units: score on a scale				
least squares mean (confidence interval 97.5%)	-0.870 (-1.416 to -0.324)	-0.751 (-1.338 to -0.165)	-0.885 (-1.436 to -0.334)	

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Comparison groups	Placebo v Risankizumab 180 mg

Number of subjects included in analysis	118
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.727 [10]
Method	mixed-effect model repeat measures
Parameter estimate	LS Mean Difference
Point estimate	0.118
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-0.646
upper limit	0.883
Variability estimate	Standard error of the mean
Dispersion value	0.3385

Notes:

[10] - Mixed-effect model repeat measures analysis with treatment, visit, treatment by visit interaction, stratification factor and baseline measurement in the model. An unstructured variance covariance matrix is used.

Statistical analysis title	Statistical Analysis 2
Comparison groups	Placebo v Risankizumab 360 mg
Number of subjects included in analysis	128
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.963 [11]
Method	mixed-effect model repeat measures
Parameter estimate	LS Mean Difference
Point estimate	-0.015
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-0.755
upper limit	0.724
Variability estimate	Standard error of the mean
Dispersion value	0.3273

Notes:

[11] - Mixed-effect model repeat measures analysis with treatment, visit, treatment by visit interaction, stratification factor and baseline measurement in the model. An unstructured variance covariance matrix is used.

Secondary: Change From Baseline in HS-Related Odor Based on the HSSA Bad Smell Score at Week 16

End point title	Change From Baseline in HS-Related Odor Based on the HSSA Bad Smell Score at Week 16

End point description:

HSSA is a 9-item PRO questionnaire developed to assess the symptoms of HS. HS-related odor is scored on an 11-point NRS, where 0 represents no symptoms and 10 represents extreme symptom experience.

Intent-to-Treat Population: all randomized participants. Participants with an assessment at given time point.

End point type	Secondary

End point timeframe:

Baseline (Week 0) to Week 16

End point values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	65	53	63	
Units: score on a scale				
least squares mean (confidence interval 97.5%)	-0.677 (-1.160 to -0.195)	-0.635 (-1.149 to -0.120)	-0.442 (-0.928 to 0.044)	

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Comparison groups	Risankizumab 180 mg v Placebo
Number of subjects included in analysis	118
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.886 [12]
Method	mixed-effect model repeat measures
Parameter estimate	LS Mean Difference
Point estimate	0.042
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-0.622
upper limit	0.706
Variability estimate	Standard error of the mean
Dispersion value	0.2941

Notes:

[12] - Mixed-effect model repeat measures analysis with treatment, visit, treatment by visit interaction, stratification factor and baseline measurement in the model. An unstructured variance covariance matrix is used.

Statistical analysis title	Statistical Analysis 2
Comparison groups	Placebo v Risankizumab 360 mg
Number of subjects included in analysis	128
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.409 [13]
Method	mixed-effect model repeat measures
Parameter estimate	LS Mean Difference
Point estimate	0.236
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-0.408
upper limit	0.879
Variability estimate	Standard error of the mean
Dispersion value	0.2851

Notes:

[13] - Mixed-effect model repeat measures analysis with treatment, visit, treatment by visit interaction, stratification factor and baseline measurement in the model. An unstructured variance covariance matrix is used.

Secondary: Change From Baseline in HS-Related Worst Drainage Based on the HSSA Worst Drainage Score at Week 16

End point title	Change From Baseline in HS-Related Worst Drainage Based on the HSSA Worst Drainage Score at Week 16

End point description:

HSSA is a 9-item PRO questionnaire developed to assess the symptoms of HS. HS-related worst drainage is scored on an 11-point NRS, where 0 represents no symptoms and 10 represents extreme symptom experience.

Intent-to-Treat Population: all randomized participants. Participants with an assessment at given time point.

End point type	Secondary

End point timeframe:

Baseline (Week 0) to Week 16

End point values	Placebo	Risankizumab 180 mg	Risankizumab 360 mg	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	65	53	63	
Units: score on a scale				
least squares mean (confidence interval 97.5%)	-0.630 (-1.154 to -0.107)	-0.882 (-1.440 to -0.324)	-0.705 (-1.233 to -0.176)	

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Comparison groups	Placebo v Risankizumab 180 mg
Number of subjects included in analysis	118
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.434 [14]
Method	mixed-effect model repeat measures
Parameter estimate	LS Mean Difference
Point estimate	-0.252
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-0.977
upper limit	0.473
Variability estimate	Standard error of the mean
Dispersion value	0.3212

Notes:

[14] - Mixed-effect model repeat measures analysis with treatment, visit, treatment by visit interaction, stratification factor and baseline measurement in the model. An unstructured variance covariance matrix is used.

Statistical analysis title	Statistical Analysis 2
Comparison groups	Placebo v Risankizumab 360 mg
Number of subjects included in analysis	128
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.813 [15]
Method	mixed-effect model repeat measures
Parameter estimate	LS Mean Difference
Point estimate	-0.074
Confidence interval	
level	Other: 97.5 %
sides	2-sided
lower limit	-0.779
upper limit	0.631
Variability estimate	Standard error of the mean
Dispersion value	0.3123

Notes:

[15] - Mixed-effect model repeat measures analysis with treatment, visit, treatment by visit interaction, stratification factor and baseline measurement in the model. An unstructured variance covariance matrix is used.

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From the first dose of study medication until 20 weeks after the last dose. Part A overall mean duration on study drug was 108.5 days. Part B overall mean duration on study drug was 179.9 days.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	24.0

Reporting groups

Reporting group title	Placebo

Reporting group description:

In Period A, participants received blinded placebo via a SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Reporting group title	Risankizumab 180 mg

Reporting group description:

In Period A, participants received blinded risankizumab 180 mg via a SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Reporting group title	Risankizumab 360 mg

Reporting group description:

In Period A, participants received blinded risankizumab 360 mg via a SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

Reporting group title	Placebo / Risankizumab 360 mg

Reporting group description:

In Period A, participants received blinded placebo via a SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded risankizumab 360 mg at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg every 8 weeks (q8w) at Weeks 20, 28, 36, 44, 52, and 60.

Reporting group title	Risankizumab 180 mg / Risankizumab 360 mg

Reporting group description:

In Period A, participants received blinded risankizumab 180 mg via a SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded placebo at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg q8w at Weeks 20, 28, 36, 44, 52, and 60.

Reporting group title	Risankizumab 360 mg / Risankizumab 360 mg

Reporting group description:

In Period A, participants received blinded risankizumab 360 mg via a SC injection at Weeks 0 (Baseline), 1, 2, 4, and 12.

In Period B, participants received blinded placebo at Weeks 16, 17, and 18. Starting at Week 20, participants received open-label risankizumab 360 mg q8w at Weeks 20, 28, 36, 44, 52, and 60.

Serious adverse events	Placebo	Risankizumab 180 mg	Risankizumab 360 mg
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 82 (2.44%)	3 / 80 (3.75%)	2 / 80 (2.50%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events			

Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
BREAST CANCER			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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
Vascular disorders			
DEEP VEIN THROMBOSIS			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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
Cardiac disorders			
ANGINA UNSTABLE			
subjects affected / exposed	1 / 82 (1.22%)	0 / 80 (0.00%)	0 / 80 (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
Surgical and medical procedures			
ABORTION INDUCED			
subjects affected / exposed	0 / 82 (0.00%)	1 / 80 (1.25%)	0 / 80 (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
Gastrointestinal disorders			
SMALL INTESTINAL OBSTRUCTION			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	1 / 80 (1.25%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Reproductive system and breast disorders			
ENDOMETRIOSIS			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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
OVARIAN CYST			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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			

HIDRADENITIS			
subjects affected / exposed	1 / 82 (1.22%)	0 / 80 (0.00%)	0 / 80 (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
Psychiatric disorders			
AFFECTIVE DISORDER			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	1 / 80 (1.25%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
INTENTIONAL SELF-INJURY			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	1 / 80 (1.25%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
MAJOR DEPRESSION			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	1 / 80 (1.25%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
SUICIDAL IDEATION			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	1 / 80 (1.25%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Musculoskeletal and connective tissue disorders			
INTERVERTEBRAL DISC PROTRUSION			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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
Infections and infestations			
APPENDICITIS			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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
CELLULITIS			

subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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	0 / 82 (0.00%)	1 / 80 (1.25%)	0 / 80 (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
SUBCUTANEOUS ABSCESS			
subjects affected / exposed	0 / 82 (0.00%)	1 / 80 (1.25%)	0 / 80 (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
TONSILLITIS			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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
URINARY TRACT INFECTION			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	0 / 80 (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	Placebo / Risankizumab 360 mg	Risankizumab 180 mg / Risankizumab 360 mg	Risankizumab 360 mg / Risankizumab 360 mg
Total subjects affected by serious adverse events			
subjects affected / exposed	3 / 74 (4.05%)	4 / 70 (5.71%)	0 / 74 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
BREAST CANCER			
subjects affected / exposed	1 / 74 (1.35%)	0 / 70 (0.00%)	0 / 74 (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			
DEEP VEIN THROMBOSIS			

subjects affected / exposed	0 / 74 (0.00%)	1 / 70 (1.43%)	0 / 74 (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
Cardiac disorders			
ANGINA UNSTABLE			
subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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
Surgical and medical procedures			
ABORTION INDUCED			
subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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			
SMALL INTESTINAL OBSTRUCTION			
subjects affected / exposed	0 / 74 (0.00%)	1 / 70 (1.43%)	0 / 74 (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
Reproductive system and breast disorders			
ENDOMETRIOSIS			
subjects affected / exposed	1 / 74 (1.35%)	0 / 70 (0.00%)	0 / 74 (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
OVARIAN CYST			
subjects affected / exposed	1 / 74 (1.35%)	0 / 70 (0.00%)	0 / 74 (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
Skin and subcutaneous tissue disorders			
HIDRADENITIS			
subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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
Psychiatric disorders			
AFFECTIVE DISORDER			

subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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
INTENTIONAL SELF-INJURY			
subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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
MAJOR DEPRESSION			
subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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
SUICIDAL IDEATION			
subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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
Musculoskeletal and connective tissue disorders			
INTERVERTEBRAL DISC PROTRUSION			
subjects affected / exposed	0 / 74 (0.00%)	1 / 70 (1.43%)	0 / 74 (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
Infections and infestations			
APPENDICITIS			
subjects affected / exposed	1 / 74 (1.35%)	0 / 70 (0.00%)	0 / 74 (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
CELLULITIS			
subjects affected / exposed	1 / 74 (1.35%)	0 / 70 (0.00%)	0 / 74 (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
COVID-19 PNEUMONIA			
subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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

SUBCUTANEOUS ABSCESS			
subjects affected / exposed	0 / 74 (0.00%)	0 / 70 (0.00%)	0 / 74 (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
TONSILLITIS			
subjects affected / exposed	0 / 74 (0.00%)	1 / 70 (1.43%)	0 / 74 (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			
subjects affected / exposed	0 / 74 (0.00%)	1 / 70 (1.43%)	0 / 74 (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

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

Non-serious adverse events	Placebo	Risankizumab 180 mg	Risankizumab 360 mg
Total subjects affected by non-serious adverse events			
subjects affected / exposed	19 / 82 (23.17%)	21 / 80 (26.25%)	26 / 80 (32.50%)
Nervous system disorders			
HEADACHE			
subjects affected / exposed	9 / 82 (10.98%)	6 / 80 (7.50%)	11 / 80 (13.75%)
occurrences (all)	16	6	15
Gastrointestinal disorders			
DIARRHOEA			
subjects affected / exposed	4 / 82 (4.88%)	2 / 80 (2.50%)	2 / 80 (2.50%)
occurrences (all)	4	2	4
Skin and subcutaneous tissue disorders			
ECZEMA			
subjects affected / exposed	0 / 82 (0.00%)	0 / 80 (0.00%)	2 / 80 (2.50%)
occurrences (all)	0	0	2
HIDRADENITIS			
subjects affected / exposed	7 / 82 (8.54%)	3 / 80 (3.75%)	2 / 80 (2.50%)
occurrences (all)	7	3	3
Musculoskeletal and connective tissue disorders			

BACK PAIN			
subjects affected / exposed	2 / 82 (2.44%)	3 / 80 (3.75%)	4 / 80 (5.00%)
occurrences (all)	2	3	4
Infections and infestations			
NASOPHARYNGITIS			
subjects affected / exposed	3 / 82 (3.66%)	6 / 80 (7.50%)	7 / 80 (8.75%)
occurrences (all)	3	6	8
UPPER RESPIRATORY TRACT INFECTION			
subjects affected / exposed	1 / 82 (1.22%)	1 / 80 (1.25%)	4 / 80 (5.00%)
occurrences (all)	1	1	4
URINARY TRACT INFECTION			
subjects affected / exposed	1 / 82 (1.22%)	4 / 80 (5.00%)	3 / 80 (3.75%)
occurrences (all)	1	4	3

Non-serious adverse events	Placebo / Risankizumab 360 mg	Risankizumab 180 mg / Risankizumab 360 mg	Risankizumab 360 mg / Risankizumab 360 mg
Total subjects affected by non-serious adverse events			
subjects affected / exposed	26 / 74 (35.14%)	12 / 70 (17.14%)	19 / 74 (25.68%)
Nervous system disorders			
HEADACHE			
subjects affected / exposed	7 / 74 (9.46%)	1 / 70 (1.43%)	4 / 74 (5.41%)
occurrences (all)	10	1	5
Gastrointestinal disorders			
DIARRHOEA			
subjects affected / exposed	5 / 74 (6.76%)	1 / 70 (1.43%)	2 / 74 (2.70%)
occurrences (all)	5	1	2
Skin and subcutaneous tissue disorders			
ECZEMA			
subjects affected / exposed	1 / 74 (1.35%)	0 / 70 (0.00%)	4 / 74 (5.41%)
occurrences (all)	1	0	4
HIDRADENITIS			
subjects affected / exposed	6 / 74 (8.11%)	8 / 70 (11.43%)	10 / 74 (13.51%)
occurrences (all)	6	8	10
Musculoskeletal and connective tissue disorders			
BACK PAIN			
subjects affected / exposed	2 / 74 (2.70%)	0 / 70 (0.00%)	1 / 74 (1.35%)
occurrences (all)	2	0	1

Infections and infestations			
NASOPHARYNGITIS			
subjects affected / exposed	1 / 74 (1.35%)	4 / 70 (5.71%)	1 / 74 (1.35%)
occurrences (all)	1	5	1
UPPER RESPIRATORY TRACT INFECTION			
subjects affected / exposed	2 / 74 (2.70%)	0 / 70 (0.00%)	0 / 74 (0.00%)
occurrences (all)	2	0	0
URINARY TRACT INFECTION			
subjects affected / exposed	4 / 74 (5.41%)	0 / 70 (0.00%)	0 / 74 (0.00%)
occurrences (all)	4	0	0

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
19 August 2019	The purpose of this version is to: - Modify eligibility criterion #35 to allow subjects to continue on non-opioid analgesics provided that the dose and dosing regimen have been stable for at least 14 days preceding the Baseline visit and are expected to remain stable at least until Week 16 visit. - Add a statement regarding dose/regimen adjustments for subjects who are on a documented stable dose and dosing regimen of a non-opioid analgesic treatment prior to entering the study. - Clarify eligibility criteria #24, 25, and 36 and relevant text in Section 5.2 and Section 5.3 to indicate duration of contraception use and expectation for live vaccines to be 20 weeks after the last dose of study drug or as guided by the local risankizumab label if approved, whichever is longer. - Clarify in Section 5.3 that ibuprofen is an allowed medication for pain management during study conduct. - Delete over the counter soap as a prohibited medication to treat HS in Section 5.3 - Clarify in Section 5.4, Allowed Concomitant Medications/Therapies that subjects will document their HS-related analgesic pain. - Increase the number of approximate enrollment sites from 50 to 60 sites. - Clarify in criterion #27 that for subjects who have had prior exposure to anti-TNF therapy, the last anti-TNF treatment administration must have occurred at least 3 months or 5 half-lives (whichever is longer) prior to Baseline. - Clarify data collection procedures in Section 3.4 and Section 3.11 of the Operations Manual. - Add requirement for collection of PK and ADA/nAb samples in the context of a suspected anaphylactic reaction in Section 3.13 of the Operations Manual. - Reduce duration of post-dose safety surveillance to 1 hour in Section 3.13 of the Operations Manual.

26 March 2020	The purpose of this version is to: - Clarify the wording describing Hidradenitis Suppurativa Clinical Response (HiSCR) throughout the protocol. This clarification has no impact on the overall HiSCR analysis. - Clarify the wording describing the definition of NRS30 throughout the protocol. This clarification has no impact on the overall NRS30. - In Section 5.1, eligibility criterion #27, removed the cap of no more than 15% TNF-IR subjects from eligibility and changed the last anti-TNF treatment administration to having occurred at least 2 months prior to Baseline. - Clarify in Section 5.3 that metformin (except for continuous treatment of pre-existing diabetes) is a prohibited systemic therapy for HS during study conduct. - Clarify in Section 5.3, criterion #6, the prohibited treatments for HS-related pain during study conduct. - Clarify in Section 5.4, any lesion that undergoes an intervention as a rescue treatment will be counted as permanently present from the date of intervention. - Clarify in Section 5.5, the withdrawal criteria. - In Section 5.8, removed the cap of no more than 15% TNF-IR subjects. - Clarify in Section 5.8, the 4 strata in the study. - Update the description of analgesic therapy relative to subject pain in Section 5.4, Allowed Concomitant Medications/Therapies. - Remove Response Adaptive Randomization (RAR) in Section 5.8 and throughout protocol. - Remove Internal Executive Review Committee (IERC) in Section 5.8 and throughout protocol. - In Section 5.5, update wording on study withdrawal. - In Section 6.1, update safety considerations pertaining to adverse events and use of drug. - In Section 6.1, update the details about how to handle subjects who do not continue into Period B from the ITT Population. - In Section 7.3, update the statistical analysis for efficacy and the control for overall type-I error.
26 March 2020	(continued) - In Section 7.3, update the power and sample size evaluation using adjusted assumptions. - Modify list of protocol signatories.

09 June 2020	The purpose of this version is to revert the following text in Section 5.4 and Section 5.5 as introduced in Protocol Version 1.0 based upon Agency feedback on Protocol Version 3.0: - Remove the provision in Section 5.4, that the investigator should consult with the TA MD to determine whether discontinuation from the study would be in the best interest of the subject if the subject requires more than 2 protocol-allowed interventions after the Week 16 visit. - Add to Section 5.5, the discontinuation criterion if a subject requires > 2 protocol-allowed HS interventions.
15 December 2020	The purpose of Protocol Version 5.0 is to update the following sections below and incorporate necessary protocol modifications due to the COVID-19 pandemic and per revised Risankizumab Safety Standards (v7.0) as follows: Modifications to the Protocol and Operations Manual due to State-of Emergency or Pandemic Situations One of the purposes of this version is to provide flexibility during state-of emergency or pandemic situations so subjects may safely enroll and continue study participation as follows: - Included information in Section 2.2 on the re-evaluation of the benefit and risk to subjects participating in the study. The benefit-risk profile of various immunomodulatory therapies is being evaluated. -Modify the following sections to account for state-emergency or pandemic situations: Update Section 5.5 to permit mitigation strategies for withdrawal/interruption/discontinuation of study drug. Update Section 5.9 to define protocol deviations to include those due to the COVID-19 pandemic. Update Section 7.3 to clarify that in the efficacy analysis, Non-Responder Imputation incorporating multiple imputation will be utilized to handle missing data due to COVID-19. Update Section 8.2 with a reference to the Operations Manual to permit modifications to the study protocol as necessary due to state-of emergency or pandemic situations and note investigators should also notify AbbVie if any urgent safety measures are taken. Update Section 9 to note that remote monitoring may be employed as needed. Update Appendix D to add reference to Operations Manual for allowed modifications.

15 December 2020	(continued) Protocol - In the Synopsis and Section 2.1, replaced the term/abbreviation "inflammatory nodule (AN)" with "abscess and inflammatory nodule (AN)." - In the Section 2.2, updated that subjects with active systemic infection or clinically important infection will not be included in the study. - In the Section 2.2, removed text stating that there are no cases of active TB, including no reactivation of TB in subjects diagnosed with latent TB, across the entire risankizumab development program to date. - In the Section 2.2, updated that subjects with positive QuantiFERON-TB testing/TB skin test who have latent TB and are considered at low risk for reactivation are not required to be treated with TB prophylaxis. - Clarified in Section 3.3 that the additional endpoint with respect to the proportion of subjects achieving at least 1 grade improvement from Baseline in PGIS scale is among subjects with Baseline PGIS of at least "minimal." - In Section 5.3, removed text for new topical therapies and clarified the use of non-antibiotic topical therapies or changes in the concentration/frequency of such treatments for the treatment of HS. - In Section 5.3, added in addition to systemic antibiotic use, "and/or topical" antibiotic use is only allowed for the treatment of acute, non-HS related infections. - In Section 5.3, added Dengue (Dengvaxia®) to the list of examples of live attenuated vaccines that are not permitted during study participation and including up to 140 days after the last dose of study drug. - In Section 5.5, added hepatic test abnormalities confirmed by a second sample should be at least 48 hours apart. - In Section 6.1 for product complaints and pregnancies, replaced the reporting period from '1 business day' or '1 working day' (respectively) to '24 hours.'
15 December 2020	(continued) - In Section 6.1, update the text 'areas of safety interest' to 'areas of safety interest/safety topics of interest' and rename Table 2 'Areas of Safety Interest' to 'Supplemental Adverse Events eCRFs.' - In Section 6.1, removed text that infections, especially opportunistic infections, are a potential risk with immunomodulators. - In Appendix C, updated protocol signatories and titles. - In Appendix D, removed "PGA Skin Pain and Analgesic Use" as an assessment performed at the Week 36 visit.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported