Clinical trial results:
A Randomized, Double-blind, Placebo-controlled Study to Evaluate the Safety, Tolerability, and Efficacy of AMG 181 in Subjects With Moderate to Severe Crohn's Disease

Summary

EudraCT number	2012-000529-31
Trial protocol	BE GB CZ DK DE AT HU NL
Global end of trial date	10 April 2018

Results information

Result version number	v1 (current)
This version publication date	24 April 2019
First version publication date	24 April 2019

Trial information

Trial identification

Sponsor protocol code	20110232

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01696396
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Amgen Inc.
Sponsor organisation address	One Amgen Center Drive, Thousand Oaks, CA, United States, 91320
Public contact	IHQ Medical Info-Clinical Trials, Amgen (EUROPE) GmbH, MedInfoInternational@amgen.com
Scientific contact	IHQ Medical Info-Clinical Trials, Amgen (EUROPE) GmbH, MedInfoInternational@amgen.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	10 April 2018
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	10 April 2018
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

To evaluate the efficacy of abrilumab (AMG 181) as measured by the proportion of subjects achieving Crohn's Disease Activity Index (CDAI) remission (CDAI < 150) at week 8.

Protection of trial subjects:

This study was conducted in accordance with International Conference on Harmonisation (ICH) Good Clinical Practice (GCP) regulations/guidelines.
The Independent Ethics Committees (IECs) or Institutional Review Boards (IRBs) involved at each center in this study reviewed and approved the study Protocol and the Informed Consent Form (ICF) before recruitment of subjects into the study and shipment of investigational product (IP). The IECs and IRBs also reviewed and approved other written subject information, any proposed advertising material, and all subsequent Protocol Amendments and changes to the ICF.
Subjects provided their written informed consent at will, after adequate explanation of the aims, methods, anticipated benefits, and potential hazards of the study and before any protocol-specific screening procedures were conducted or any investigational product was administered.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	04 December 2012
Long term follow-up planned	Yes
Long term follow-up rationale	Safety
Long term follow-up duration	24 Months
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Canada: 34
Country: Number of subjects enrolled	United States: 35
Country: Number of subjects enrolled	Austria: 7
Country: Number of subjects enrolled	Belgium: 35
Country: Number of subjects enrolled	Czech Republic: 26
Country: Number of subjects enrolled	Denmark: 7
Country: Number of subjects enrolled	France: 30
Country: Number of subjects enrolled	Germany: 8
Country: Number of subjects enrolled	Hungary: 23
Country: Number of subjects enrolled	Netherlands: 28
Country: Number of subjects enrolled	Switzerland: 6
Country: Number of subjects enrolled	United Kingdom: 15

Worldwide total number of subjects	254
EEA total number of subjects	179

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)	253
From 65 to 84 years	1
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

This study was conducted at 84 centers in Canada, European Union, and the United States. Participants were enrolled from 04 December 2012 to 30 September 2014.
The study consisted of a 24-week double-blind treatment period, a 108-week open-label treatment period, and a safety follow-up period.

Pre-assignment

Screening details:

Participants were to be randomly assigned in a 2:1:2:1 ratio to 1 of 4 treatment groups. Due to a misalignment error, some participants were erroneously assigned to incorrect treatment resulting in a final randomization ratio different from that originally stipulated in the protocol.

Period 1

Period 1 title	Overall Study (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator

Arms

Are arms mutually exclusive?	Yes
Arm title	Placebo/Abrilumab 210 mg Q3M

Arm description:

Participants randomized to receive placebo by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months (Q3M) for 108 weeks.

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

Dosage and administration details:

Placebo to abrilumab administered by subcutaneous injection

Arm title	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M

Arm description:

Participants randomized to receive 21 mg abrilumab by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks (Q4W) thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months for 108 weeks.

Arm type	Experimental
Investigational medicinal product name	Abrilumab
Investigational medicinal product code	AMG 181
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Administered by subcutaneous injection

Arm title	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M

Arm description:

Participants randomized to receive 70 mg abrilumab by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received

abrilumab 210 mg once every 3 months for 108 weeks.

Arm type	Experimental
Investigational medicinal product name	Abrilumab
Investigational medicinal product code	AMG 181
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Administered by subcutaneous injection

Arm title	Abrilumab 210 mg/Abrilumab 210 mg Q3M

Arm description:

Participants randomized to receive a single dose of 210 mg abrilumab by subcutaneous injection on day 1, followed by placebo at week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months for 108 weeks.

Arm type	Experimental
Investigational medicinal product name	Abrilumab
Investigational medicinal product code	AMG 181
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Administered by subcutaneous injection

Number of subjects in period 1	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Started	100	27	85
Received Study Drug	98	26	84
Entered Open-label Period	84	21	75
Completed	69	20	59
Not completed	31	7	26
Adverse event, serious fatal	-	-	1
Consent withdrawn by subject	19	5	19
Decision by Sponsor	3	1	2
Lost to follow-up	9	1	4

Number of subjects in period 1	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Started	42
Received Study Drug	41
Entered Open-label Period	37
Completed	28
Not completed	14
Adverse event, serious fatal	-
Consent withdrawn by subject	11

Decision by Sponsor	2
Lost to follow-up	1

Baseline characteristics

Reporting groups	
Reporting group title	Placebo/Abrilumab 210 mg Q3M
Reporting group description:	
Participants randomized to receive placebo by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months (Q3M) for 108 weeks.	
Reporting group title	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Reporting group description:	
Participants randomized to receive 21 mg abrilumab by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks (Q4W) thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months for 108 weeks.	
Reporting group title	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Reporting group description:	
Participants randomized to receive 70 mg abrilumab by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months for 108 weeks.	
Reporting group title	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Reporting group description:	
Participants randomized to receive a single dose of 210 mg abrilumab by subcutaneous injection on day 1, followed by placebo at week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months for 108 weeks.	

Reporting group values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects	100	27	85
Age, Customized Units: Subjects			
18 – 64 years	99	27	85
≥ 65 years	1	0	0
Age Continuous Units: years			
arithmetic mean	36.2	38.9	35.6
standard deviation	± 11.2	± 14.2	± 11.8
Sex: Female, Male Units: Subjects			
Female	58	12	51
Male	42	15	34
Race/Ethnicity, Customized Units: Subjects			
Asian	0	0	0
Black or African American	2	0	0
White	97	26	82
Other	1	1	3
Ethnicity (NIH/OMB) Units: Subjects			
Hispanic or Latino	0	1	0
Not Hispanic or Latino	100	26	85
Unknown or Not Reported	0	0	0
Any Prior Anti-Tumor Necrosis Factor			

(TNF) Use Units: Subjects			
Yes	80	21	67
No	20	6	18
Enrollment Prior to Protocol Amendment 3 Units: Subjects			
Yes	44	0	29
No	56	27	56
Duration of Crohn's Diease Units: years			
arithmetic mean	11.07	12.58	10.69
standard deviation	± 8.33	± 9.55	± 7.75
Crohn's Disease Activity Index (CDAI) Score			
The CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, degree of general well-being, presence or absence of extra-intestinal manifestations or fistula, use or non-use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600, with a higher score indicating more-severe disease activity. Patients with scores of > 450 are considered to have very severe disease.			
Units: units on a scale			
arithmetic mean	303.8	310.0	314.0
standard deviation	± 63.2	± 83.5	± 60.4

Reporting group values	Abrilumab 210 mg/Abrilumab 210 mg Q3M	Total	
Number of subjects	42	254	
Age, Customized Units: Subjects			
18 – 64 years	42	253	
≥ 65 years	0	1	
Age Continuous Units: years			
arithmetic mean	36.5		
standard deviation	± 9.4	-	
Sex: Female, Male Units: Subjects			
Female	23	144	
Male	19	110	
Race/Ethnicity, Customized Units: Subjects			
Asian	1	1	
Black or African American	1	3	
White	40	245	
Other	0	5	
Ethnicity (NIH/OMB) Units: Subjects			
Hispanic or Latino	1	2	
Not Hispanic or Latino	41	252	
Unknown or Not Reported	0	0	
Any Prior Anti-Tumor Necrosis Factor (TNF) Use Units: Subjects			

Yes	33	201	
No	9	53	
Enrollment Prior to Protocol Amendment 3 Units: Subjects			
Yes	16	89	
No	26	165	
Duration of Crohn's Diease Units: years			
arithmetic mean	11.31		
standard deviation	± 7.54	-	
Crohn's Disease Activity Index (CDAI) Score			
The CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, degree of general well-being, presence or absence of extra-intestinal manifestations or fistula, use or non-use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600, with a higher score indicating more-severe disease activity. Patients with scores of > 450 are considered to have very severe disease.			
Units: units on a scale			
arithmetic mean	319.3		
standard deviation	± 67.5	-	

End points

End points reporting groups

Reporting group title	Placebo/Abrilumab 210 mg Q3M
Reporting group description:	
Participants randomized to receive placebo by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months (Q3M) for 108 weeks.	
Reporting group title	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Reporting group description:	
Participants randomized to receive 21 mg abrilumab by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks (Q4W) thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months for 108 weeks.	
Reporting group title	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Reporting group description:	
Participants randomized to receive 70 mg abrilumab by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months for 108 weeks.	
Reporting group title	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Reporting group description:	
Participants randomized to receive a single dose of 210 mg abrilumab by subcutaneous injection on day 1, followed by placebo at week 2, week 4, and every 4 weeks thereafter until week 24. During the open-label period, participants received abrilumab 210 mg once every 3 months for 108 weeks.	

Primary: Percentage of Participants with Remission at Week 8

End point title	Percentage of Participants with Remission at Week 8
End point description:	
Remission was defined as a Crohn's Disease Activity Index (CDAI) score < 150. The CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, general well-being, presence or absence of extra-intestinal manifestations or fistula, use or non-use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600, with higher scores indicating more-severe disease activity. The remission rate was calculated based on observed data (unadjusted remission rate) and also after applying a logistic regression model including the factors of treatment group, stratification factors (prior anti-TNF use and pre- vs post-Protocol Amendment 3) and baseline CDAI Score (adjusted remission rate). The full analysis set includes all randomized participants who received at least 1 dose of study drug. Both unadjusted and adjusted remission rates were calculated using non-responder imputation.	
End point type	Primary
End point timeframe:	
Week 8	

End point values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	98	26	84	41
Units: percentage of participants				
number (not applicable)				
Unadjusted remission rate	13.3	23.1	14.3	19.5
Adjusted remission rate	12.8	23.1	14.4	21.9

Statistical analyses

Statistical analysis title	Comparison of Abrilumab vs Placebo
Statistical analysis description:	
Comparisons between treatment groups were made using remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M v Placebo/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority[1]
P-value	= 0.76 [2]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.15
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.54
upper limit	2.44

Notes:

[1] - The study was powered for formal statistical testing of the abrilumab 70 mg group. The primary and key secondary endpoints were tested under a sequential framework of statistical hypotheses, each with 2-sided significance level of 0.10 for the treatment effect of abrilumab 70 mg compared with placebo.
[2] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Remission Rates
Statistical analysis description:	
The difference in remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	1.6
Confidence interval	
level	90 %
sides	2-sided
lower limit	-7.9
upper limit	8.9

Statistical analysis title	Comparison of Abrilumab vs Placebo
Statistical analysis description:	
Comparisons between treatment groups were made using remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[3]
P-value	= 0.22 [4]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.91
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.8
upper limit	4.57

Notes:

[3] - Analysis was not part of the formal testing

[4] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Remission Rates
Statistical analysis description:	
The difference in remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[5]
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	9.1
Confidence interval	
level	90 %
sides	2-sided
lower limit	-4.6
upper limit	19.4

Notes:

[5] - Analysis was not part of the formal testing

Statistical analysis title	Comparison of Abrilumab vs Placebo
Statistical analysis description:	
Comparisons between treatment groups were made using remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M

Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[6]
P-value	= 0.25 [7]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.05
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.74
upper limit	5.73

Notes:

[6] - Analysis was not part of the formal testing

[7] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Remission Rates

Statistical analysis description:

The difference in remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[8]
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	10.3
Confidence interval	
level	90 %
sides	2-sided
lower limit	-6.8
upper limit	22.6

Notes:

[8] - Analysis was not part of the formal testing

Secondary: Percentage of Participants with Remission at Week 12

End point title	Percentage of Participants with Remission at Week 12

End point description:

Remission was defined as a CDAI score < 150. The CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, degree of general well-being, presence or absence of extra-intestinal manifestations or fistula, use or non-use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600, with higher scores indicating more-severe disease activity. The remission rate was calculated based on observed data (unadjusted remission rate) and also after applying a logistic regression model including the factors of treatment group, stratification factors (prior anti-TNF use and pre- vs post-Protocol Amendment 3) and baseline CDAI Score (adjusted remission rate).
The full analysis set includes all randomized participants who received at least 1 dose of study drug. Both unadjusted and adjusted response rates were calculated using non-responder imputation.

End point type	Secondary

End point timeframe:

Week 12

End point values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	98	26	84	41
Units: percentage of participants				
number (not applicable)				
Unadjusted remission rate	18.1	33.3	25.3	27.0
Adjusted remission rate	20.1	43.8	31.0	34.8

Statistical analyses

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.16 [9]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.78
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.9
upper limit	3.53

Notes:

[9] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Remission Rates

Statistical analysis description:

The difference in remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M

Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	10.9
Confidence interval	
level	90 %
sides	2-sided
lower limit	-1.8
upper limit	21

Statistical analysis title	Comparison of Abriumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[10]
P-value	= 0.13 [11]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.12
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.93
upper limit	4.84

Notes:

[10] - Analysis was not part of the formal testing

[11] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Remission Rates

Statistical analysis description:

The difference in remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[12]
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	14.7
Confidence interval	
level	90 %
sides	2-sided
lower limit	-2.1
upper limit	27.5

Notes:

[12] - Analysis was not part of the formal testing

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[13]
P-value	= 0.056 [14]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.1
Confidence interval	
level	90 %
sides	2-sided
lower limit	1.17
upper limit	8.2

Notes:

[13] - Analysis was not part of the formal testing

[14] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Remission Rates

Statistical analysis description:

The difference in remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[15]
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	23.7
Confidence interval	
level	90 %
sides	2-sided
lower limit	2.8
upper limit	39.2

Notes:

[15] - Analysis was not part of the formal testing

Secondary: Percentage of Participants with Response at Week 12

End point title	Percentage of Participants with Response at Week 12

End point description:

Response was defined as either remission (CDAI score < 150) or a decrease from baseline in CDAI score of ≥ 100 points. The CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, degree of general well-being, presence or absence of extra-intestinal manifestations or fistula, use or non-use of antidiarrheal agents, presence or absence of an abdominal

mass, hematocrit, and body weight). Scores range from approximately 0 to 600, with higher scores indicating more-severe disease activity. The response rate was calculated based on observed data (unadjusted response rate) and also after applying a logistic regression model including the factors of treatment group, stratification factors (prior anti-TNF use and pre- versus post-Protocol Amendment 3) and baseline CDAI score (adjusted response rate).
The full analysis set was used in the analysis; both unadjusted and adjusted response rates were calculated using non-responder imputation.

End point type	Secondary

End point timeframe:

Baseline and week 12

End point values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	98	26	84	41
Units: percentage of participants				
number (not applicable)				
Unadjusted response rate	27.7	41.7	45.3	43.2
Adjusted response rate	35.3	50.4	55.1	50.9

Statistical analyses

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using response rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.021 [16]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.25
Confidence interval	
level	90 %
sides	2-sided
lower limit	1.27
upper limit	4.01

Notes:

[16] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Response Rates

Statistical analysis description:

The difference in response rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-

protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
Parameter estimate	Difference in Adjusted Response Rates
Point estimate	19.8
Confidence interval	
level	90 %
sides	2-sided
lower limit	5.8
upper limit	31.3

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using response rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[17]
P-value	= 0.14 [18]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.9
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.94
upper limit	3.87

Notes:

[17] - Analysis was not part of the formal testing

[18] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Response Rates

Statistical analysis description:

The difference in response rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[19]
Parameter estimate	Difference in Adjusted Response Rates
Point estimate	15.7

Confidence interval	
level	90 %
sides	2-sided
lower limit	-2.3
upper limit	29.7

Notes:

[19] - Analysis was not part of the formal testing

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using response rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[20]
P-value	= 0.23 [21]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.87
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.79
upper limit	4.39

Notes:

[20] - Analysis was not part of the formal testing

[21] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Response Rates

Statistical analysis description:

The difference in response rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[22]
Parameter estimate	Difference in Adjusted Response Rates
Point estimate	15.1
Confidence interval	
level	90 %
sides	2-sided
lower limit	-6.4
upper limit	31.3

Notes:

[22] - Analysis was not part of the formal testing

Secondary: Percentage of Participants with Response at Week 8

End point title	Percentage of Participants with Response at Week 8

End point description:

Response was defined as either remission (CDAI score < 150) or a decrease from baseline in CDAI score of ≥ 100 points. The CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, degree of general well-being, presence or absence of extra-intestinal manifestations or fistula, use or non-use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600, with higher scores indicating more-severe disease activity. The response rate was calculated based on observed data (unadjusted response rate) and also after applying a logistic regression model including the factors of treatment group, stratification factors (prior anti-TNF use and pre- versus post-Protocol Amendment 3) and baseline CDAI score (adjusted response rate).
The full analysis set was used in the analysis; both unadjusted and adjusted response rates were calculated using non-responder imputation.

End point type	Secondary

End point timeframe:

Baseline and week 8

End point values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	98	26	84	41
Units: percentage of participants				
number (not applicable)				
Unadjusted response rate	26.4	33.3	42.9	30.6
Adjusted response rate	30.6	33.8	46.6	32.6

Statistical analyses

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using response rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.047 [23]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.98
Confidence interval	
level	90 %
sides	2-sided
lower limit	1.13
upper limit	3.47

Notes:

[23] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Response Rates
Statistical analysis description:	
The difference in response rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
Parameter estimate	Difference in Adjusted Response Rates
Point estimate	16
Confidence interval	
level	90 %
sides	2-sided
lower limit	2.4
upper limit	27.1

Statistical analysis title	Comparison of Abrilumab vs Placebo
Statistical analysis description:	
Comparisons between treatment groups were made using response rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[24]
P-value	= 0.84 [25]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.09
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.52
upper limit	2.29

Notes:

[24] - Analysis was not part of the formal testing

[25] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Response Rates
Statistical analysis description:	
The difference in response rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M

Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[26]
Parameter estimate	Difference in Adjusted Response Rates
Point estimate	1.9
Confidence interval	
level	90 %
sides	2-sided
lower limit	-15.2
upper limit	15.2

Notes:

[26] - Analysis was not part of the formal testing

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using response rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[27]
P-value	= 0.78 [28]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.15
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.49
upper limit	2.72

Notes:

[27] - Analysis was not part of the formal testing

[28] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference in Response Rates

Statistical analysis description:

The difference in response rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[29]
Parameter estimate	Difference in Adjusted Response Rates
Point estimate	3.1
Confidence interval	
level	90 %
sides	2-sided
lower limit	-17.4
upper limit	18.3

Notes:

[29] - Analysis was not part of the formal testing

Secondary: Percentage of Participants with Sustained Remission at Both Week 12 and Week 24

End point title	Percentage of Participants with Sustained Remission at Both Week 12 and Week 24

End point description:

Remission was defined as a CDAI score < 150. Sustained remission was defined as achieving remission at both week 12 and week 24. CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, general well-being, presence or absence of extra-intestinal manifestations or fistula, use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600 with higher scores indicating more-severe disease activity. The remission rate was calculated based on observed data (unadjusted remission rate) and also after applying a logistic regression model including the factors of treatment group, stratification factors (prior anti-TNF use and pre- versus post-Protocol Amendment 3) and baseline CDAI score (adjusted remission rate).
The full analysis set was used for the analysis; both unadjusted and adjusted sustained remission rates were calculated using non-responder imputation.

End point type	Secondary

End point timeframe:

Week 12 and week 24

End point values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	98	26	84	41
Units: percentage of participants				
number (not applicable)				
Unadjusted remission rate	8.2	19.2	11.9	17.1
Adjusted remission rate	9.0	25.0	14.0	21.7

Statistical analyses

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using sustained remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.34 [30]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.65

Confidence interval	
level	90 %
sides	2-sided
lower limit	0.69
upper limit	3.91

Notes:

[30] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference is Sustained Remission Rates

Statistical analysis description:

The difference in sustained remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	5
Confidence interval	
level	90 %
sides	2-sided
lower limit	-3.9
upper limit	11.7

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using sustained remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[31]
P-value	= 0.078 [32]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.82
Confidence interval	
level	90 %
sides	2-sided
lower limit	1.07
upper limit	7.41

Notes:

[31] - Analysis was not part of the formal testing

[32] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference is Sustained Remission Rates

Statistical analysis description:	
The difference in sustained remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[33]
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	12.8
Confidence interval	
level	90 %
sides	2-sided
lower limit	-0.6
upper limit	22.6

Notes:

[33] - Analysis was not part of the formal testing

Statistical analysis title	Comparison of Abrilumab vs Placebo
Statistical analysis description:	
Comparisons between treatment groups were made using sustained remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[34]
P-value	= 0.083 [35]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	3.37
Confidence interval	
level	90 %
sides	2-sided
lower limit	1.07
upper limit	10.66

Notes:

[34] - Analysis was not part of the formal testing

[35] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference is Sustained Remission Rates
Statistical analysis description:	
The difference in sustained remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M

Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[36]
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	16
Confidence interval	
level	90 %
sides	2-sided
lower limit	-1.2
upper limit	28.3

Notes:

[36] - Analysis was not part of the formal testing

Secondary: Percentage of Participants with Sustained Remission at Both Week 8 and Week 24

End point title	Percentage of Participants with Sustained Remission at Both Week 8 and Week 24

End point description:

Remission was defined as a CDAI score < 150. Sustained remission was defined as achieving remission at both week 8 and week 24. CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, general well-being, presence or absence of extra-intestinal manifestations or fistula, use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600 with higher scores indicating more-severe disease activity. The remission rate was calculated based on observed data (unadjusted remission rate) and also after applying a logistic regression model including the factors of treatment group, stratification factors (prior anti-TNF use and pre- versus post-Protocol Amendment 3) and baseline CDAI score (adjusted remission rate).
The full analysis set was used for the analysis; both unadjusted and adjusted sustained remission rates were calculated using non-responder imputation.

End point type	Secondary

End point timeframe:

Week 8 and week 24

End point values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	98	26	84	41
Units: percentage of participants				
number (not applicable)				
Unadjusted remission rate	7.1	15.4	9.5	12.2
Adjusted remission rate	5.9	14.3	8.7	12.7

Statistical analyses

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using sustained remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior

TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.47 [37]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.52
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.59
upper limit	3.93

Notes:

[37] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference is Sustained Remission Rates

Statistical analysis description:

The difference in sustained remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	2.8
Confidence interval	
level	90 %
sides	2-sided
lower limit	-4.7
upper limit	8.1

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using sustained remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[38]
P-value	= 0.21 [39]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.32

Confidence interval	
level	90 %
sides	2-sided
lower limit	0.77
upper limit	6.98

Notes:

[38] - Analysis was not part of the formal testing

[39] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference is Sustained Remission Rates

Statistical analysis description:

The difference in sustained remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[40]
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	6.8
Confidence interval	
level	90 %
sides	2-sided
lower limit	-4.3
upper limit	14.5

Notes:

[40] - Analysis was not part of the formal testing

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment groups were made using sustained remission rates estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[41]
P-value	= 0.21 [42]
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.66
Confidence interval	
level	90 %
sides	2-sided
lower limit	0.75
upper limit	9.45

Notes:

[41] - Analysis was not part of the formal testing

[42] - Adjusted for baseline CDAI score and stratification factors.

Statistical analysis title	Difference is Sustained Remission Rates

Statistical analysis description:	
The difference in sustained remission rates, estimated from a logistic regression model adjusted for baseline CDAI score and stratification factors (prior vs no prior TNF antagonist use and enrollment pre- vs post-protocol amendment).	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[43]
Parameter estimate	Difference in Adjusted Remission Rates
Point estimate	8.4
Confidence interval	
level	90 %
sides	2-sided
lower limit	-6
upper limit	17.9

Notes:

[43] - Analysis was not part of the formal testing

Secondary: Change from Baseline in CDAI Score at Week 12

End point title	Change from Baseline in CDAI Score at Week 12

End point description:

The CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, degree of general well-being, presence or absence of extra-intestinal manifestations or fistula, use or non-use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600, with a higher score indicating more-severe disease activity.
The full analysis set was used in the analysis; missing data were handled using the inverse probability weighting (IPW) method.

End point type	Secondary

End point timeframe:

Baseline and week 12

End point values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	98	26	84	41
Units: units on a scale				
least squares mean (standard error)	-55.32 (± 11.41)	-92.16 (± 21.85)	-97.41 (± 12.92)	-96.11 (± 22.78)

Statistical analyses

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment arms was conducted using an inverse probability weighting (IPW) generalized estimating equations (GEE) model adjusted for prior anti-TNF use, pre-versus post-protocol amendment 3 and baseline CDAI score.

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.006
Method	IPW GEE Model
Parameter estimate	LS Mean Treatment Difference
Point estimate	-42.09
Confidence interval	
level	90 %
sides	2-sided
lower limit	-67.3
upper limit	-16.9

Statistical analysis title	Comparison of Abrilumab vs Placebo
Statistical analysis description:	
Comparisons between treatment arms was conducted using an inverse probability weighting (IPW) generalized estimating equations (GEE) model adjusted for prior anti-TNF use, pre-versus post-protocol amendment 3 and baseline CDAI score.	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[44]
P-value	= 0.095
Method	IPW GEE Model
Parameter estimate	LS Mean Treatment Difference
Point estimate	-40.79
Confidence interval	
level	90 %
sides	2-sided
lower limit	-81.5
upper limit	-0.5

Notes:

[44] - Analysis was not part of the formal testing

Statistical analysis title	Comparison of Abrilumab vs Placebo
Statistical analysis description:	
Comparisons between treatment arms was conducted using an inverse probability weighting (IPW) generalized estimating equations (GEE) model adjusted for prior anti-TNF use, pre-versus post-protocol amendment 3 and baseline CDAI score.	
Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[45]
P-value	= 0.11
Method	IPW GEE Model
Parameter estimate	LS Mean Treatment Difference
Point estimate	-36.84

Confidence interval	
level	90 %
sides	2-sided
lower limit	-74.3
upper limit	0.7

Notes:

[45] - Analysis was not part of the formal testing

Secondary: Change from Baseline in CDAI Score at Week 8

End point title	Change from Baseline in CDAI Score at Week 8

End point description:

The CDAI is a weighted, composite index of 8 disease variables (stool frequency, severity of abdominal pain, degree of general well-being, presence or absence of extra-intestinal manifestations or fistula, use or non-use of antidiarrheal agents, presence or absence of an abdominal mass, hematocrit, and body weight). Scores range from approximately 0 to 600, with a higher score indicating more-severe disease activity.
The full analysis set was used for the analysis; missing data were handled using the inverse probability weighting (IPW) method.

End point type	Secondary

End point timeframe:

Baseline and week 8

End point values	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M	Abrilumab 210 mg/Abrilumab 210 mg Q3M
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	98	26	84	41
Units: units on a scale				
least squares mean (standard error)	-64.05 (± 9.62)	-80.42 (± 20.86)	-91.52 (± 11.78)	-87.64 (± 19.89)

Statistical analyses

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment arms was conducted using an inverse probability weighting (IPW) generalized estimating equations (GEE) model adjusted for prior anti-TNF use, pre-versus post-protocol amendment 3 and baseline CDAI score.

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 70 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	182
Analysis specification	Pre-specified
Analysis type	superiority
P-value	= 0.045
Method	IPW GEE Model
Parameter estimate	LS Mean Treatment Difference
Point estimate	-27.47

Confidence interval	
level	90 %
sides	2-sided
lower limit	-50
upper limit	-4.9

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment arms was conducted using an inverse probability weighting (IPW) generalized estimating equations (GEE) model adjusted for prior anti-TNF use, pre-versus post-protocol amendment 3 and baseline CDAI score.

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 21 mg Q4W/Abrilumab 210 mg Q3M
Number of subjects included in analysis	124
Analysis specification	Pre-specified
Analysis type	superiority[46]
P-value	= 0.45
Method	IPW GEE Model
Parameter estimate	LS Mean Treatment Difference
Point estimate	-16.37
Confidence interval	
level	90 %
sides	2-sided
lower limit	-51.8
upper limit	19.1

Notes:

[46] - Analysis was not part of the formal testing

Statistical analysis title	Comparison of Abrilumab vs Placebo

Statistical analysis description:

Comparisons between treatment arms was conducted using an inverse probability weighting (IPW) generalized estimating equations (GEE) model adjusted for prior anti-TNF use, pre-versus post-protocol amendment 3 and baseline CDAI score.

Comparison groups	Placebo/Abrilumab 210 mg Q3M v Abrilumab 210 mg/Abrilumab 210 mg Q3M
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	superiority[47]
P-value	= 0.27
Method	IPW GEE Model
Parameter estimate	LS Mean Treatment Difference
Point estimate	-23.59
Confidence interval	
level	90 %
sides	2-sided
lower limit	-58.7
upper limit	11.5

Notes:

[47] - Analysis was not part of the formal testing

Adverse events

Adverse events information

Timeframe for reporting adverse events:

24 weeks in the double-blind period and 108 weeks in the open-label period.

Adverse event reporting additional description:

One participant randomized to the 21 mg abrilumab treatment group received 70 mg abrilumab in error and is counted in that group for safety analyses in both treatment periods.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	20.1

Reporting groups

Reporting group title	DB Period: Placebo

Reporting group description:

Participants received placebo by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24 during the double-blind (DB) treatment period.

Reporting group title	DB Period: Abrilumab 21 mg Q4W

Reporting group description:

Participants received 21 mg abrilumab by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24 during the double-blind treatment period

Reporting group title	DB Period: Abrilumab 70 mg Q4W

Reporting group description:

Participants received 70 mg abrilumab by subcutaneous injection on day 1, week 2, week 4, and every 4 weeks thereafter until week 24 during the double-blind treatment period.

Reporting group title	DB Period: Abrilumab 210 mg

Reporting group description:

Participants received a single dose of 210 mg abrilumab by subcutaneous injection on day 1, followed by placebo at week 2, week 4, and every 4 weeks thereafter until week 24 during the double-blind treatment period.

Reporting group title	OL Period: Placebo/Abrilumab 210 mg Q3M

Reporting group description:

Participants who received placebo during the double-blind treatment period received abrilumab 210 mg once every 3 months (Q3M) for 108 weeks during the open-label (OL) treatment period.

Reporting group title	OL Period: Abrilumab 21 mg Q4W/210 mg Q3M

Reporting group description:

During the open-label period, participants who received 21 mg abrilumab Q4W during the DB treatment period received abrilumab 210 mg once every 3 months for 108 weeks.

Reporting group title	OL Period: Abrilumab 70 mg Q4W/210 mg Q3M

Reporting group description:

Participants who received 70 mg abrilumab Q4W during the DB treatment period received abrilumab 210 mg once every 3 months for 108 weeks during the open-label period.

Reporting group title	OL Period: Abrilumab 210 mg/210 mg Q3M

Reporting group description:

Participants who received 210 mg abrilumab during the DB treatment period received abrilumab 210 mg once every 3 months for 108 weeks during the open-label period.

Serious adverse events	DB Period: Placebo	DB Period: Abrilumab 21 mg Q4W	DB Period: Abrilumab 70 mg Q4W
Total subjects affected by serious adverse events			
subjects affected / exposed	14 / 98 (14.29%)	7 / 25 (28.00%)	13 / 85 (15.29%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Chronic myeloid leukaemia			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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			
Cholecystectomy			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Ileocolectomy			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Scoliosis surgery			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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			
Adverse drug reaction			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Chills			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Influenza like illness			

subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Multiple organ dysfunction syndrome			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Pyrexia			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (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
Social circumstances			
Aborted pregnancy			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
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			
Cervical dysplasia			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Respiratory, thoracic and mediastinal disorders			
Pleuritic pain			
subjects affected / exposed	0 / 98 (0.00%)	1 / 25 (4.00%)	0 / 85 (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
Injury, poisoning and procedural complications			
Anastomotic leak			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Clavicle fracture			

subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (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
Intestinal anastomosis complication			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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			
Acute myocardial infarction			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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 arrest			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Myocardial infarction			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Myocardial ischaemia			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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			
Cerebrovascular accident			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (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
Transient ischaemic attack			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Blood and lymphatic system disorders			

Anaemia			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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			
Abdominal hernia			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Abdominal pain			
subjects affected / exposed	0 / 98 (0.00%)	1 / 25 (4.00%)	0 / 85 (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
Abdominal pain lower			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Anal fistula			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Chronic gastritis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Constipation			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Crohn's disease			
subjects affected / exposed	9 / 98 (9.18%)	4 / 25 (16.00%)	3 / 85 (3.53%)
occurrences causally related to treatment / all	0 / 9	0 / 4	1 / 3
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Enteritis			

subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Enterocolonic fistula			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Ileal stenosis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Ileus			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Intestinal obstruction			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Large intestine perforation			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Small intestinal obstruction			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	3 / 85 (3.53%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 3
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hepatobiliary disorders			
Bile duct stone			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Biliary colic			

subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Drug-induced liver injury			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Hepatic function abnormal			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (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
Renal and urinary disorders			
Nephritis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Nephrolithiasis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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			
Abdominal abscess			
subjects affected / exposed	0 / 98 (0.00%)	1 / 25 (4.00%)	0 / 85 (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
Abdominal wall abscess			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Abscess intestinal			
subjects affected / exposed	0 / 98 (0.00%)	1 / 25 (4.00%)	0 / 85 (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
Anal abscess			

subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Appendicitis perforated			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Clostridium difficile colitis			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (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
Clostridium difficile infection			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Erysipelas			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Escherichia sepsis			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (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
Escherichia urinary tract infection			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
External ear cellulitis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Gastroenteritis			

subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Gastroenteritis viral			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Influenza			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Intrauterine infection			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Necrotising fasciitis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Pelvic abscess			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Perineal abscess			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pneumonia parainfluenzae viral			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Postoperative wound infection			

subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Psoas abscess			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Retroperitoneal abscess			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Septic shock			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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
Tubo-ovarian abscess			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (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
Vulval abscess			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Metabolism and nutrition disorders			
Dehydration			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (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	DB Period:	OL Period:	OL Period:

	Abrilumab 210 mg	Placebo/Abrilumab 210 mg Q3M	Abrilumab 21 mg Q4W/210 mg Q3M
Total subjects affected by serious adverse events			
subjects affected / exposed	6 / 41 (14.63%)	24 / 84 (28.57%)	3 / 20 (15.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Chronic myeloid leukaemia			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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			
Cholecystectomy			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Ileocolectomy			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Scoliosis surgery			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
General disorders and administration site conditions			
Adverse drug reaction			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Chills			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Influenza like illness			

subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Multiple organ dysfunction syndrome			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Pyrexia			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Social circumstances			
Aborted pregnancy			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Reproductive system and breast disorders			
Cervical dysplasia			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Respiratory, thoracic and mediastinal disorders			
Pleuritic pain			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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			
Anastomotic leak			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Clavicle fracture			

subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Intestinal anastomosis complication			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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			
Acute myocardial infarction			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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 arrest			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Myocardial infarction			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Myocardial ischaemia			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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			
Cerebrovascular accident			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Transient ischaemic attack			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Blood and lymphatic system disorders			

Anaemia			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	0 / 20 (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
Gastrointestinal disorders			
Abdominal hernia			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Abdominal pain			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Abdominal pain lower			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Anal fistula			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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 gastritis			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Constipation			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	0 / 20 (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
Crohn's disease			
subjects affected / exposed	2 / 41 (4.88%)	9 / 84 (10.71%)	2 / 20 (10.00%)
occurrences causally related to treatment / all	0 / 2	1 / 13	1 / 2
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Enteritis			

subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Enterocolonic fistula			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Ileal stenosis			
subjects affected / exposed	0 / 41 (0.00%)	2 / 84 (2.38%)	0 / 20 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Ileus			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Intestinal obstruction			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Large intestine perforation			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Small intestinal obstruction			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	0 / 20 (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
Hepatobiliary disorders			
Bile duct stone			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Biliary colic			

subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Drug-induced liver injury			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Hepatic function abnormal			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Renal and urinary disorders			
Nephritis			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	0 / 20 (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
Nephrolithiasis			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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			
Abdominal abscess			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Abdominal wall abscess			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Abscess intestinal			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Anal abscess			

subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (0.00%)
occurrences causally related to treatment / all	0 / 0	3 / 4	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Appendicitis perforated			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Clostridium difficile colitis			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Clostridium difficile infection			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (0.00%)
occurrences causally related to treatment / all	0 / 0	2 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Erysipelas			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Escherichia sepsis			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Escherichia urinary tract infection			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
External ear cellulitis			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Gastroenteritis			

subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Gastroenteritis viral			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Influenza			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (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
Intrauterine infection			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Necrotising fasciitis			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Pelvic abscess			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Perineal abscess			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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 parainfluenzae viral			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Postoperative wound infection			

subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Psoas abscess			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Retroperitoneal abscess			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Septic shock			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Tubo-ovarian abscess			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Vulval abscess			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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
Metabolism and nutrition disorders			
Dehydration			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	0 / 20 (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	OL Period:	OL Period:	

	Abrilumab 70 mg Q4W/210 mg Q3M	Abrilumab 210 mg/210 mg Q3M	
Total subjects affected by serious adverse events			
subjects affected / exposed	19 / 76 (25.00%)	12 / 37 (32.43%)	
number of deaths (all causes)	1	0	
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Chronic myeloid leukaemia			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Surgical and medical procedures			
Cholecystectomy			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ileocolectomy			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Scoliosis surgery			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
General disorders and administration site conditions			
Adverse drug reaction			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Chills			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Influenza like illness			

subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Multiple organ dysfunction syndrome			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pyrexia			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Social circumstances			
Aborted pregnancy			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Reproductive system and breast disorders			
Cervical dysplasia			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Respiratory, thoracic and mediastinal disorders			
Pleuritic pain			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Injury, poisoning and procedural complications			
Anastomotic leak			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Clavicle fracture			

subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Intestinal anastomosis complication			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cardiac disorders			
Acute myocardial infarction			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Cardiac arrest			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	1 / 1	0 / 0	
Myocardial infarction			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Myocardial ischaemia			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Nervous system disorders			
Cerebrovascular accident			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Transient ischaemic attack			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Blood and lymphatic system disorders			

Anaemia			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastrointestinal disorders			
Abdominal hernia			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Abdominal pain			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Abdominal pain lower			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Anal fistula			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Chronic gastritis			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Constipation			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Crohn's disease			
subjects affected / exposed	8 / 76 (10.53%)	6 / 37 (16.22%)	
occurrences causally related to treatment / all	2 / 8	2 / 6	
deaths causally related to treatment / all	0 / 0	0 / 0	
Enteritis			

subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Enterocolonic fistula			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ileal stenosis			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ileus			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Intestinal obstruction			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Large intestine perforation			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Small intestinal obstruction			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatobiliary disorders			
Bile duct stone			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Biliary colic			

subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Drug-induced liver injury			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatic function abnormal			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Renal and urinary disorders			
Nephritis			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Nephrolithiasis			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (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			
Abdominal abscess			
subjects affected / exposed	1 / 76 (1.32%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Abdominal wall abscess			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Abscess intestinal			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (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	3 / 76 (3.95%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	1 / 3	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Appendicitis perforated			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Clostridium difficile colitis			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Clostridium difficile infection			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Erysipelas			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Escherichia sepsis			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Escherichia urinary tract infection			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
External ear cellulitis			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastroenteritis			

subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastroenteritis viral			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Influenza			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Intrauterine infection			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Necrotising fasciitis			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pelvic abscess			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	1 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Perineal abscess			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pneumonia parainfluenzae viral			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Postoperative wound infection			

subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Psoas abscess			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Retroperitoneal abscess			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Septic shock			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Tubo-ovarian abscess			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urinary tract infection			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Vulval abscess			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Metabolism and nutrition disorders			
Dehydration			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
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: Abrilumab 21 mg Q4W	DB Period: Abrilumab 70 mg Q4W
Total subjects affected by non-serious adverse events			
subjects affected / exposed	61 / 98 (62.24%)	14 / 25 (56.00%)	48 / 85 (56.47%)
Vascular disorders			
Hypertension			
subjects affected / exposed	2 / 98 (2.04%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	2	0	0
Surgical and medical procedures			
Female sterilisation			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	2 / 98 (2.04%)	1 / 25 (4.00%)	1 / 85 (1.18%)
occurrences (all)	2	1	1
Fatigue			
subjects affected / exposed	4 / 98 (4.08%)	1 / 25 (4.00%)	2 / 85 (2.35%)
occurrences (all)	5	1	2
Influenza like illness			
subjects affected / exposed	4 / 98 (4.08%)	3 / 25 (12.00%)	4 / 85 (4.71%)
occurrences (all)	4	3	6
Malaise			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	0	0	1
Oedema peripheral			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	1	0	1
Pain			
subjects affected / exposed	2 / 98 (2.04%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	2	0	0
Pyrexia			
subjects affected / exposed	2 / 98 (2.04%)	2 / 25 (8.00%)	4 / 85 (4.71%)
occurrences (all)	3	2	4

Immune system disorders			
Seasonal allergy			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Respiratory, thoracic and mediastinal disorders			
Dyspnoea			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	1	0	1
Hiccups			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Oropharyngeal pain			
subjects affected / exposed	3 / 98 (3.06%)	0 / 25 (0.00%)	4 / 85 (4.71%)
occurrences (all)	3	0	4
Pneumothorax			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Psychiatric disorders			
Depression			
subjects affected / exposed	2 / 98 (2.04%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	2	0	0
Insomnia			
subjects affected / exposed	3 / 98 (3.06%)	1 / 25 (4.00%)	1 / 85 (1.18%)
occurrences (all)	3	1	1
Restlessness			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0
Investigations			
Blood iron decreased			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Blood urea increased			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Clostridium test positive			

subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Injury, poisoning and procedural complications			
Fall			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Nervous system disorders			
Dizziness			
subjects affected / exposed	7 / 98 (7.14%)	1 / 25 (4.00%)	4 / 85 (4.71%)
occurrences (all)	10	1	6
Headache			
subjects affected / exposed	11 / 98 (11.22%)	4 / 25 (16.00%)	12 / 85 (14.12%)
occurrences (all)	12	6	15
Memory impairment			
subjects affected / exposed	2 / 98 (2.04%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	2	0	0
Nervous system disorder			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Paraesthesia			
subjects affected / exposed	2 / 98 (2.04%)	2 / 25 (8.00%)	7 / 85 (8.24%)
occurrences (all)	2	2	9
Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0
Ear and labyrinth disorders			
Tinnitus			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Gastrointestinal disorders			
Abdominal distension			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	1	0	1
Abdominal pain			

subjects affected / exposed	9 / 98 (9.18%)	1 / 25 (4.00%)	8 / 85 (9.41%)
occurrences (all)	10	1	8
Anal fistula			
subjects affected / exposed	0 / 98 (0.00%)	1 / 25 (4.00%)	1 / 85 (1.18%)
occurrences (all)	0	1	1
Constipation			
subjects affected / exposed	2 / 98 (2.04%)	1 / 25 (4.00%)	1 / 85 (1.18%)
occurrences (all)	2	1	5
Crohn's disease			
subjects affected / exposed	8 / 98 (8.16%)	1 / 25 (4.00%)	2 / 85 (2.35%)
occurrences (all)	8	1	2
Diarrhoea			
subjects affected / exposed	2 / 98 (2.04%)	0 / 25 (0.00%)	4 / 85 (4.71%)
occurrences (all)	2	0	4
Gastrointestinal fistula			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Nausea			
subjects affected / exposed	8 / 98 (8.16%)	1 / 25 (4.00%)	2 / 85 (2.35%)
occurrences (all)	8	1	2
Oral discomfort			
subjects affected / exposed	0 / 98 (0.00%)	1 / 25 (4.00%)	0 / 85 (0.00%)
occurrences (all)	0	1	0
Proctalgia			
subjects affected / exposed	2 / 98 (2.04%)	1 / 25 (4.00%)	1 / 85 (1.18%)
occurrences (all)	2	2	1
Toothache			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0
Vomiting			
subjects affected / exposed	3 / 98 (3.06%)	0 / 25 (0.00%)	3 / 85 (3.53%)
occurrences (all)	3	0	3
Hepatobiliary disorders			
Cholelithiasis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0

Skin and subcutaneous tissue disorders			
Acne			
subjects affected / exposed	2 / 98 (2.04%)	2 / 25 (8.00%)	0 / 85 (0.00%)
occurrences (all)	2	2	0
Hyperhidrosis			
subjects affected / exposed	1 / 98 (1.02%)	1 / 25 (4.00%)	0 / 85 (0.00%)
occurrences (all)	1	1	0
Pruritus			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0
Rash			
subjects affected / exposed	2 / 98 (2.04%)	1 / 25 (4.00%)	0 / 85 (0.00%)
occurrences (all)	2	1	0
Rash maculo-papular			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0
Skin ulcer			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Renal and urinary disorders			
Dysuria			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0
Urinary incontinence			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	10 / 98 (10.20%)	1 / 25 (4.00%)	8 / 85 (9.41%)
occurrences (all)	12	1	10
Arthritis			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	1	0	1
Back pain			
subjects affected / exposed	4 / 98 (4.08%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	4	0	1

Muscle spasms			
subjects affected / exposed	1 / 98 (1.02%)	2 / 25 (8.00%)	0 / 85 (0.00%)
occurrences (all)	1	2	0
Myalgia			
subjects affected / exposed	2 / 98 (2.04%)	2 / 25 (8.00%)	1 / 85 (1.18%)
occurrences (all)	2	2	1
Infections and infestations			
Anal abscess			
subjects affected / exposed	1 / 98 (1.02%)	1 / 25 (4.00%)	2 / 85 (2.35%)
occurrences (all)	1	1	4
Bronchitis			
subjects affected / exposed	2 / 98 (2.04%)	1 / 25 (4.00%)	3 / 85 (3.53%)
occurrences (all)	2	1	3
Cellulitis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Clostridium difficile infection			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	0	0	1
Conjunctivitis			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0
Fungal infection			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Gastroenteritis			
subjects affected / exposed	6 / 98 (6.12%)	0 / 25 (0.00%)	3 / 85 (3.53%)
occurrences (all)	6	0	3
Gastroenteritis viral			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	0	0	1
Herpes zoster			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Influenza			

subjects affected / exposed	1 / 98 (1.02%)	1 / 25 (4.00%)	1 / 85 (1.18%)
occurrences (all)	1	1	1
Nasopharyngitis			
subjects affected / exposed	11 / 98 (11.22%)	2 / 25 (8.00%)	7 / 85 (8.24%)
occurrences (all)	12	2	8
Psoas abscess			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Sinusitis			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	0	0	1
Upper respiratory tract infection			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	7 / 85 (8.24%)
occurrences (all)	0	0	7
Urinary tract infection			
subjects affected / exposed	2 / 98 (2.04%)	0 / 25 (0.00%)	6 / 85 (7.06%)
occurrences (all)	2	0	7
Viral infection			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	2 / 85 (2.35%)
occurrences (all)	1	0	2
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	1 / 85 (1.18%)
occurrences (all)	0	0	1
Magnesium deficiency			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Vitamin B12 deficiency			
subjects affected / exposed	0 / 98 (0.00%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	0	0	0
Vitamin D deficiency			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0
Zinc deficiency			
subjects affected / exposed	1 / 98 (1.02%)	0 / 25 (0.00%)	0 / 85 (0.00%)
occurrences (all)	1	0	0

Non-serious adverse events	DB Period: Abrilumab 210 mg	OL Period: Placebo/Abrilumab 210 mg Q3M	OL Period: Abrilumab 21 mg Q4W/210 mg Q3M
Total subjects affected by non-serious adverse events			
subjects affected / exposed	27 / 41 (65.85%)	61 / 84 (72.62%)	16 / 20 (80.00%)
Vascular disorders			
Hypertension			
subjects affected / exposed	1 / 41 (2.44%)	1 / 84 (1.19%)	0 / 20 (0.00%)
occurrences (all)	1	1	0
Surgical and medical procedures			
Female sterilisation			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	1 / 41 (2.44%)	5 / 84 (5.95%)	0 / 20 (0.00%)
occurrences (all)	1	5	0
Fatigue			
subjects affected / exposed	3 / 41 (7.32%)	3 / 84 (3.57%)	0 / 20 (0.00%)
occurrences (all)	4	3	0
Influenza like illness			
subjects affected / exposed	0 / 41 (0.00%)	5 / 84 (5.95%)	1 / 20 (5.00%)
occurrences (all)	0	5	2
Malaise			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Oedema peripheral			
subjects affected / exposed	3 / 41 (7.32%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	3	1	1
Pain			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Pyrexia			
subjects affected / exposed	2 / 41 (4.88%)	4 / 84 (4.76%)	3 / 20 (15.00%)
occurrences (all)	2	5	3
Immune system disorders			

Seasonal allergy			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	1	0	1
Respiratory, thoracic and mediastinal disorders			
Dyspnoea			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	1	0	1
Hiccups			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Oropharyngeal pain			
subjects affected / exposed	2 / 41 (4.88%)	4 / 84 (4.76%)	1 / 20 (5.00%)
occurrences (all)	2	5	1
Pneumothorax			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Psychiatric disorders			
Depression			
subjects affected / exposed	1 / 41 (2.44%)	1 / 84 (1.19%)	2 / 20 (10.00%)
occurrences (all)	1	1	2
Insomnia			
subjects affected / exposed	0 / 41 (0.00%)	3 / 84 (3.57%)	0 / 20 (0.00%)
occurrences (all)	0	3	0
Restlessness			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Investigations			
Blood iron decreased			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	3
Blood urea increased			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Clostridium test positive			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	0	1	1

Injury, poisoning and procedural complications			
Fall			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Nervous system disorders			
Dizziness			
subjects affected / exposed	2 / 41 (4.88%)	0 / 84 (0.00%)	0 / 20 (0.00%)
occurrences (all)	2	0	0
Headache			
subjects affected / exposed	8 / 41 (19.51%)	7 / 84 (8.33%)	3 / 20 (15.00%)
occurrences (all)	10	10	4
Memory impairment			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	0	1	1
Nervous system disorder			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Paraesthesia			
subjects affected / exposed	2 / 41 (4.88%)	4 / 84 (4.76%)	0 / 20 (0.00%)
occurrences (all)	2	4	0
Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	0 / 41 (0.00%)	3 / 84 (3.57%)	2 / 20 (10.00%)
occurrences (all)	0	4	2
Ear and labyrinth disorders			
Tinnitus			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	1	0	1
Gastrointestinal disorders			
Abdominal distension			
subjects affected / exposed	3 / 41 (7.32%)	0 / 84 (0.00%)	0 / 20 (0.00%)
occurrences (all)	3	0	0
Abdominal pain			
subjects affected / exposed	1 / 41 (2.44%)	9 / 84 (10.71%)	2 / 20 (10.00%)
occurrences (all)	2	10	2
Anal fistula			

subjects affected / exposed	0 / 41 (0.00%)	3 / 84 (3.57%)	0 / 20 (0.00%)
occurrences (all)	0	3	0
Constipation			
subjects affected / exposed	2 / 41 (4.88%)	2 / 84 (2.38%)	1 / 20 (5.00%)
occurrences (all)	3	5	1
Crohn's disease			
subjects affected / exposed	2 / 41 (4.88%)	14 / 84 (16.67%)	1 / 20 (5.00%)
occurrences (all)	2	15	1
Diarrhoea			
subjects affected / exposed	2 / 41 (4.88%)	5 / 84 (5.95%)	0 / 20 (0.00%)
occurrences (all)	2	5	0
Gastrointestinal fistula			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Nausea			
subjects affected / exposed	3 / 41 (7.32%)	7 / 84 (8.33%)	2 / 20 (10.00%)
occurrences (all)	3	8	4
Oral discomfort			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Proctalgia			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	2	0	2
Toothache			
subjects affected / exposed	1 / 41 (2.44%)	1 / 84 (1.19%)	2 / 20 (10.00%)
occurrences (all)	1	2	2
Vomiting			
subjects affected / exposed	3 / 41 (7.32%)	5 / 84 (5.95%)	2 / 20 (10.00%)
occurrences (all)	3	6	2
Hepatobiliary disorders			
Cholelithiasis			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Skin and subcutaneous tissue disorders			
Acne			

subjects affected / exposed	1 / 41 (2.44%)	1 / 84 (1.19%)	0 / 20 (0.00%)
occurrences (all)	2	1	0
Hyperhidrosis			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	0	1	1
Pruritus			
subjects affected / exposed	1 / 41 (2.44%)	2 / 84 (2.38%)	1 / 20 (5.00%)
occurrences (all)	1	2	1
Rash			
subjects affected / exposed	1 / 41 (2.44%)	6 / 84 (7.14%)	0 / 20 (0.00%)
occurrences (all)	1	7	0
Rash maculo-papular			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Skin ulcer			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Renal and urinary disorders			
Dysuria			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Urinary incontinence			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	3 / 41 (7.32%)	5 / 84 (5.95%)	2 / 20 (10.00%)
occurrences (all)	5	8	2
Arthritis			
subjects affected / exposed	0 / 41 (0.00%)	2 / 84 (2.38%)	1 / 20 (5.00%)
occurrences (all)	0	2	1
Back pain			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	0	1	2
Muscle spasms			

subjects affected / exposed	2 / 41 (4.88%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	2	0	1
Myalgia			
subjects affected / exposed	3 / 41 (7.32%)	2 / 84 (2.38%)	2 / 20 (10.00%)
occurrences (all)	3	2	4
Infections and infestations			
Anal abscess			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	0 / 20 (0.00%)
occurrences (all)	0	3	0
Bronchitis			
subjects affected / exposed	2 / 41 (4.88%)	4 / 84 (4.76%)	1 / 20 (5.00%)
occurrences (all)	2	5	1
Cellulitis			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	0	1	2
Clostridium difficile infection			
subjects affected / exposed	0 / 41 (0.00%)	2 / 84 (2.38%)	1 / 20 (5.00%)
occurrences (all)	0	3	1
Conjunctivitis			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	0	1	1
Fungal infection			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Gastroenteritis			
subjects affected / exposed	1 / 41 (2.44%)	2 / 84 (2.38%)	0 / 20 (0.00%)
occurrences (all)	1	2	0
Gastroenteritis viral			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	0	1	1
Herpes zoster			
subjects affected / exposed	0 / 41 (0.00%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	0	1	1
Influenza			
subjects affected / exposed	3 / 41 (7.32%)	4 / 84 (4.76%)	1 / 20 (5.00%)
occurrences (all)	3	4	2

Nasopharyngitis			
subjects affected / exposed	3 / 41 (7.32%)	12 / 84 (14.29%)	2 / 20 (10.00%)
occurrences (all)	4	22	3
Psoas abscess			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Sinusitis			
subjects affected / exposed	2 / 41 (4.88%)	1 / 84 (1.19%)	2 / 20 (10.00%)
occurrences (all)	3	6	2
Upper respiratory tract infection			
subjects affected / exposed	1 / 41 (2.44%)	6 / 84 (7.14%)	0 / 20 (0.00%)
occurrences (all)	1	6	0
Urinary tract infection			
subjects affected / exposed	1 / 41 (2.44%)	3 / 84 (3.57%)	2 / 20 (10.00%)
occurrences (all)	2	3	2
Viral infection			
subjects affected / exposed	2 / 41 (4.88%)	2 / 84 (2.38%)	1 / 20 (5.00%)
occurrences (all)	2	2	1
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	1 / 41 (2.44%)	0 / 84 (0.00%)	0 / 20 (0.00%)
occurrences (all)	1	0	0
Magnesium deficiency			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Vitamin B12 deficiency			
subjects affected / exposed	0 / 41 (0.00%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	0	0	1
Vitamin D deficiency			
subjects affected / exposed	1 / 41 (2.44%)	1 / 84 (1.19%)	1 / 20 (5.00%)
occurrences (all)	1	1	1
Zinc deficiency			
subjects affected / exposed	2 / 41 (4.88%)	0 / 84 (0.00%)	1 / 20 (5.00%)
occurrences (all)	2	0	1

Non-serious adverse events	OL Period: Abrilumab 70 mg Q4W/210 mg Q3M	OL Period: Abrilumab 210 mg/210 mg Q3M	

Total subjects affected by non-serious adverse events			
subjects affected / exposed	55 / 76 (72.37%)	28 / 37 (75.68%)	
Vascular disorders			
Hypertension			
subjects affected / exposed	1 / 76 (1.32%)	2 / 37 (5.41%)	
occurrences (all)	1	2	
Surgical and medical procedures			
Female sterilisation			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	1 / 76 (1.32%)	2 / 37 (5.41%)	
occurrences (all)	1	2	
Fatigue			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences (all)	1	0	
Influenza like illness			
subjects affected / exposed	7 / 76 (9.21%)	3 / 37 (8.11%)	
occurrences (all)	9	4	
Malaise			
subjects affected / exposed	2 / 76 (2.63%)	0 / 37 (0.00%)	
occurrences (all)	2	0	
Oedema peripheral			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences (all)	0	1	
Pain			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Pyrexia			
subjects affected / exposed	2 / 76 (2.63%)	5 / 37 (13.51%)	
occurrences (all)	4	8	
Immune system disorders			
Seasonal allergy			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Respiratory, thoracic and mediastinal			

disorders			
Dyspnoea			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Hiccups			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Oropharyngeal pain			
subjects affected / exposed	1 / 76 (1.32%)	3 / 37 (8.11%)	
occurrences (all)	1	3	
Pneumothorax			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Psychiatric disorders			
Depression			
subjects affected / exposed	2 / 76 (2.63%)	3 / 37 (8.11%)	
occurrences (all)	2	3	
Insomnia			
subjects affected / exposed	5 / 76 (6.58%)	2 / 37 (5.41%)	
occurrences (all)	5	3	
Restlessness			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Investigations			
Blood iron decreased			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Blood urea increased			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Clostridium test positive			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Injury, poisoning and procedural complications			
Fall			

subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Nervous system disorders			
Dizziness			
subjects affected / exposed	2 / 76 (2.63%)	1 / 37 (2.70%)	
occurrences (all)	2	1	
Headache			
subjects affected / exposed	2 / 76 (2.63%)	3 / 37 (8.11%)	
occurrences (all)	3	3	
Memory impairment			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences (all)	1	0	
Nervous system disorder			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Paraesthesia			
subjects affected / exposed	1 / 76 (1.32%)	2 / 37 (5.41%)	
occurrences (all)	2	2	
Blood and lymphatic system disorders			
Anaemia			
subjects affected / exposed	3 / 76 (3.95%)	1 / 37 (2.70%)	
occurrences (all)	3	1	
Ear and labyrinth disorders			
Tinnitus			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Gastrointestinal disorders			
Abdominal distension			
subjects affected / exposed	1 / 76 (1.32%)	2 / 37 (5.41%)	
occurrences (all)	1	2	
Abdominal pain			
subjects affected / exposed	10 / 76 (13.16%)	2 / 37 (5.41%)	
occurrences (all)	10	2	
Anal fistula			
subjects affected / exposed	1 / 76 (1.32%)	2 / 37 (5.41%)	
occurrences (all)	1	2	
Constipation			

subjects affected / exposed	2 / 76 (2.63%)	1 / 37 (2.70%)	
occurrences (all)	3	1	
Crohn's disease			
subjects affected / exposed	12 / 76 (15.79%)	3 / 37 (8.11%)	
occurrences (all)	15	4	
Diarrhoea			
subjects affected / exposed	5 / 76 (6.58%)	2 / 37 (5.41%)	
occurrences (all)	6	2	
Gastrointestinal fistula			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Nausea			
subjects affected / exposed	5 / 76 (6.58%)	4 / 37 (10.81%)	
occurrences (all)	5	5	
Oral discomfort			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Proctalgia			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences (all)	0	1	
Toothache			
subjects affected / exposed	0 / 76 (0.00%)	2 / 37 (5.41%)	
occurrences (all)	0	2	
Vomiting			
subjects affected / exposed	2 / 76 (2.63%)	2 / 37 (5.41%)	
occurrences (all)	3	2	
Hepatobiliary disorders			
Cholelithiasis			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Skin and subcutaneous tissue disorders			
Acne			
subjects affected / exposed	1 / 76 (1.32%)	1 / 37 (2.70%)	
occurrences (all)	1	1	
Hyperhidrosis			

subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Pruritus			
subjects affected / exposed	2 / 76 (2.63%)	0 / 37 (0.00%)	
occurrences (all)	2	0	
Rash			
subjects affected / exposed	2 / 76 (2.63%)	4 / 37 (10.81%)	
occurrences (all)	2	4	
Rash maculo-papular			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences (all)	0	1	
Skin ulcer			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Renal and urinary disorders			
Dysuria			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Urinary incontinence			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	7 / 76 (9.21%)	5 / 37 (13.51%)	
occurrences (all)	8	5	
Arthritis			
subjects affected / exposed	1 / 76 (1.32%)	0 / 37 (0.00%)	
occurrences (all)	1	0	
Back pain			
subjects affected / exposed	3 / 76 (3.95%)	1 / 37 (2.70%)	
occurrences (all)	3	1	
Muscle spasms			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences (all)	0	1	
Myalgia			

subjects affected / exposed	2 / 76 (2.63%)	2 / 37 (5.41%)	
occurrences (all)	2	2	
Infections and infestations			
Anal abscess			
subjects affected / exposed	4 / 76 (5.26%)	0 / 37 (0.00%)	
occurrences (all)	4	0	
Bronchitis			
subjects affected / exposed	2 / 76 (2.63%)	0 / 37 (0.00%)	
occurrences (all)	2	0	
Cellulitis			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Clostridium difficile infection			
subjects affected / exposed	1 / 76 (1.32%)	1 / 37 (2.70%)	
occurrences (all)	1	1	
Conjunctivitis			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Fungal infection			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Gastroenteritis			
subjects affected / exposed	7 / 76 (9.21%)	2 / 37 (5.41%)	
occurrences (all)	8	2	
Gastroenteritis viral			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Herpes zoster			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Influenza			
subjects affected / exposed	10 / 76 (13.16%)	6 / 37 (16.22%)	
occurrences (all)	13	7	
Nasopharyngitis			
subjects affected / exposed	14 / 76 (18.42%)	6 / 37 (16.22%)	
occurrences (all)	25	7	

Psoas abscess			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Sinusitis			
subjects affected / exposed	3 / 76 (3.95%)	2 / 37 (5.41%)	
occurrences (all)	3	2	
Upper respiratory tract infection			
subjects affected / exposed	2 / 76 (2.63%)	3 / 37 (8.11%)	
occurrences (all)	2	3	
Urinary tract infection			
subjects affected / exposed	0 / 76 (0.00%)	1 / 37 (2.70%)	
occurrences (all)	0	1	
Viral infection			
subjects affected / exposed	3 / 76 (3.95%)	1 / 37 (2.70%)	
occurrences (all)	6	1	
Metabolism and nutrition disorders			
Decreased appetite			
subjects affected / exposed	0 / 76 (0.00%)	2 / 37 (5.41%)	
occurrences (all)	0	2	
Magnesium deficiency			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Vitamin B12 deficiency			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	
Vitamin D deficiency			
subjects affected / exposed	1 / 76 (1.32%)	1 / 37 (2.70%)	
occurrences (all)	1	1	
Zinc deficiency			
subjects affected / exposed	0 / 76 (0.00%)	0 / 37 (0.00%)	
occurrences (all)	0	0	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
14 June 2012	Amendment 1 introduced changes that incorporated feedback received from regulatory authorities in Europe and the US on a phase 2 study in subjects with Ulcerative Colitis. Briefly: - The subject population at study entry was refined to subjects who had an inadequate response to, loss of response to, or intolerance to immunomodulators and/or anti-TNF agents. - A list of highly effective methods of birth control was added. - Topical aminosalicylic acid or corticosteroids, and IV or intramuscular corticosteroids were added to the exclusion criteria. - The safety follow-up period was extended from 12 months to 24 months. - The use of concomitant medications during the study was clarified. - Immunomodulators were to be withdrawn in all subjects at week 8. - Recommendations for withdrawal of open-label AMG 181 in subjects who did not achieve adequate disease control or had recurrence of significant symptoms was added. - Hepatotoxicity rules on stopping of and rechallenge with investigational product were added. - In the statistical section, the statistical method proposed for the continuous or ordinal endpoints was changed to an IPW GEE model to handle missing data. The ANCOVA model after missing data was imputed by the last observation carried forward approach was demoted to a sensitivity analysis. The lists of covariates and subgroup analyses were updated. - Other minor changes included corrections of typographical errors and small edits to clarify intent.
11 February 2013	Amendment 2 introduced the following changes: - Results from phase 3 studies of vedolizumab had recently been made publicly available (subsequent full publication = Sands et al, 2014). These results suggested that the effect on disease activity might increase further beyond week 8. The study endpoints were therefore updated to include additional key secondary, other secondary, and exploratory endpoints, mainly at week 12, in order to assess disease activity at this time point as well as at week 8. Moreover, the statistical section was updated to reflect the changes in assumptions of the treatment effect size according to recent results and the addition of key secondary endpoints. The overall type I error rate was adjusted to a 2-sided alpha level of 0.10. - The enrollment of subjects with any prior exposure to anti-TNF agents was limited to approximately 80% in order to ensure recruitment of anti-TNF-naïve subjects in the study and generation of efficacy data in that population in addition to those for the core population of anti-TNF-exposed subjects. - Minor updates were made to Section 2 (Background and Rationale). - Minor clarifications and corrections were made to eligibility criteria. - Clarifications and corrections were made to Section 7 (Study Procedures). - Reasons for removal of subjects from the study were updated in Section 8 (Removal and Replacement of Subjects) and Section 9 (Safety Data Collection, Recording, and Reporting). - Updates to Section 9 (Safety Data Collection, Recording, and Reporting) were made to ensure that adverse event reporting and reports of lactation followed the sponsor's standard procedures. - Typographic and formatting errors were corrected throughout the Protocol.

25 September 2013	Amendment 3 introduced the following changes: - A systematic misalignment between the IP secondary packaging and the IPIM occurred. As a consequence, 89 subjects enrolled prior to Protocol Amendment 3 were randomly assigned to treatment groups at ratios different from those stipulated in the double-blind period as outlined in Protocol. Approximately 74 subjects were expected to have received the IVRS randomized dose and 15 subjects received an incorrect dose such that a greater proportion of subjects than stipulated in the Protocol received placebo. All subjects received a dose level defined by the Protocol. No increased safety risks were identified for subjects who received a different protocol-defined dose than that to which they were randomly assigned. Changes to the Statistical Considerations were made accordingly, as summarized below: -- Full Analysis Set and Analysis of Key Endpoints: Neither the randomization nor study blind was compromised and therefore the intent-to-treat principle was maintained. The full analysis consisted of all randomized subjects who had received at least 1 dose of IP. Subjects enrolled under Amendment 3 were to be analyzed according to their IVRS randomized treatment group. However, subjects enrolled prior to Amendment 3 were to be analyzed according to the randomly assigned yet erroneous treatment as the result of the systemic misalignment. -- Sample Size Considerations: Minor adjustments were made to the sample size assumptions. - Clarifications to Study Design were done. - Inclusion Criteria was updated such that at non-US sites, subjects who demonstrated an inadequate response to, loss of response to, or intolerance to corticosteroids were to be allowed in the study. This change allowed for testing of AMG 181 in a broader patient population and facilitated subject recruitment in regions outside of the US. - Minor clarifications and corrections to Study Procedures and Schedule of Assessments were done.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
12 July 2013	Routine PK analyses by the unblended clinical pharmacology group reported a systematic inconsistency in expected exposures for the 21 mg dose cohort. The study was immediately paused for investigation, which showed a consistent discrepancy between the IP instruction manual (IPIM) description of vial positions and the actual vial positions in the IP package. Once the discrepancy was corrected and affected patients completed their double-blind treatment period, the study resumed enrollment and randomization per protocol.	06 December 2013

Notes:

Limitations and caveats

None reported