



Clinical trial results:

A 52-Week, multicenter, randomized, double-blind, placebo-controlled study of subcutaneous secukinumab to demonstrate efficacy as assessed by palmoplantar pustulosis Psoriasis Area and Severity Index (ppPASI) at 16 Weeks of treatment, compared to placebo, and to assess long-term safety, tolerability, and efficacy in subjects with moderate to severe chronic palmoplantar pustular psoriasis – amended with an optional extension treatment period of up to a total of 148 weeks

Summary

EudraCT number	2013-003086-34
Trial protocol	SE GB AT ES DE BE IT PL
Global end of trial date	31 May 2017

Results information

Result version number	v1 (current)
This version publication date	16 June 2018
First version publication date	16 June 2018

Trial information

Trial identification

Sponsor protocol code	CAIN457A3301
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Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02008890
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Novartis Pharma AG
Sponsor organisation address	CH-4002, Basel, Switzerland,
Public contact	Clinical Disclosure Office, Novartis Pharma AG, 41 613241111, Novartis.email@novartis.com
Scientific contact	Clinical Disclosure Office, Novartis Pharma AG, 41 613241111, Novartis.email@novartis.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	31 May 2017
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	31 May 2017
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective was to demonstrate the superiority of secukinumab 150 mg s.c. and/or 300 mg s.c. in patients with moderate to severe chronic PPP at Week 16 with respect to the palmoplantar pustulosis Psoriasis Area and Severity Index 75 response rate (ppPASI 75) compared to placebo.

Protection of trial subjects:

The study was in compliance with the ethical principles derived from the Declaration of Helsinki and the International Conference on Harmonization (ICH) Good Clinical Practice (GCP) guidelines. All the local regulatory requirements pertinent to safety of trial subjects were also followed during the conduct of the trial.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	26 December 2013
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Austria: 14
Country: Number of subjects enrolled	Belgium: 6
Country: Number of subjects enrolled	France: 21
Country: Number of subjects enrolled	Germany: 90
Country: Number of subjects enrolled	Italy: 3
Country: Number of subjects enrolled	Poland: 24
Country: Number of subjects enrolled	Russian Federation: 21
Country: Number of subjects enrolled	Spain: 18
Country: Number of subjects enrolled	Sweden: 16
Country: Number of subjects enrolled	United Kingdom: 24
Worldwide total number of subjects	237
EEA total number of subjects	216

Notes:

Subjects enrolled per age group

In utero	0
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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)	197
From 65 to 84 years	40
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

A total of 337 patients were screened, and 237 of these patients completed the screening phase and were randomized to treatment.

Pre-assignment

Screening details:

Period 1 (Baseline to Week 16): patients were randomized to AIN457 150 mg, AIN457 300 mg or Placebo

Period 2 (Week 16 to Week 52): Placebo non-responders were re-randomized at Week 16 to AIN457 150 mg or AIN457 300 mg

Extension Period (Week 52 to Week 148): Placebo responders (assessed at Week 16) were not eligible to enter the Extension Period.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	AIN457 150mg

Arm description:

Secukinumab 150mg at each dosing.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 150 mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 150 mg, provided as: one PFS of 150 mg dose and one PFS of Placebo dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Arm title	AIN457 300mg
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Arm description:

Secukinumab 300mg at each dosing.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 300 mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 300 mg, provided as: two PFS of 150 mg dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Arm title	Placebo
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Arm description:

Placebo at each dosing.

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

Dosage and administration details:

Placebo, provided as: two PFS of Placebo dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Number of subjects in period 1	AIN457 150mg	AIN457 300mg	Placebo
Started	80	79	78
Completed	65	64	66
Not completed	15	15	12
Consent withdrawn by subject	7	7	5
Physician decision	1	-	1
Adverse event, non-fatal	6	8	6
Pregnancy	1	-	-

Period 2

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

Arms

Are arms mutually exclusive?	Yes
Arm title	AIN457 150mg

Arm description:

Secukinumab 150mg at each dosing.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 150mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 150 mg, provided as: one PFS of 150 mg dose and one PFS of Placebo dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Arm title	AIN457 300mg
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Arm description:

Secukinumab 300mg at each dosing.

Arm type	Experimental
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Investigational medicinal product name	Secukinumab 300 mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use
Dosage and administration details:	
Secukinumab 300 mg, provided as: two PFS of 150 mg dose, labeled as "AIN457 150 mg/1 mL/Placebo"	

Arm title	Placebo - AIN457 150 mg
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Arm description:

Placebo until Week 12. ppPASI 75 non-responder at Week 16. Secukinumab 150mg from Week 16 until the end of the study.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 150mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 150 mg, provided as: one PFS of 150 mg dose and one PFS of Placebo dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Arm title	Placebo - AIN457 300 mg
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Arm description:

Placebo until Week 12. ppPASI 75 non-responder at Week 16. Secukinumab 300mg from Week 16 until the end of the study.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 300 mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 300 mg, provided as: two PFS of 150 mg dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Arm title	Placebo
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Arm description:

Placebo at each dosing.

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

Dosage and administration details:

Placebo, provided as: two PFS of Placebo dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Number of subjects in period 2 ^[1]	AIN457 150mg	AIN457 300mg	Placebo - AIN457 150 mg
Started	65	64	27
Completed	38	49	13
Not completed	27	15	14
Consent withdrawn by subject	11	8	7
Physician decision	4	-	2
Adverse event, non-fatal	12	7	5
Lost to follow-up	-	-	-

Number of subjects in period 2 ^[1]	Placebo - AIN457 300 mg	Placebo
Started	28	10
Completed	20	9
Not completed	8	1
Consent withdrawn by subject	2	-
Physician decision	1	-
Adverse event, non-fatal	5	-
Lost to follow-up	-	1

Notes:

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

Justification: Patients originally randomized to Placebo (in Period 1) and considered non-responders at Week 16 were re-randomized to AIN457 150 mg or AIN457 300 mg for the subsequent periods leading to inconsistencies when reporting the data.

Period 3

Period 3 title	Extension Period
Is this the baseline period?	No
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Data analyst, Assessor

Blinding implementation details:

At Week 52, the investigator was unblinded in relation to the placebo; however blinding regarding the dose groups of active treatment (secukinumab 150 mg and 300 mg) was maintained until the end of the study.

Arms

Are arms mutually exclusive?	Yes
Arm title	AIN457 150mg

Arm description:

Secukinumab 150mg at each dosing.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 150mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 150 mg, provided as: one PFS of 150 mg dose and one PFS of Placebo dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Arm title	AIN457 300mg
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Arm description:

Secukinumab 300mg at each dosing.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 300 mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 300 mg, provided as: two PFS of 150 mg dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Arm title	Placebo - AIN457 150 mg
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Arm description:

Placebo until Week 12. ppPASI 75 non-responder at Week 16. Secukinumab 150mg from Week 16 until the end of the study.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 150mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 150 mg, provided as: one PFS of 150 mg dose and one PFS of Placebo dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Arm title	Placebo - AIN457 300 mg
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Arm description:

Placebo until Week 12. ppPASI 75 non-responder at Week 16. Secukinumab 300mg from Week 16 until the end of the study.

Arm type	Experimental
Investigational medicinal product name	Secukinumab 300 mg
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Secukinumab 300 mg, provided as: two PFS of 150 mg dose, labeled as "AIN457 150 mg/1 mL/Placebo"

Number of subjects in period 3^[2]	AIN457 150mg	AIN457 300mg	Placebo - AIN457 150 mg
Started	31	36	10
Completed	26	31	6
Not completed	5	5	4
Consent withdrawn by subject	3	2	4
Adverse event, non-fatal	1	3	-
Lost to follow-up	1	-	-

Number of subjects in period 3^[2]	Placebo - AIN457 300 mg
Started	17
Completed	13
Not completed	4
Consent withdrawn by subject	2
Adverse event, non-fatal	2
Lost to follow-up	-

Notes:

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

Justification: Patients originally randomized to Placebo (in Period 1) and considered non-responders at Week 16 were re-randomized to AIN457 150 mg or AIN457 300 mg for the subsequent periods leading to inconsistencies when reporting the data.

Baseline characteristics

Reporting groups

Reporting group title	AIN457 150mg
Reporting group description: Secukinumab 150mg at each dosing.	
Reporting group title	AIN457 300mg
Reporting group description: Secukinumab 300mg at each dosing.	
Reporting group title	Placebo
Reporting group description: Placebo at each dosing.	

Reporting group values	AIN457 150mg	AIN457 300mg	Placebo
Number of subjects	80	79	78
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	65	62	70
From 65-84 years	15	17	8
85 years and over	0	0	0
Age Continuous Units: Years			
arithmetic mean	50.7	50.6	52.9
standard deviation	± 13.68	± 14.77	± 11.33
Sex: Female, Male Units: Subjects			
Female	63	64	59
Male	17	15	19
Race/Ethnicity, Customized Units: Subjects			
Black	1	0	1
Caucasian	78	78	76
Missing	1	0	1
Other	0	1	0

Reporting group values	Total		
Number of subjects	237		
Age categorical Units: Subjects			
In utero	0		
Preterm newborn infants (gestational age < 37 wks)	0		

Newborns (0-27 days)	0		
Infants and toddlers (28 days-23 months)	0		
Children (2-11 years)	0		
Adolescents (12-17 years)	0		
Adults (18-64 years)	197		
From 65-84 years	40		
85 years and over	0		
Age Continuous			
Units: Years			
arithmetic mean			
standard deviation	-		
Sex: Female, Male			
Units: Subjects			
Female	186		
Male	51		
Race/Ethnicity, Customized			
Units: Subjects			
Black	2		
Caucasian	232		
Missing	2		
Other	1		

End points

End points reporting groups

Reporting group title	AIN457 150mg
Reporting group description: Secukinumab 150mg at each dosing.	
Reporting group title	AIN457 300mg
Reporting group description: Secukinumab 300mg at each dosing.	
Reporting group title	Placebo
Reporting group description: Placebo at each dosing.	
Reporting group title	AIN457 150mg
Reporting group description: Secukinumab 150mg at each dosing.	
Reporting group title	AIN457 300mg
Reporting group description: Secukinumab 300mg at each dosing.	
Reporting group title	Placebo - AIN457 150 mg
Reporting group description: Placebo until Week 12. ppPASI 75 non-responder at Week 16. Secukinumab 150mg from Week 16 until the end of the study.	
Reporting group title	Placebo - AIN457 300 mg
Reporting group description: Placebo until Week 12. ppPASI 75 non-responder at Week 16. Secukinumab 300mg from Week 16 until the end of the study.	
Reporting group title	Placebo
Reporting group description: Placebo at each dosing.	
Reporting group title	AIN457 150mg
Reporting group description: Secukinumab 150mg at each dosing.	
Reporting group title	AIN457 300mg
Reporting group description: Secukinumab 300mg at each dosing.	
Reporting group title	Placebo - AIN457 150 mg
Reporting group description: Placebo until Week 12. ppPASI 75 non-responder at Week 16. Secukinumab 150mg from Week 16 until the end of the study.	
Reporting group title	Placebo - AIN457 300 mg
Reporting group description: Placebo until Week 12. ppPASI 75 non-responder at Week 16. Secukinumab 300mg from Week 16 until the end of the study.	

Primary: palmoplantar pustulosis Psoriasis Area and Severity Index 75 response rate (ppPASI 75) at Week 16 (period 1)

End point title	palmoplantar pustulosis Psoriasis Area and Severity Index 75 response rate (ppPASI 75) at Week 16 (period 1)
End point description: The primary endpoint was assessed by the palmoplantar pustulosis Psoriasis Area and Severity Index 75	

(ppPASI 75). The percentage of subjects who achieved a 75% reduction in ppPASI score from Baseline to Week 16 was measured. The ppPASI is a modification of the PASI score and adjusted for palmoplantar pustular psoriasis by classifying and scoring erythema, scaling (desquamation) and pustules/vesicles. Both palms and both plants are scored from 0 to 4. The extent of involvement of each region of the body is scored from 0 to 6. The total maximum score is 72.

End point type	Primary
End point timeframe:	
Baseline to Week 16	

End point values	AIN457 150mg	AIN457 300mg	Placebo	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	80	79	78	
Units: Percent				
number (not applicable)	17.5	26.6	14.1	

Statistical analyses

Statistical analysis title	ppPASI 75 response rate at Week 16
Comparison groups	AIN457 150mg v Placebo
Number of subjects included in analysis	158
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.5722
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	1.33
Confidence interval	
level	95 %
sides	2-sided
lower limit	0.5
upper limit	3.53

Statistical analysis title	ppPASI 75 response rate at Week 16
Comparison groups	AIN457 300mg v Placebo
Number of subjects included in analysis	157
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.0411
Method	Regression, Logistic
Parameter estimate	Odds ratio (OR)
Point estimate	2.62

Confidence interval	
level	95 %
sides	2-sided
lower limit	1.04
upper limit	6.6

Secondary: ppPASI: absolute change from baseline to Week 16

End point title	ppPASI: absolute change from baseline to Week 16
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End point description:

A secondary endpoint was assessed by the palmoplantar pustulosis Psoriasis Area and Severity Index (ppPASI). The mean change of ppPASI score from Baseline to Week 16 was measured. The ppPASI is a modification of the PASI score and adjusted for palmoplantar pustular psoriasis by classifying and scoring erythema, scaling (desquamation) and pustules/vesicles. Both palms and both plants are scored from 0 to 4. The extent of involvement of each region of the body is scored from 0 to 6. The total maximum score is 72.

End point type	Secondary
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End point timeframe:

Baseline to Week 16

End point values	AIN457 150mg	AIN457 300mg	Placebo	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	68	69	70	
Units: points				
arithmetic mean (standard deviation)				
Baseline	21.79 (± 8.211)	23.01 (± 10.787)	23.10 (± 10.198)	
Change from Baseline to Week 16	-6.99 (± 10.904)	-9.74 (± 12.130)	-6.73 (± 9.868)	

Statistical analyses

Statistical analysis title	ppPASI 75 change from baseline to Week 16
Comparison groups	AIN457 150mg v Placebo
Number of subjects included in analysis	138
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.9431
Method	Regression, Linear
Parameter estimate	Mean difference (final values)
Point estimate	-0.56
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.59
upper limit	3.47

Statistical analysis title	ppPASI 75 change from baseline to Week 16
Comparison groups	AIN457 300mg v Placebo
Number of subjects included in analysis	139
Analysis specification	Pre-specified
Analysis type	
P-value	= 0.1576
Method	Regression, Linear
Parameter estimate	Mean difference (final values)
Point estimate	-3.13
Confidence interval	
level	95 %
sides	2-sided
lower limit	-7.14
upper limit	0.88

Secondary: ppPASI 75 response over time (Period 1)

End point title	ppPASI 75 response over time (Period 1)
End point description:	
A secondary endpoint was assessed as response rate of patients to treatment measured by the palmoplantar pustulosis Psoriasis Area and Severity Index 75 (ppPASI 75). The percentage of subjects who achieved a 75% reduction in ppPASI score from Baseline to each post-baseline visit was measured. The ppPASI is a modification of the PASI score and adjusted for palmoplantar pustular psoriasis by classifying and scoring erythema, scaling (desquamation) and pustules/vesicles. Both palms and both plants are scored from 0 to 4. The extent of involvement of each region of the body is scored from 0 to 6. The total maximum score is 72.	
End point type	Secondary
End point timeframe:	
Baseline to Week 16	

End point values	AIN457 150mg	AIN457 300mg	Placebo	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	80	79	78	
Units: percent				
number (not applicable)				
Week 1	0	1.3	1.3	
Week 2	1.3	1.3	0	
Week 3	2.6	5.4	0	
Week 4	6.5	9.1	1.4	
Week 8	13.0	13.3	9.6	
Week 12	14.7	23.9	10.1	
Week 16	17.5	26.6	14.1	

Statistical analyses

No statistical analyses for this end point

Secondary: ppPASI 75 response over time (Period 2)

End point title	ppPASI 75 response over time (Period 2)
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End point description:

A secondary endpoint was assessed as response rate of patients to treatment measured by the palmoplantar pustulosis Psoriasis Area and Severity Index 75 (ppPASI 75). The percentage of subjects who achieved a 75% reduction in ppPASI score from Baseline to each post-baseline visit was measured. The ppPASI is a modification of the PASI score and adjusted for palmoplantar pustular psoriasis by classifying and scoring erythema, scaling (desquamation) and pustules/vesicles. Both palms and both plants are scored from 0 to 4. The extent of involvement of each region of the body is scored from 0 to 6. The total maximum score is 72.

End point type	Secondary
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End point timeframe:

Week 16 to Week 52

End point values	AIN457 150mg	AIN457 300mg	Placebo - AIN457 150 mg	Placebo - AIN457 300 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	64	64	27	28
Units: percent				
number (not applicable)				
Week 16	18.8	31.3	0	0
Week 20	20.3	31.3	7.7	17.9
Week 24	30.2	37.5	19.2	38.5
Week 32	36.4	48.3	25.0	44.0
Week 40	44.4	56.4	37.5	50.0
Week 48	52.4	58.0	40.0	47.4
Week 52	57.9	58.8	50.0	60.0

End point values	Placebo			
Subject group type	Reporting group			
Number of subjects analysed	10			
Units: percent				
number (not applicable)				
Week 16	90.0			
Week 20	80.0			
Week 24	80.0			
Week 32	80.0			

Week 40	70.0			
Week 48	60.0			
Week 52	66.7			

Statistical analyses

No statistical analyses for this end point

Secondary: ppPASI 75 response over time (Extension Period)

End point title	ppPASI 75 response over time (Extension Period)
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End point description:

A secondary endpoint was assessed as response rate of patients to treatment measured by the palmoplantar pustulosis Psoriasis Area and Severity Index 75 (ppPASI 75). The percentage of subjects who achieved a 75% reduction in ppPASI score from Baseline to each post-baseline visit was measured. The ppPASI is a modification of the PASI score and adjusted for palmoplantar pustular psoriasis by classifying and scoring erythema, scaling (desquamation) and pustules/vesicles. Both palms and both plants are scored from 0 to 4. The extent of involvement of each region of the body is scored from 0 to 6. The total maximum score is 72.

End point type	Secondary
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End point timeframe:

Week 52 to Week 148

End point values	AIN457 150mg	AIN457 300mg	Placebo - AIN457 150 mg	Placebo - AIN457 300 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	31	36	10	17
Units: percent				
number (not applicable)				
Week 52	64.5	63.9	50.0	64.7
Week 64	56.7	66.7	40.0	82.4
Week 76	68.2	67.7	62.5	60.0
Week 88	88.2	80.0	42.9	75.0
Week 100	100.0	75.0	33.3	54.5
Week 112	100.0	75.0	60.0	66.7
Week 124	93.3	78.3	40.0	70.0
Week 136	93.3	77.3	40.0	66.7
Week 148	100.0	78.3	75.0	77.8

Statistical analyses

No statistical analyses for this end point

Secondary: Most frequent Adverse Events - Period 1 (patient's safety)

End point title	Most frequent Adverse Events - Period 1 (patient's safety)
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End point description:

Most frequent (at least 5% in any of the AIN457 groups) Adverse Events

End point type	Secondary
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End point timeframe:

Baseline to Week 16 (Period 1)

End point values	AIN457 150mg	AIN457 300mg	Placebo	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	80	79	78	
Units: percent				
number (not applicable)				
Nasopharyngitis	10.0	20.3	14.1	
Pustular psoriasis	12.5	16.5	5.1	
Headache	5.0	12.7	14.1	
Pruritus	6.3	8.9	5.1	
Psoriasis	6.3	5.1	3.8	
Urinary tract infection	2.5	5.1	3.8	
Cough	6.3	3.8	0	
Folliculitis	3.8	5.1	1.3	
Nausea	3.8	5.1	0	
Oral herpes	5.0	1.3	0	
Rash pustular	5.0	1.3	0	

Statistical analyses

No statistical analyses for this end point

Secondary: Most frequent Adverse Events - Period 2 (patient's safety)

End point title	Most frequent Adverse Events - Period 2 (patient's safety)
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End point description:

Most frequent (at least 5% in any of the AIN457 groups) Adverse Events

End point type	Secondary
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End point timeframe:

Week 16 to Week 52 (Period 2)

End point values	AIN457 150mg	AIN457 300mg	Placebo - AIN457 150 mg	Placebo - AIN457 300 mg
Subject group type	Reporting group	Reporting group	Reporting group	Reporting group
Number of subjects analysed	64	64	27	28
Units: percent				
number (not applicable)				
Nasopharyngitis	12.5	21.9	11.1	21.4
Pustular psoriasis	18.8	10.9	14.8	21.4

Bronchitis	4.7	9.4	3.7	10.7
Headache	4.7	6.3	3.7	7.1
Eczema	1.6	9.4	7.4	0.0
Psoriasis	3.1	4.7	7.4	0.0
Pruritus	3.1	4.7	0.0	7.1
Folliculitis	3.1	6.3	0.0	3.6
Pain in extremity	0.0	7.8	7.4	0.0
Cough	0.0	6.3	0.0	3.6
Sinusitis	0.0	1.6	7.4	3.6
Skin infection	1.6	3.1	7.4	0.0
Urinary tract infection	0.0	4.7	7.4	0.0
Pruritus generalised	1.6	1.6	7.4	0.0
Rash	0.0	6.3	0.0	0.0

End point values	Placebo			
Subject group type	Reporting group			
Number of subjects analysed	10			
Units: percent				
number (not applicable)				
Nasopharyngitis	10.0			
Pustular psoriasis	10.0			
Bronchitis	0.0			
Headache	0.0			
Eczema	0.0			
Psoriasis	20.0			
Pruritus	10.0			
Folliculitis	0.0			
Pain in extremity	0.0			
Cough	0.0			
Sinusitis	10.0			
Skin infection	0.0			
Urinary tract infection	0.0			
Pruritus generalised	0.0			
Rash	0.0			

Statistical analyses

No statistical analyses for this end point

Secondary: Most frequent Adverse Events - extension period (patient's safety)

End point title	Most frequent Adverse Events - extension period (patient's safety)
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End point description:

Most frequent (at least 5% in any of the AIN457 groups) Adverse Events

End point type	Secondary
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End point timeframe:

Week 52 to Week 148 (extension period)

End point values	AIN457 150mg	AIN457 300mg		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	31 ^[1]	36 ^[2]		
Units: percent				
number (not applicable)				
Viral upper respiratory tract infection	12.2	18.9		
Headache	7.3	5.7		
Upper respiratory tract infection	2.4	9.4		
Urinary tract infection	9.8	3.8		
Diarrhoea	4.9	5.7		
Tonsillitis	2.4	5.7		
Ear infection	7.3	0.0		
Oropharyngeal pain	0.0	5.7		

Notes:

[1] - Includes 10 additional "Placebo-AIN457 150 mg patients". Actual number analyzed is 41.

[2] - Includes 17 additional "Placebo-AIN457 300 mg patients". Actual number analyzed is 53.

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse Events are collected from First Patient First Visit (FPFV) until Last Patient Last Visit (LPLV). All Adverse events are reported in this record from First Patient First Treatment until Last Patient Last Visit.

Assessment type	Systematic
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Dictionary used

Dictionary name	MedDRA
Dictionary version	20.0

Reporting groups

Reporting group title	Initial AIN457 150 mg
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Reporting group description:

AEs for patients randomized to Secukinumab 150 mg at start of study.

Reporting group title	Initial AIN457 300 mg
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Reporting group description:

AEs for patients randomized to Secukinumab 300 mg at start of study.

Reporting group title	Placebo
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Reporting group description:

AEs for patients randomized to Placebo at start of study while treated with Placebo (AEs that occurred after re-randomization to Secukinumab are not counted in this group).

Reporting group title	AIN457 150 mg in any period
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Reporting group description:

AEs for patients initially randomized to AIN457 150mg and placebo non-responder re-randomized to AIN457 150 mg at Week 16

Reporting group title	AIN457 300 mg in any period
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Reporting group description:

AEs for patients initially randomized to AIN457 300mg and placebo non-responder re-randomized to AIN457 300 mg at Week 16

Reporting group title	Any Secukinumab
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Reporting group description:

Any Secukinumab

Serious adverse events	Initial AIN457 150 mg	Initial AIN457 300 mg	Placebo
Total subjects affected by serious adverse events			
subjects affected / exposed	9 / 80 (11.25%)	13 / 79 (16.46%)	5 / 78 (6.41%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Tonsil cancer			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	0 / 78 (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

Uterine leiomyoma			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vascular disorders			
Hypotension			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	0 / 78 (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			
Hip arthroplasty			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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			
Drug ineffective			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	0 / 78 (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 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Reproductive system and breast disorders			
Endometrial hyperplasia			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (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
Respiratory, thoracic and mediastinal disorders			
Chronic obstructive pulmonary disease			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Investigations			

Aspartate aminotransferase increased			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (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
Transaminases increased			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	1 / 78 (1.28%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Injury, poisoning and procedural complications			
Subarachnoid haemorrhage			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	1 / 78 (1.28%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiac disorders			
Arrhythmia			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Atrial thrombosis			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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 arrest			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	1 / 78 (1.28%)
occurrences causally related to treatment / all	0 / 0	1 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiogenic shock			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Cardiomyopathy			

subjects affected / exposed	1 / 80 (1.25%)	1 / 79 (1.27%)	0 / 78 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Coronary artery disease			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Coronary artery stenosis			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (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
Myocardial infarction			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	0 / 78 (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
Tachycardia			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (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
Nervous system disorders			
Cerebrovascular accident			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	1 / 78 (1.28%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Abdominal mass			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (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
Hepatobiliary disorders			
Drug-induced liver injury			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	1 / 78 (1.28%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Skin and subcutaneous tissue disorders			
Erythema multiforme			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (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
Psoriasis			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (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
Pustular psoriasis			
subjects affected / exposed	1 / 80 (1.25%)	4 / 79 (5.06%)	0 / 78 (0.00%)
occurrences causally related to treatment / all	0 / 1	4 / 5	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Musculoskeletal and connective tissue disorders			
Cervical spinal stenosis			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Osteoarthritis			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	0 / 78 (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			
Cellulitis			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Erysipelas			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	1 / 78 (1.28%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Lower respiratory tract infection			

subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	0 / 78 (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
Peritonsillar abscess			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Rash pustular			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (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
Superinfection bacterial			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Upper respiratory tract infection			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	0 / 78 (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 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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
Metabolism and nutrition disorders			
Diabetes mellitus			
subjects affected / exposed	0 / 80 (0.00%)	1 / 79 (1.27%)	0 / 78 (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

Serious adverse events	AIN457 150 mg in any period	AIN457 300 mg in any period	Any Secukinumab
Total subjects affected by serious adverse events			
subjects affected / exposed	11 / 107 (10.28%)	17 / 107 (15.89%)	28 / 214 (13.08%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0

Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Tonsil cancer			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Uterine leiomyoma			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vascular disorders			
Hypotension			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Surgical and medical procedures			
Hip arthroplasty			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
General disorders and administration site conditions			
Drug ineffective			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Multiple organ dysfunction syndrome			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	1 / 1	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Reproductive system and breast disorders			
Endometrial hyperplasia			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			

Chronic obstructive pulmonary disease			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	1 / 1	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Investigations			
Aspartate aminotransferase increased			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Transaminases increased			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Injury, poisoning and procedural complications			
Subarachnoid haemorrhage			
subjects affected / exposed	0 / 107 (0.00%)	0 / 107 (0.00%)	0 / 214 (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			
Arrhythmia			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	1 / 1	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Atrial thrombosis			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiac arrest			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences causally related to treatment / all	0 / 0	1 / 2	1 / 2
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiogenic shock			

subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	1 / 1	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiomyopathy			
subjects affected / exposed	1 / 107 (0.93%)	1 / 107 (0.93%)	2 / 214 (0.93%)
occurrences causally related to treatment / all	0 / 1	0 / 1	0 / 2
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Coronary artery disease			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Coronary artery stenosis			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Myocardial infarction			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Tachycardia			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nervous system disorders			
Cerebrovascular accident			
subjects affected / exposed	0 / 107 (0.00%)	0 / 107 (0.00%)	0 / 214 (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 mass			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	1 / 1	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Hepatobiliary disorders			

Drug-induced liver injury			
subjects affected / exposed	0 / 107 (0.00%)	0 / 107 (0.00%)	0 / 214 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Skin and subcutaneous tissue disorders			
Erythema multiforme			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Psoriasis			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Pustular psoriasis			
subjects affected / exposed	1 / 107 (0.93%)	4 / 107 (3.74%)	5 / 214 (2.34%)
occurrences causally related to treatment / all	0 / 1	4 / 5	4 / 6
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Musculoskeletal and connective tissue disorders			
Cervical spinal stenosis			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Osteoarthritis			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Cellulitis			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	1 / 1	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Erysipelas			

subjects affected / exposed	0 / 107 (0.00%)	0 / 107 (0.00%)	0 / 214 (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
Lower respiratory tract infection			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	1 / 1	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Peritonsillar abscess			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	1 / 1	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Rash pustular			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Superinfection bacterial			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Upper respiratory tract infection			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Urinary tract infection			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	1 / 1	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Metabolism and nutrition disorders			
Diabetes mellitus			
subjects affected / exposed	0 / 107 (0.00%)	1 / 107 (0.93%)	1 / 214 (0.47%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Frequency threshold for reporting non-serious adverse events: 2 %

Non-serious adverse events	Initial AIN457 150 mg	Initial AIN457 300 mg	Placebo
Total subjects affected by non-serious adverse events			
subjects affected / exposed	73 / 80 (91.25%)	73 / 79 (92.41%)	53 / 78 (67.95%)
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Skin papilloma			
subjects affected / exposed	2 / 80 (2.50%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	2	0	0
Vascular disorders			
Hypertension			
subjects affected / exposed	2 / 80 (2.50%)	5 / 79 (6.33%)	3 / 78 (3.85%)
occurrences (all)	2	5	3
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	1 / 78 (1.28%)
occurrences (all)	0	3	1
Chest pain			
subjects affected / exposed	2 / 80 (2.50%)	1 / 79 (1.27%)	1 / 78 (1.28%)
occurrences (all)	2	1	1
Fatigue			
subjects affected / exposed	1 / 80 (1.25%)	3 / 79 (3.80%)	3 / 78 (3.85%)
occurrences (all)	1	7	3
Feeling hot			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	2 / 78 (2.56%)
occurrences (all)	0	0	3
Injection site urticaria			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	0	4	0
Pyrexia			
subjects affected / exposed	4 / 80 (5.00%)	1 / 79 (1.27%)	0 / 78 (0.00%)
occurrences (all)	4	1	0
Immune system disorders			
Drug hypersensitivity			

subjects affected / exposed occurrences (all)	0 / 80 (0.00%) 0	2 / 79 (2.53%) 2	0 / 78 (0.00%) 0
Respiratory, thoracic and mediastinal disorders Cough subjects affected / exposed occurrences (all)	5 / 80 (6.25%) 5	8 / 79 (10.13%) 10	0 / 78 (0.00%) 0
Oropharyngeal pain subjects affected / exposed occurrences (all)	1 / 80 (1.25%) 1	4 / 79 (5.06%) 5	2 / 78 (2.56%) 2
Psychiatric disorders Anxiety subjects affected / exposed occurrences (all)	0 / 80 (0.00%) 0	1 / 79 (1.27%) 1	0 / 78 (0.00%) 0
Depression subjects affected / exposed occurrences (all)	3 / 80 (3.75%) 3	1 / 79 (1.27%) 1	2 / 78 (2.56%) 2
Insomnia subjects affected / exposed occurrences (all)	1 / 80 (1.25%) 1	2 / 79 (2.53%) 2	2 / 78 (2.56%) 2
Investigations Alanine aminotransferase increased subjects affected / exposed occurrences (all)	2 / 80 (2.50%) 3	2 / 79 (2.53%) 2	1 / 78 (1.28%) 1
Blood pressure increased subjects affected / exposed occurrences (all)	1 / 80 (1.25%) 1	2 / 79 (2.53%) 2	0 / 78 (0.00%) 0
Gamma-glutamyltransferase increased subjects affected / exposed occurrences (all)	0 / 80 (0.00%) 0	2 / 79 (2.53%) 2	2 / 78 (2.56%) 3
Injury, poisoning and procedural complications Arthropod bite subjects affected / exposed occurrences (all)	1 / 80 (1.25%) 1	2 / 79 (2.53%) 2	0 / 78 (0.00%) 0
Cardiac disorders			

Bradycardia subjects affected / exposed occurrences (all)	1 / 80 (1.25%) 1	2 / 79 (2.53%) 2	0 / 78 (0.00%) 0
Tachycardia subjects affected / exposed occurrences (all)	2 / 80 (2.50%) 2	2 / 79 (2.53%) 2	1 / 78 (1.28%) 1
Nervous system disorders			
Burning sensation subjects affected / exposed occurrences (all)	0 / 80 (0.00%) 0	1 / 79 (1.27%) 1	2 / 78 (2.56%) 2
Dizziness subjects affected / exposed occurrences (all)	1 / 80 (1.25%) 1	1 / 79 (1.27%) 1	2 / 78 (2.56%) 3
Headache subjects affected / exposed occurrences (all)	7 / 80 (8.75%) 12	12 / 79 (15.19%) 32	10 / 78 (12.82%) 14
Migraine subjects affected / exposed occurrences (all)	2 / 80 (2.50%) 2	1 / 79 (1.27%) 2	0 / 78 (0.00%) 0
Sciatica subjects affected / exposed occurrences (all)	2 / 80 (2.50%) 2	3 / 79 (3.80%) 4	2 / 78 (2.56%) 2
Ear and labyrinth disorders			
Vertigo subjects affected / exposed occurrences (all)	2 / 80 (2.50%) 2	0 / 79 (0.00%) 0	1 / 78 (1.28%) 1
Gastrointestinal disorders			
Abdominal pain subjects affected / exposed occurrences (all)	2 / 80 (2.50%) 3	2 / 79 (2.53%) 2	0 / 78 (0.00%) 0
Aphthous ulcer subjects affected / exposed occurrences (all)	1 / 80 (1.25%) 2	2 / 79 (2.53%) 2	0 / 78 (0.00%) 0
Constipation subjects affected / exposed occurrences (all)	3 / 80 (3.75%) 3	0 / 79 (0.00%) 0	0 / 78 (0.00%) 0
Dental caries			

subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	0	2	0
Diarrhoea			
subjects affected / exposed	5 / 80 (6.25%)	8 / 79 (10.13%)	4 / 78 (5.13%)
occurrences (all)	5	9	6
Nausea			
subjects affected / exposed	3 / 80 (3.75%)	6 / 79 (7.59%)	0 / 78 (0.00%)
occurrences (all)	3	10	0
Vomiting			
subjects affected / exposed	2 / 80 (2.50%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	2	3	0
Skin and subcutaneous tissue disorders			
Dermatitis			
subjects affected / exposed	1 / 80 (1.25%)	4 / 79 (5.06%)	1 / 78 (1.28%)
occurrences (all)	1	5	1
Dermatitis contact			
subjects affected / exposed	3 / 80 (3.75%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	4	0	0
Dermatitis psoriasiform			
subjects affected / exposed	2 / 80 (2.50%)	1 / 79 (1.27%)	0 / 78 (0.00%)
occurrences (all)	2	1	0
Drug eruption			
subjects affected / exposed	2 / 80 (2.50%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	2	0	0
Dyshidrotic eczema			
subjects affected / exposed	3 / 80 (3.75%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	3	0	0
Eczema			
subjects affected / exposed	3 / 80 (3.75%)	7 / 79 (8.86%)	3 / 78 (3.85%)
occurrences (all)	3	20	3
Hyperkeratosis			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	0	2	0
Intertrigo			
subjects affected / exposed	3 / 80 (3.75%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	3	3	0

Lichen planus			
subjects affected / exposed	2 / 80 (2.50%)	1 / 79 (1.27%)	0 / 78 (0.00%)
occurrences (all)	3	1	0
Pruritus			
subjects affected / exposed	6 / 80 (7.50%)	11 / 79 (13.92%)	4 / 78 (5.13%)
occurrences (all)	8	11	5
Pruritus generalised			
subjects affected / exposed	2 / 80 (2.50%)	2 / 79 (2.53%)	1 / 78 (1.28%)
occurrences (all)	2	2	1
Psoriasis			
subjects affected / exposed	5 / 80 (6.25%)	7 / 79 (8.86%)	5 / 78 (6.41%)
occurrences (all)	5	7	5
Pustular psoriasis			
subjects affected / exposed	19 / 80 (23.75%)	16 / 79 (20.25%)	4 / 78 (5.13%)
occurrences (all)	22	22	4
Rash			
subjects affected / exposed	1 / 80 (1.25%)	5 / 79 (6.33%)	0 / 78 (0.00%)
occurrences (all)	1	5	0
Seborrhoeic dermatitis			
subjects affected / exposed	3 / 80 (3.75%)	0 / 79 (0.00%)	1 / 78 (1.28%)
occurrences (all)	3	0	1
Skin exfoliation			
subjects affected / exposed	2 / 80 (2.50%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	2	0	0
Skin fissures			
subjects affected / exposed	0 / 80 (0.00%)	3 / 79 (3.80%)	0 / 78 (0.00%)
occurrences (all)	0	4	0
Urticaria			
subjects affected / exposed	0 / 80 (0.00%)	4 / 79 (5.06%)	0 / 78 (0.00%)
occurrences (all)	0	7	0
Renal and urinary disorders			
Dysuria			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	1 / 78 (1.28%)
occurrences (all)	0	2	1
Proteinuria			

subjects affected / exposed occurrences (all)	2 / 80 (2.50%) 2	0 / 79 (0.00%) 0	0 / 78 (0.00%) 0
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	5 / 80 (6.25%)	4 / 79 (5.06%)	5 / 78 (6.41%)
occurrences (all)	6	6	5
Back pain			
subjects affected / exposed	4 / 80 (5.00%)	7 / 79 (8.86%)	4 / 78 (5.13%)
occurrences (all)	5	8	4
Musculoskeletal pain			
subjects affected / exposed	3 / 80 (3.75%)	1 / 79 (1.27%)	1 / 78 (1.28%)
occurrences (all)	3	1	1
Pain in extremity			
subjects affected / exposed	2 / 80 (2.50%)	7 / 79 (8.86%)	6 / 78 (7.69%)
occurrences (all)	2	9	6
Psoriatic arthropathy			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	2 / 78 (2.56%)
occurrences (all)	1	0	2
Spinal pain			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	0	2	0
Tendonitis			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	0	2	0
Infections and infestations			
Bacterial vaginosis			
subjects affected / exposed	2 / 80 (2.50%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	2	0	0
Bronchitis			
subjects affected / exposed	5 / 80 (6.25%)	6 / 79 (7.59%)	1 / 78 (1.28%)
occurrences (all)	8	7	1
Cellulitis			
subjects affected / exposed	1 / 80 (1.25%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	1	2	0
Conjunctivitis			

subjects affected / exposed	4 / 80 (5.00%)	3 / 79 (3.80%)	0 / 78 (0.00%)
occurrences (all)	4	4	0
Cystitis			
subjects affected / exposed	3 / 80 (3.75%)	1 / 79 (1.27%)	1 / 78 (1.28%)
occurrences (all)	4	5	1
Ear infection			
subjects affected / exposed	1 / 80 (1.25%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	1	0	0
Eczema impetiginous			
subjects affected / exposed	2 / 80 (2.50%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	2	0	0
Erysipelas			
subjects affected / exposed	1 / 80 (1.25%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	1	2	0
Folliculitis			
subjects affected / exposed	5 / 80 (6.25%)	8 / 79 (10.13%)	1 / 78 (1.28%)
occurrences (all)	6	12	1
Fungal skin infection			
subjects affected / exposed	2 / 80 (2.50%)	2 / 79 (2.53%)	1 / 78 (1.28%)
occurrences (all)	3	2	1
Furuncle			
subjects affected / exposed	2 / 80 (2.50%)	2 / 79 (2.53%)	1 / 78 (1.28%)
occurrences (all)	2	2	1
Gastroenteritis			
subjects affected / exposed	2 / 80 (2.50%)	3 / 79 (3.80%)	0 / 78 (0.00%)
occurrences (all)	2	5	0
Impetigo			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	0	2	0
Influenza			
subjects affected / exposed	5 / 80 (6.25%)	3 / 79 (3.80%)	2 / 78 (2.56%)
occurrences (all)	5	4	2
Laryngitis			
subjects affected / exposed	0 / 80 (0.00%)	0 / 79 (0.00%)	2 / 78 (2.56%)
occurrences (all)	0	0	2
Localised infection			

subjects affected / exposed	1 / 80 (1.25%)	3 / 79 (3.80%)	0 / 78 (0.00%)
occurrences (all)	1	3	0
Lower respiratory tract infection			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	0	2	0
Oral candidiasis			
subjects affected / exposed	0 / 80 (0.00%)	5 / 79 (6.33%)	2 / 78 (2.56%)
occurrences (all)	0	6	2
Oral herpes			
subjects affected / exposed	4 / 80 (5.00%)	3 / 79 (3.80%)	0 / 78 (0.00%)
occurrences (all)	4	3	0
Otitis externa			
subjects affected / exposed	2 / 80 (2.50%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	3	0	0
Paronychia			
subjects affected / exposed	2 / 80 (2.50%)	1 / 79 (1.27%)	0 / 78 (0.00%)
occurrences (all)	4	1	0
Pharyngitis			
subjects affected / exposed	3 / 80 (3.75%)	1 / 79 (1.27%)	0 / 78 (0.00%)
occurrences (all)	3	1	0
Pharyngotonsillitis			
subjects affected / exposed	1 / 80 (1.25%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	2	2	0
Rash pustular			
subjects affected / exposed	3 / 80 (3.75%)	1 / 79 (1.27%)	0 / 78 (0.00%)
occurrences (all)	3	1	0
Sinusitis			
subjects affected / exposed	1 / 80 (1.25%)	3 / 79 (3.80%)	1 / 78 (1.28%)
occurrences (all)	1	3	1
Skin bacterial infection			
subjects affected / exposed	3 / 80 (3.75%)	3 / 79 (3.80%)	1 / 78 (1.28%)
occurrences (all)	3	3	1
Skin infection			
subjects affected / exposed	1 / 80 (1.25%)	2 / 79 (2.53%)	1 / 78 (1.28%)
occurrences (all)	1	3	1
Staphylococcal skin infection			

subjects affected / exposed	3 / 80 (3.75%)	1 / 79 (1.27%)	0 / 78 (0.00%)
occurrences (all)	4	1	0
Subcutaneous abscess			
subjects affected / exposed	2 / 80 (2.50%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	2	0	0
Tinea pedis			
subjects affected / exposed	1 / 80 (1.25%)	3 / 79 (3.80%)	0 / 78 (0.00%)
occurrences (all)	1	3	0
Tonsillitis			
subjects affected / exposed	3 / 80 (3.75%)	3 / 79 (3.80%)	0 / 78 (0.00%)
occurrences (all)	3	3	0
Tooth abscess			
subjects affected / exposed	1 / 80 (1.25%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	1	2	0
Upper respiratory tract infection			
subjects affected / exposed	4 / 80 (5.00%)	7 / 79 (8.86%)	4 / 78 (5.13%)
occurrences (all)	4	9	4
Urinary tract infection			
subjects affected / exposed	5 / 80 (6.25%)	5 / 79 (6.33%)	3 / 78 (3.85%)
occurrences (all)	5	8	3
Viral upper respiratory tract infection			
subjects affected / exposed	17 / 80 (21.25%)	31 / 79 (39.24%)	12 / 78 (15.38%)
occurrences (all)	29	47	15
Vulvovaginal candidiasis			
subjects affected / exposed	1 / 80 (1.25%)	3 / 79 (3.80%)	1 / 78 (1.28%)
occurrences (all)	1	8	1
Metabolism and nutrition disorders			
Dyslipidaemia			
subjects affected / exposed	2 / 80 (2.50%)	0 / 79 (0.00%)	0 / 78 (0.00%)
occurrences (all)	2	0	0
Hypercholesterolaemia			
subjects affected / exposed	4 / 80 (5.00%)	1 / 79 (1.27%)	3 / 78 (3.85%)
occurrences (all)	4	1	3
Hyperlipidaemia			
subjects affected / exposed	0 / 80 (0.00%)	2 / 79 (2.53%)	0 / 78 (0.00%)
occurrences (all)	0	2	0

Non-serious adverse events	AIN457 150 mg in any period	AIN457 300 mg in any period	Any Secukinumab
Total subjects affected by non-serious adverse events			
subjects affected / exposed	92 / 107 (85.98%)	94 / 107 (87.85%)	186 / 214 (86.92%)
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Skin papilloma			
subjects affected / exposed	2 / 107 (1.87%)	0 / 107 (0.00%)	2 / 214 (0.93%)
occurrences (all)	2	0	2
Vascular disorders			
Hypertension			
subjects affected / exposed	3 / 107 (2.80%)	6 / 107 (5.61%)	9 / 214 (4.21%)
occurrences (all)	3	6	9
General disorders and administration site conditions			
Asthenia			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	3	3
Chest pain			
subjects affected / exposed	2 / 107 (1.87%)	1 / 107 (0.93%)	3 / 214 (1.40%)
occurrences (all)	2	1	3
Fatigue			
subjects affected / exposed	1 / 107 (0.93%)	3 / 107 (2.80%)	4 / 214 (1.87%)
occurrences (all)	1	7	8
Feeling hot			
subjects affected / exposed	0 / 107 (0.00%)	0 / 107 (0.00%)	0 / 214 (0.00%)
occurrences (all)	0	0	0
Injection site urticaria			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	4	4
Pyrexia			
subjects affected / exposed	4 / 107 (3.74%)	1 / 107 (0.93%)	5 / 214 (2.34%)
occurrences (all)	4	1	5
Immune system disorders			
Drug hypersensitivity			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	2	2
Respiratory, thoracic and mediastinal disorders			

Cough subjects affected / exposed occurrences (all)	5 / 107 (4.67%) 5	9 / 107 (8.41%) 11	14 / 214 (6.54%) 16
Oropharyngeal pain subjects affected / exposed occurrences (all)	2 / 107 (1.87%) 2	6 / 107 (5.61%) 7	8 / 214 (3.74%) 9
Psychiatric disorders			
Anxiety subjects affected / exposed occurrences (all)	0 / 107 (0.00%) 0	3 / 107 (2.80%) 3	3 / 214 (1.40%) 3
Depression subjects affected / exposed occurrences (all)	3 / 107 (2.80%) 3	1 / 107 (0.93%) 1	4 / 214 (1.87%) 4
Insomnia subjects affected / exposed occurrences (all)	1 / 107 (0.93%) 1	2 / 107 (1.87%) 2	3 / 214 (1.40%) 3
Investigations			
Alanine aminotransferase increased subjects affected / exposed occurrences (all)	2 / 107 (1.87%) 3	2 / 107 (1.87%) 2	4 / 214 (1.87%) 5
Blood pressure increased subjects affected / exposed occurrences (all)	1 / 107 (0.93%) 1	2 / 107 (1.87%) 2	3 / 214 (1.40%) 3
Gamma-glutamyltransferase increased subjects affected / exposed occurrences (all)	0 / 107 (0.00%) 0	2 / 107 (1.87%) 2	2 / 214 (0.93%) 2
Injury, poisoning and procedural complications			
Arthropod bite subjects affected / exposed occurrences (all)	1 / 107 (0.93%) 1	2 / 107 (1.87%) 2	3 / 214 (1.40%) 3
Cardiac disorders			
Bradycardia subjects affected / exposed occurrences (all)	1 / 107 (0.93%) 1	3 / 107 (2.80%) 4	4 / 214 (1.87%) 5
Tachycardia			

subjects affected / exposed occurrences (all)	2 / 107 (1.87%) 2	2 / 107 (1.87%) 2	4 / 214 (1.87%) 4
Nervous system disorders			
Burning sensation			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	3	3
Dizziness			
subjects affected / exposed	2 / 107 (1.87%)	2 / 107 (1.87%)	4 / 214 (1.87%)
occurrences (all)	2	2	4
Headache			
subjects affected / exposed	9 / 107 (8.41%)	15 / 107 (14.02%)	24 / 214 (11.21%)
occurrences (all)	14	36	50
Migraine			
subjects affected / exposed	2 / 107 (1.87%)	1 / 107 (0.93%)	3 / 214 (1.40%)
occurrences (all)	2	2	4
Sciatica			
subjects affected / exposed	2 / 107 (1.87%)	4 / 107 (3.74%)	6 / 214 (2.80%)
occurrences (all)	2	5	7
Ear and labyrinth disorders			
Vertigo			
subjects affected / exposed	2 / 107 (1.87%)	0 / 107 (0.00%)	2 / 214 (0.93%)
occurrences (all)	2	0	2
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	3 / 107 (2.80%)	3 / 107 (2.80%)	6 / 214 (2.80%)
occurrences (all)	4	4	8
Aphthous ulcer			
subjects affected / exposed	1 / 107 (0.93%)	2 / 107 (1.87%)	3 / 214 (1.40%)
occurrences (all)	2	2	4
Constipation			
subjects affected / exposed	3 / 107 (2.80%)	0 / 107 (0.00%)	3 / 214 (1.40%)
occurrences (all)	3	0	3
Dental caries			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	2	2
Diarrhoea			

subjects affected / exposed occurrences (all)	5 / 107 (4.67%) 5	9 / 107 (8.41%) 11	14 / 214 (6.54%) 16
Nausea subjects affected / exposed occurrences (all)	4 / 107 (3.74%) 4	7 / 107 (6.54%) 11	11 / 214 (5.14%) 15
Vomiting subjects affected / exposed occurrences (all)	2 / 107 (1.87%) 2	2 / 107 (1.87%) 3	4 / 214 (1.87%) 5
Skin and subcutaneous tissue disorders			
Dermatitis subjects affected / exposed occurrences (all)	1 / 107 (0.93%) 1	4 / 107 (3.74%) 5	5 / 214 (2.34%) 6
Dermatitis contact subjects affected / exposed occurrences (all)	3 / 107 (2.80%) 4	0 / 107 (0.00%) 0	3 / 214 (1.40%) 4
Dermatitis psoriasiform subjects affected / exposed occurrences (all)	2 / 107 (1.87%) 2	1 / 107 (0.93%) 1	3 / 214 (1.40%) 3
Drug eruption subjects affected / exposed occurrences (all)	2 / 107 (1.87%) 2	0 / 107 (0.00%) 0	2 / 214 (0.93%) 2
Dyshidrotic eczema subjects affected / exposed occurrences (all)	3 / 107 (2.80%) 3	0 / 107 (0.00%) 0	3 / 214 (1.40%) 3
Eczema subjects affected / exposed occurrences (all)	5 / 107 (4.67%) 5	7 / 107 (6.54%) 20	12 / 214 (5.61%) 25
Hyperkeratosis subjects affected / exposed occurrences (all)	0 / 107 (0.00%) 0	2 / 107 (1.87%) 2	2 / 214 (0.93%) 2
Intertrigo subjects affected / exposed occurrences (all)	3 / 107 (2.80%) 3	2 / 107 (1.87%) 3	5 / 214 (2.34%) 6
Lichen planus subjects affected / exposed occurrences (all)	2 / 107 (1.87%) 3	1 / 107 (0.93%) 1	3 / 214 (1.40%) 4

Pruritus			
subjects affected / exposed	6 / 107 (5.61%)	13 / 107 (12.15%)	19 / 214 (8.88%)
occurrences (all)	8	13	21
Pruritus generalised			
subjects affected / exposed	4 / 107 (3.74%)	2 / 107 (1.87%)	6 / 214 (2.80%)
occurrences (all)	4	2	6
Psoriasis			
subjects affected / exposed	7 / 107 (6.54%)	7 / 107 (6.54%)	14 / 214 (6.54%)
occurrences (all)	7	7	14
Pustular psoriasis			
subjects affected / exposed	24 / 107 (22.43%)	23 / 107 (21.50%)	47 / 214 (21.96%)
occurrences (all)	27	30	57
Rash			
subjects affected / exposed	1 / 107 (0.93%)	6 / 107 (5.61%)	7 / 214 (3.27%)
occurrences (all)	1	6	7
Seborrhoeic dermatitis			
subjects affected / exposed	3 / 107 (2.80%)	0 / 107 (0.00%)	3 / 214 (1.40%)
occurrences (all)	3	0	3
Skin exfoliation			
subjects affected / exposed	2 / 107 (1.87%)	1 / 107 (0.93%)	3 / 214 (1.40%)
occurrences (all)	2	1	3
Skin fissures			
subjects affected / exposed	0 / 107 (0.00%)	3 / 107 (2.80%)	3 / 214 (1.40%)
occurrences (all)	0	4	4
Urticaria			
subjects affected / exposed	1 / 107 (0.93%)	5 / 107 (4.67%)	6 / 214 (2.80%)
occurrences (all)	1	8	9
Renal and urinary disorders			
Dysuria			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	2	2
Proteinuria			
subjects affected / exposed	3 / 107 (2.80%)	0 / 107 (0.00%)	3 / 214 (1.40%)
occurrences (all)	3	0	3
Musculoskeletal and connective tissue disorders			

Arthralgia			
subjects affected / exposed	6 / 107 (5.61%)	4 / 107 (3.74%)	10 / 214 (4.67%)
occurrences (all)	8	6	14
Back pain			
subjects affected / exposed	5 / 107 (4.67%)	8 / 107 (7.48%)	13 / 214 (6.07%)
occurrences (all)	6	11	17
Musculoskeletal pain			
subjects affected / exposed	4 / 107 (3.74%)	1 / 107 (0.93%)	5 / 214 (2.34%)
occurrences (all)	4	1	5
Pain in extremity			
subjects affected / exposed	4 / 107 (3.74%)	7 / 107 (6.54%)	11 / 214 (5.14%)
occurrences (all)	4	9	13
Psoriatic arthropathy			
subjects affected / exposed	1 / 107 (0.93%)	0 / 107 (0.00%)	1 / 214 (0.47%)
occurrences (all)	1	0	1
Spinal pain			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	2	2
Tendonitis			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	2	2
Infections and infestations			
Bacterial vaginosis			
subjects affected / exposed	2 / 107 (1.87%)	0 / 107 (0.00%)	2 / 214 (0.93%)
occurrences (all)	2	0	2
Bronchitis			
subjects affected / exposed	6 / 107 (5.61%)	11 / 107 (10.28%)	17 / 214 (7.94%)
occurrences (all)	9	15	24
Cellulitis			
subjects affected / exposed	1 / 107 (0.93%)	2 / 107 (1.87%)	3 / 214 (1.40%)
occurrences (all)	1	2	3
Conjunctivitis			
subjects affected / exposed	4 / 107 (3.74%)	4 / 107 (3.74%)	8 / 214 (3.74%)
occurrences (all)	4	5	9
Cystitis			

subjects affected / exposed	4 / 107 (3.74%)	2 / 107 (1.87%)	6 / 214 (2.80%)
occurrences (all)	6	7	13
Ear infection			
subjects affected / exposed	4 / 107 (3.74%)	0 / 107 (0.00%)	4 / 214 (1.87%)
occurrences (all)	8	0	8
Eczema impetiginous			
subjects affected / exposed	2 / 107 (1.87%)	0 / 107 (0.00%)	2 / 214 (0.93%)
occurrences (all)	2	0	2
Erysipelas			
subjects affected / exposed	1 / 107 (0.93%)	2 / 107 (1.87%)	3 / 214 (1.40%)
occurrences (all)	1	2	3
Folliculitis			
subjects affected / exposed	5 / 107 (4.67%)	9 / 107 (8.41%)	14 / 214 (6.54%)
occurrences (all)	6	13	19
Fungal skin infection			
subjects affected / exposed	2 / 107 (1.87%)	2 / 107 (1.87%)	4 / 214 (1.87%)
occurrences (all)	3	2	5
Furuncle			
subjects affected / exposed	2 / 107 (1.87%)	2 / 107 (1.87%)	4 / 214 (1.87%)
occurrences (all)	2	2	4
Gastroenteritis			
subjects affected / exposed	2 / 107 (1.87%)	3 / 107 (2.80%)	5 / 214 (2.34%)
occurrences (all)	2	5	7
Impetigo			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	2	2
Influenza			
subjects affected / exposed	5 / 107 (4.67%)	3 / 107 (2.80%)	8 / 214 (3.74%)
occurrences (all)	5	4	9
Laryngitis			
subjects affected / exposed	0 / 107 (0.00%)	0 / 107 (0.00%)	0 / 214 (0.00%)
occurrences (all)	0	0	0
Localised infection			
subjects affected / exposed	1 / 107 (0.93%)	3 / 107 (2.80%)	4 / 214 (1.87%)
occurrences (all)	1	3	4
Lower respiratory tract infection			

subjects affected / exposed	1 / 107 (0.93%)	2 / 107 (1.87%)	3 / 214 (1.40%)
occurrences (all)	1	2	3
Oral candidiasis			
subjects affected / exposed	0 / 107 (0.00%)	5 / 107 (4.67%)	5 / 214 (2.34%)
occurrences (all)	0	6	6
Oral herpes			
subjects affected / exposed	4 / 107 (3.74%)	3 / 107 (2.80%)	7 / 214 (3.27%)
occurrences (all)	4	3	7
Otitis externa			
subjects affected / exposed	2 / 107 (1.87%)	0 / 107 (0.00%)	2 / 214 (0.93%)
occurrences (all)	3	0	3
Paronychia			
subjects affected / exposed	2 / 107 (1.87%)	1 / 107 (0.93%)	3 / 214 (1.40%)
occurrences (all)	4	1	5
Pharyngitis			
subjects affected / exposed	4 / 107 (3.74%)	1 / 107 (0.93%)	5 / 214 (2.34%)
occurrences (all)	4	1	5
Pharyngotonsillitis			
subjects affected / exposed	1 / 107 (0.93%)	3 / 107 (2.80%)	4 / 214 (1.87%)
occurrences (all)	2	3	5
Rash pustular			
subjects affected / exposed	3 / 107 (2.80%)	1 / 107 (0.93%)	4 / 214 (1.87%)
occurrences (all)	3	1	4
Sinusitis			
subjects affected / exposed	3 / 107 (2.80%)	4 / 107 (3.74%)	7 / 214 (3.27%)
occurrences (all)	3	5	8
Skin bacterial infection			
subjects affected / exposed	3 / 107 (2.80%)	4 / 107 (3.74%)	7 / 214 (3.27%)
occurrences (all)	3	4	7
Skin infection			
subjects affected / exposed	3 / 107 (2.80%)	2 / 107 (1.87%)	5 / 214 (2.34%)
occurrences (all)	3	3	6
Staphylococcal skin infection			
subjects affected / exposed	3 / 107 (2.80%)	1 / 107 (0.93%)	4 / 214 (1.87%)
occurrences (all)	4	1	5
Subcutaneous abscess			

subjects affected / exposed	2 / 107 (1.87%)	0 / 107 (0.00%)	2 / 214 (0.93%)
occurrences (all)	2	0	2
Tinea pedis			
subjects affected / exposed	1 / 107 (0.93%)	4 / 107 (3.74%)	5 / 214 (2.34%)
occurrences (all)	1	4	5
Tonsillitis			
subjects affected / exposed	3 / 107 (2.80%)	5 / 107 (4.67%)	8 / 214 (3.74%)
occurrences (all)	3	5	8
Tooth abscess			
subjects affected / exposed	1 / 107 (0.93%)	3 / 107 (2.80%)	4 / 214 (1.87%)
occurrences (all)	1	3	4
Upper respiratory tract infection			
subjects affected / exposed	4 / 107 (3.74%)	8 / 107 (7.48%)	12 / 214 (5.61%)
occurrences (all)	4	10	14
Urinary tract infection			
subjects affected / exposed	7 / 107 (6.54%)	6 / 107 (5.61%)	13 / 214 (6.07%)
occurrences (all)	8	10	18
Viral upper respiratory tract infection			
subjects affected / exposed	20 / 107 (18.69%)	40 / 107 (37.38%)	60 / 214 (28.04%)
occurrences (all)	33	60	93
Vulvovaginal candidiasis			
subjects affected / exposed	1 / 107 (0.93%)	3 / 107 (2.80%)	4 / 214 (1.87%)
occurrences (all)	1	8	9
Metabolism and nutrition disorders			
Dyslipidaemia			
subjects affected / exposed	3 / 107 (2.80%)	0 / 107 (0.00%)	3 / 214 (1.40%)
occurrences (all)	3	0	3
Hypercholesterolaemia			
subjects affected / exposed	4 / 107 (3.74%)	1 / 107 (0.93%)	5 / 214 (2.34%)
occurrences (all)	4	1	5
Hyperlipidaemia			
subjects affected / exposed	0 / 107 (0.00%)	2 / 107 (1.87%)	2 / 214 (0.93%)
occurrences (all)	0	2	2

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
13 October 2014	The amendment was issued to provide continued treatment for patients who were on active therapy during Treatment period 2 of the trial and were eligible and willing to continue with extension of treatment.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported