Clinical trial results:
A randomized, double-blind, placebo-controlled, multicenter, study to demonstrate the efficacy at 16 weeks of secukinumab 150 and 300 mg s. c. and to assess safety, tolerability and long-term efficacy up to 132 weeks in subjects with moderate to severe nail psoriasis

Summary

EudraCT number	2012-005413-40
Trial protocol	CZ ES BE GR DK DE GB
Global end of trial date	03 January 2017

Results information

Result version number	v1 (current)
This version publication date	30 December 2017
First version publication date	30 December 2017

Trial information

Trial identification

Sponsor protocol code	CAIN457A2313

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01807520
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 613421111,
Scientific contact	Clinical Disclosure Office, Novartis Pharma AG, 41 613421111,

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	03 January 2017
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	03 January 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 and/or 300 mg to placebo in patients with moderate to severe psoriasis affecting the nails as assessed by NAPSI (NAil Psoriasis Severity Index) at Week 16.

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	20 June 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	Australia: 23
Country: Number of subjects enrolled	Belgium: 6
Country: Number of subjects enrolled	Czech Republic: 19
Country: Number of subjects enrolled	Denmark: 10
Country: Number of subjects enrolled	Germany: 39
Country: Number of subjects enrolled	United Kingdom: 26
Country: Number of subjects enrolled	Greece: 18
Country: Number of subjects enrolled	Spain: 26
Country: Number of subjects enrolled	United States: 31
Worldwide total number of subjects	198
EEA total number of subjects	144

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)	186
From 65 to 84 years	12
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The study was made up of 4 periods: screening, treatment period 1, treatment period 2 and post-treatment follow-up.

Pre-assignment

Screening details:

In treatment period 1, participants were randomized in a 1:1:1 ratio to secukinumab 150mg, secukinumab 300mg or placebo.. In treatment period 2, placebo participants were re-randomized in a 1:1 ratio to secukinumab 150mg or secukinumab 300mg. The follow-up period occurred 8 weeks post treatment period 2 (12 weeks post the last dose of secukinumab).

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	Investigator, Subject, Monitor, Carer, Data analyst, Assessor

Arms

Are arms mutually exclusive?	Yes
Arm title	AIN457 150 mg

Arm description:

Participants assigned to secukinumab 150 mg were dosed weekly for five weeks, then once every four weeks up to and including Week 132. To maintain the blinding, participants received additional placebo injections at Weeks 17, 18 and 19. All doses of study treatment were administered by sub-cutaneous injections.

Arm type	Experimental
Investigational medicinal product name	Secukinumab
Investigational medicinal product code	AIN457
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants assigned to secukinumab 150 mg were dosed weekly for five weeks, then once every four weeks up to and including Week 132. To maintain the blinding, patients received additional placebo injections at Weeks 17, 18 and 19. All doses of study treatment are administered by sub-cutaneous injections.

Arm title	AIN457 300 mg

Arm description:

Participants assigned to secukinumab 300 mg were dosed weekly for five weeks, then once every four weeks up to and including Week 132. To maintain the blinding, participants received additional placebo injections at Weeks 17, 18 and 19. All doses of study treatment were administered by sub-cutaneous injections.

Arm type	Experimental
Investigational medicinal product name	Secukinumab
Investigational medicinal product code	AIN457
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants assigned to secukinumab 300 mg were dosed weekly for five weeks, then once every four weeks up to and including Week 132. To maintain the blinding, patients received additional placebo injections at Weeks 17, 18 and 19. All doses of study treatment are administered by sub-cutaneous

injections.

Arm title	Placebo

Arm description:

Participants assigned to placebo were dosed weekly for five weeks, then at Week 8 and Week 12. At Week 16, placebo participants were randomized in a 1:1 ratio, to receive secukinumab either 150 mg or 300 mg and were dosed weekly for five weeks starting at Week 16, then once every four weeks up to and including Week 132. All doses of study treatment were administered by sub-cutaneous injections.

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:

Patients assigned to placebo were dosed weekly for five weeks, then at Week 8 and Week 12. At Week 16, placebo patients were randomized in a 1:1 ratio, to receive secukinumab either 150 mg or 300 mg and were dosed weekly for five weeks starting at Week 16, then once every four weeks up to and including Week 132. All doses of study treatment are administered by sub-cutaneous injections.

Number of subjects in period 1	AIN457 150 mg	AIN457 300 mg	Placebo
Started	67	66	65
Full Analysis Set	67	66	65
Safety Set	67	65	65
Completed	63	65	58
Not completed	4	1	7
Consent withdrawn by subject	-	1	3
Physician decision	-	-	1
Adverse event, non-fatal	2	-	-
Protocol deviation	1	-	1
Lost to follow-up	1	-	-
Lack of efficacy	-	-	2

Baseline characteristics

Reporting groups	
Reporting group title	AIN457 150 mg
Reporting group description:	
Participants assigned to secukinumab 150 mg were dosed weekly for five weeks, then once every four weeks up to and including Week 132. To maintain the blinding, participants received additional placebo injections at Weeks 17, 18 and 19. All doses of study treatment were administered by sub-cutaneous injections.	
Reporting group title	AIN457 300 mg
Reporting group description:	
Participants assigned to secukinumab 300 mg were dosed weekly for five weeks, then once every four weeks up to and including Week 132. To maintain the blinding, participants received additional placebo injections at Weeks 17, 18 and 19. All doses of study treatment were administered by sub-cutaneous injections.	
Reporting group title	Placebo
Reporting group description:	
Participants assigned to placebo were dosed weekly for five weeks, then at Week 8 and Week 12. At Week 16, placebo participants were randomized in a 1:1 ratio, to receive secukinumab either 150 mg or 300 mg and were dosed weekly for five weeks starting at Week 16, then once every four weeks up to and including Week 132. All doses of study treatment were administered by sub-cutaneous injections.	

Reporting group values	AIN457 150 mg	AIN457 300 mg	Placebo
Number of subjects	67	66	65
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)	63	61	62
From 65-84 years	4	5	3
85 years and over	0	0	0
Age Continuous Units: Years			
arithmetic mean	43.5	45.1	43.6
standard deviation	± 10.94	± 12.9	± 11.2
Gender, Male/Female Units: Subjects			
Female	12	13	13
Male	55	53	52

Reporting group values	Total		
Number of subjects	198		
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)	186		
From 65-84 years	12		
85 years and over	0		
Age Continuous			
Units: Years			
arithmetic mean			
standard deviation	-		
Gender, Male/Female			
Units: Subjects			
Female	38		
Male	160		

End points

End points reporting groups

Reporting group title	AIN457 150 mg

Reporting group description:

Participants assigned to secukinumab 150 mg were dosed weekly for five weeks, then once every four weeks up to and including Week 132. To maintain the blinding, participants received additional placebo injections at Weeks 17, 18 and 19. All doses of study treatment were administered by sub-cutaneous injections.

Reporting group title	AIN457 300 mg

Reporting group description:

Participants assigned to secukinumab 300 mg were dosed weekly for five weeks, then once every four weeks up to and including Week 132. To maintain the blinding, participants received additional placebo injections at Weeks 17, 18 and 19. All doses of study treatment were administered by sub-cutaneous injections.

Reporting group title	Placebo

Reporting group description:

Participants assigned to placebo were dosed weekly for five weeks, then at Week 8 and Week 12. At Week 16, placebo participants were randomized in a 1:1 ratio, to receive secukinumab either 150 mg or 300 mg and were dosed weekly for five weeks starting at Week 16, then once every four weeks up to and including Week 132. All doses of study treatment were administered by sub-cutaneous injections.

Subject analysis set title	Placebo - AIN157 150 mg
Subject analysis set type	Full analysis

Subject analysis set description:

Participants received placebo weekly for five weeks, and then at Week 8 and Week 12. At Week 16, participants were randomized to receive secukinumab 150 mg and were dosed weekly for five weeks starting at Week 16, and then once every four weeks up to and including Week 132. All doses of study treatment were administered by sub-cutaneous injections.

Subject analysis set title	Placebo - AIN457 300 mg
Subject analysis set type	Full analysis

Subject analysis set description:

Participants received placebo weekly for five weeks, and then at Week 8 and Week 12. At Week 16, participants were randomized to receive secukinumab 300 mg and were dosed weekly for five weeks starting at Week 16, and then once every four weeks up to and including Week 132. All doses of study treatment were administered by sub-cutaneous injections.

Primary: Percentage change from baseline in Nail Psoriasis Severity Index (NAPSI) after 16 weeks of treatment

End point title	Percentage change from baseline in Nail Psoriasis Severity Index (NAPSI) after 16 weeks of treatment

End point description:

The NAPSI is a tool to assess psoriatic nail involvement in patients with nail psoriasis. Each nail is divided with imaginary horizontal and longitudinal lines into quadrants. Each nail is given a score for nail matrix psoriasis (0-4) and nail bed psoriasis (0-4) depending on the presence of any of the features of nail psoriasis in that quadrant. Each nail gets a nail matrix score and a nail bed score, the total of which is the NAPSI score for that nail ranging from 0 to 8. All 10 fingernails are assessed giving a total NAPSI score ranging from 0 to 80. A negative change from baseline indicates improvement. The adjusted mean is presented.

End point type	Primary

End point timeframe:

Baseline, 16 weeks

End point values	AIN457 150 mg	AIN457 300 mg	Placebo	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	63	64	56	
Units: percent change				
arithmetic mean (standard error)	-38.4 (± 4.54)	-46.1 (± 3.43)	-11.7 (± 4.28)	

Statistical analyses

Statistical analysis title	Change from baseline in NAPSI
Comparison groups	AIN457 150 mg v Placebo
Number of subjects included in analysis	119
Analysis specification	Pre-specified
Analysis type	
P-value	< 0.0001
Method	Mixed model reapeated measures
Parameter estimate	Mean difference (net)
Point estimate	-26.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-39.1
upper limit	-14.3
Variability estimate	Standard error of the mean
Dispersion value	6.26

Statistical analysis title	Change from baseline in NAPSI
Comparison groups	AIN457 300 mg v Placebo
Number of subjects included in analysis	120
Analysis specification	Pre-specified
Analysis type	
P-value	< 0.0001
Method	Mixed model repeated measures
Parameter estimate	Mean difference (net)
Point estimate	-34.4
Confidence interval	
level	95 %
sides	2-sided
lower limit	-45.2
upper limit	-23.5
Variability estimate	Standard error of the mean
Dispersion value	5.47

Secondary: Percent change from baseline in NAPSI score

End point title	Percent change from baseline in NAPSI score[1]

End point description:

The NAPSI is a tool to assess psoriatic nail involvement in patients with nail psoriasis. Each nail is divided with imaginary horizontal and longitudinal lines into quadrants. Each nail is given a score for nail matrix psoriasis (0-4) and nail bed psoriasis (0-4) depending on the presence of any of the features of nail psoriasis in that quadrant. Each nail gets a nail matrix score and a nail bed score, the total of which is the NAPSI score for that nail ranging from 0 to 8. All 10 fingernails are assessed giving a total NAPSI score ranging from 0 to 80. A negative change from baseline indicates improvement.

End point type	Secondary

End point timeframe:

baseline, 16 weeks, 132 weeks

Notes:

[1] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: All arms do not apply.

End point values	AIN457 150 mg	AIN457 300 mg	Placebo - AIN157 150 mg	Placebo - AIN457 300 mg
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	67	65	29	29
Units: percent change				
arithmetic mean (standard deviation)				
Week 16	-37.9 (± 37.32)	-45.3 (± 27.22)	-15.4 (± 32.79)	-7.8 (± 31.77)
Week 132 (n=67,65,28,29)	-52.9 (± 42.90)	-70.5 (± 29.2)	-62.9 (± 29.05)	-72.7 (± 22.84)

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of participants achieving Psoriasis Area and Severity Index 75 (PASI75) and Investigator Global Assessment (IGA mod 2011) response 0 or 1 over time up to Week 16 of the treatment compared to placebo and over time up to Week 132

End point title	Percentage of participants achieving Psoriasis Area and Severity Index 75 (PASI75) and Investigator Global Assessment (IGA mod 2011) response 0 or 1 over time up to Week 16 of the treatment compared to placebo and over time up to Week 132[2]

End point description:

PASI is a combined assessment of lesion severity and affected area into a single score: 0 (no disease) to 72 (maximal disease). Body is divided into 4 areas for scoring (head, arms, trunk, legs; each area is scored by itself and scores are combined for final PASI. For each area, percent of skin involved is estimated: 0 (0%) to 6 (90-100%), and severity is estimated by clinical signs, erythema, induration and desquamation; scale 0 (none) to 4 (maximum). Final PASI = sum of severity parameters for each area* area score weight of section (head: 0.1, arms: 0.2 body: 0.3 legs: 0.4). The IGA scale referred exclusively to the participant's disease at the time of the assessment. The scores are: 0 = clear, 1 = almost clear, 2 = mild, 3 = moderate, 4 = severe and 5 = very severe. To be considered IGA responder at any point in time, the patient must have an IGA score of 0 or 1 and have achieved a reduction of at least two points on the IGA scale from baseline.

End point type	Secondary

End point timeframe:

16 weeks, 132 weeks

Notes:

[2] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: All arms do not apply.

End point values	AIN457 150 mg	AIN457 300 mg		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	67	65		
Units: Percentage of participants				
number (not applicable)				
Week 16, PASI 75	76.6	87.1		
Week 16, IGA 0/1	67.8	74.0		
Week 132, PASI 75	61.6	82.7		
Week 132, IGA 0/1	52.2	61.2		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants who develop immunogenicity against secukinumab

End point title	Number of participants who develop immunogenicity against secukinumab[3]

End point description:

The number of participants who tested positive for anti-secukinumab antibodies. It refers to the number of participants who had no positive values at baseline but developed them only after start of secukinumab treatment. None of the participants had a loss of efficacy and the test was only transiently positive.

End point type	Secondary

End point timeframe:

Week 132

Notes:

[3] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.
Justification: All arms do not apply.

End point values	AIN457 150 mg	AIN457 300 mg	Placebo - AIN157 150 mg	Placebo - AIN457 300 mg
Subject group type	Reporting group	Reporting group	Subject analysis set	Subject analysis set
Number of subjects analysed	67	65	29	29
Units: Participants	2	5	4	3

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 reported in this record are from date of First Patient First Treatment until Last Patient Last Visit.

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	19.1

Reporting groups

Reporting group title	Any AIN457 150 mg
Reporting group description:	
Any AIN457 150 mg	
Reporting group title	Any AIN457 300 mg
Reporting group description:	
Any AIN457 300 mg	
Reporting group title	Placebo
Reporting group description:	
Placebo	
Reporting group title	Any AIN457 dose
Reporting group description:	
Any AIN457 dose	

Serious adverse events	Any AIN457 150 mg	Any AIN457 300 mg	Placebo
Total subjects affected by serious adverse events			
subjects affected / exposed	10 / 96 (10.42%)	9 / 94 (9.57%)	1 / 65 (1.54%)
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)			
Basal cell carcinoma			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (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
Tonsil cancer			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
General disorders and administration site conditions			

Pyrexia			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Respiratory, thoracic and mediastinal disorders			
Haemoptysis			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Laryngeal oedema			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Psychiatric disorders			
Alcohol withdrawal syndrome			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Psychotic disorder			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (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
Suicidal ideation			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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			
Foot fracture			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Laceration			

subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (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
Radius fracture			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (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
Cardiac disorders			
Myocardial infarction			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Nervous system disorders			
Sciatica			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Blood and lymphatic system disorders			
Neutropenia			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (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
Eye disorders			
Cataract subcapsular			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Gastrointestinal disorders			
Inguinal hernia			
subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Hepatobiliary disorders			
Hepatotoxicity			

subjects affected / exposed	0 / 96 (0.00%)	1 / 94 (1.06%)	0 / 65 (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
Skin and subcutaneous tissue disorders			
Erythrodermic psoriasis			
subjects affected / exposed	0 / 96 (0.00%)	0 / 94 (0.00%)	1 / 65 (1.54%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Psoriasis			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Musculoskeletal and connective tissue disorders			
Rotator cuff syndrome			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Eczema impetiginous			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (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
Eczema infected			
subjects affected / exposed	1 / 96 (1.04%)	0 / 94 (0.00%)	0 / 65 (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
Pyelonephritis			
subjects affected / exposed	1 / 96 (1.04%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences causally related to treatment / all	1 / 1	1 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

Serious adverse events	Any AIN457 dose		
Total subjects affected by serious adverse events			
subjects affected / exposed	19 / 190 (10.00%)		
number of deaths (all causes)	0		

number of deaths resulting from adverse events	0		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Basal cell carcinoma			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Tonsil cancer			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
General disorders and administration site conditions			
Pyrexia			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Respiratory, thoracic and mediastinal disorders			
Haemoptysis			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Laryngeal oedema			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Psychiatric disorders			
Alcohol withdrawal syndrome			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Psychotic disorder			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Suicidal ideation			

subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Injury, poisoning and procedural complications			
Foot fracture			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Laceration			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Radius fracture			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Cardiac disorders			
Myocardial infarction			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Nervous system disorders			
Sciatica			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Blood and lymphatic system disorders			
Neutropenia			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Eye disorders			
Cataract subcapsular			

subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	1 / 1		
deaths causally related to treatment / all	0 / 0		
Gastrointestinal disorders			
Inguinal hernia			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Hepatobiliary disorders			
Hepatotoxicity			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Skin and subcutaneous tissue disorders			
Erythrodermic psoriasis			
subjects affected / exposed	0 / 190 (0.00%)		
occurrences causally related to treatment / all	0 / 0		
deaths causally related to treatment / all	0 / 0		
Psoriasis			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Musculoskeletal and connective tissue disorders			
Rotator cuff syndrome			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Infections and infestations			
Eczema impetiginous			
subjects affected / exposed	1 / 190 (0.53%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		
Eczema infected			

subjects affected / exposed	1 / 190 (0.53%)			
occurrences causally related to treatment / all	1 / 1			
deaths causally related to treatment / all	0 / 0			
Pyelonephritis				
subjects affected / exposed	2 / 190 (1.05%)			
occurrences causally related to treatment / all	2 / 2			
deaths causally related to treatment / all	0 / 0			

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

Non-serious adverse events	Any AIN457 150 mg	Any AIN457 300 mg	Placebo
Total subjects affected by non-serious adverse events			
subjects affected / exposed	76 / 96 (79.17%)	79 / 94 (84.04%)	37 / 65 (56.92%)
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Melanocytic naevus			
subjects affected / exposed	1 / 96 (1.04%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	1	2	0
Skin papilloma			
subjects affected / exposed	1 / 96 (1.04%)	2 / 94 (2.13%)	1 / 65 (1.54%)
occurrences (all)	1	3	1
Vascular disorders			
Hypertension			
subjects affected / exposed	5 / 96 (5.21%)	4 / 94 (4.26%)	0 / 65 (0.00%)
occurrences (all)	5	4	0
General disorders and administration site conditions			
Fatigue			
subjects affected / exposed	4 / 96 (4.17%)	5 / 94 (5.32%)	0 / 65 (0.00%)
occurrences (all)	4	5	0
Influenza like illness			
subjects affected / exposed	3 / 96 (3.13%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	3	2	0
Injection site erythema			
subjects affected / exposed	0 / 96 (0.00%)	0 / 94 (0.00%)	2 / 65 (3.08%)
occurrences (all)	0	0	2
Pyrexia			

subjects affected / exposed	3 / 96 (3.13%)	1 / 94 (1.06%)	1 / 65 (1.54%)
occurrences (all)	4	1	1
Immune system disorders			
Seasonal allergy			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	3	1	0
Respiratory, thoracic and mediastinal disorders			
Asthma			
subjects affected / exposed	1 / 96 (1.04%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	2	3	0
Chronic obstructive pulmonary disease			
subjects affected / exposed	1 / 96 (1.04%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	1	2	0
Cough			
subjects affected / exposed	7 / 96 (7.29%)	7 / 94 (7.45%)	2 / 65 (3.08%)
occurrences (all)	7	8	2
Dyspnoea			
subjects affected / exposed	1 / 96 (1.04%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	1	2	0
Nasal congestion			
subjects affected / exposed	2 / 96 (2.08%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	2	3	0
Oropharyngeal pain			
subjects affected / exposed	4 / 96 (4.17%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	4	0	0
Productive cough			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	2	0	0
Rhinitis allergic			
subjects affected / exposed	2 / 96 (2.08%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	2	2	0
Rhinorrhoea			
subjects affected / exposed	0 / 96 (0.00%)	3 / 94 (3.19%)	1 / 65 (1.54%)
occurrences (all)	0	3	1
Wheezing			

subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	0	2	0
Psychiatric disorders			
Anxiety			
subjects affected / exposed	6 / 96 (6.25%)	0 / 94 (0.00%)	1 / 65 (1.54%)
occurrences (all)	10	0	1
Depression			
subjects affected / exposed	3 / 96 (3.13%)	4 / 94 (4.26%)	2 / 65 (3.08%)
occurrences (all)	4	4	2
Insomnia			
subjects affected / exposed	2 / 96 (2.08%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	2	4	0
Stress			
subjects affected / exposed	3 / 96 (3.13%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	3	0	0
Investigations			
Aspartate aminotransferase increased			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	3	0
Weight increased			
subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	0	2	0
Injury, poisoning and procedural complications			
Arthropod sting			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Avulsion fracture			
subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	0	2	0
Contusion			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	1 / 65 (1.54%)
occurrences (all)	2	0	1
Fall			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	3	0	0
Ligament sprain			

subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Limb injury			
subjects affected / exposed	2 / 96 (2.08%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	2	2	0
Skin abrasion			
subjects affected / exposed	0 / 96 (0.00%)	0 / 94 (0.00%)	2 / 65 (3.08%)
occurrences (all)	0	0	2
Tendon rupture			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	2	0	0
Cardiac disorders			
Palpitations			
subjects affected / exposed	1 / 96 (1.04%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	2	3	0
Nervous system disorders			
Dizziness			
subjects affected / exposed	3 / 96 (3.13%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	3	1	0
Headache			
subjects affected / exposed	9 / 96 (9.38%)	10 / 94 (10.64%)	4 / 65 (6.15%)
occurrences (all)	15	14	6
Poor quality sleep			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	2	0	0
Sciatica			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Ear and labyrinth disorders			
Vertigo			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Eye disorders			
Dry eye			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	2	0	0
Eye irritation			

subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	2	0	0
Eye pruritus			
subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	0	2	0
Visual impairment			
subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	0	2	0
Gastrointestinal disorders			
Abdominal pain			
subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	2 / 65 (3.08%)
occurrences (all)	0	2	2
Abdominal pain upper			
subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	0	2	0
Diarrhoea			
subjects affected / exposed	5 / 96 (5.21%)	5 / 94 (5.32%)	5 / 65 (7.69%)
occurrences (all)	5	5	5
Dyspepsia			
subjects affected / exposed	3 / 96 (3.13%)	5 / 94 (5.32%)	0 / 65 (0.00%)
occurrences (all)	3	14	0
Haemorrhoids			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	3	1	0
Loose tooth			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	3	0	0
Nausea			
subjects affected / exposed	4 / 96 (4.17%)	3 / 94 (3.19%)	1 / 65 (1.54%)
occurrences (all)	4	3	1
Toothache			
subjects affected / exposed	3 / 96 (3.13%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	3	1	0
Vomiting			
subjects affected / exposed	3 / 96 (3.13%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	3	1	0

Hepatobiliary disorders			
Hepatic steatosis			
subjects affected / exposed	2 / 96 (2.08%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	2	2	0
Skin and subcutaneous tissue disorders			
Acne			
subjects affected / exposed	1 / 96 (1.04%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	1	2	0
Actinic keratosis			
subjects affected / exposed	1 / 96 (1.04%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	1	3	0
Alopecia areata			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Dermatitis			
subjects affected / exposed	3 / 96 (3.13%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	3	0	0
Dry skin			
subjects affected / exposed	3 / 96 (3.13%)	4 / 94 (4.26%)	0 / 65 (0.00%)
occurrences (all)	3	4	0
Eczema			
subjects affected / exposed	1 / 96 (1.04%)	4 / 94 (4.26%)	0 / 65 (0.00%)
occurrences (all)	1	6	0
Intertrigo			
subjects affected / exposed	1 / 96 (1.04%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	1	3	0
Pruritus			
subjects affected / exposed	5 / 96 (5.21%)	3 / 94 (3.19%)	1 / 65 (1.54%)
occurrences (all)	5	3	1
Pruritus generalised			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	1 / 65 (1.54%)
occurrences (all)	2	0	1
Psoriasis			
subjects affected / exposed	16 / 96 (16.67%)	6 / 94 (6.38%)	7 / 65 (10.77%)
occurrences (all)	21	6	9
Seborrhoeic dermatitis			

subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	2	0	0
Skin fissures			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	2 / 65 (3.08%)
occurrences (all)	2	1	2
Renal and urinary disorders			
Haematuria			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Endocrine disorders			
Hypothyroidism			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	4 / 96 (4.17%)	8 / 94 (8.51%)	2 / 65 (3.08%)
occurrences (all)	4	10	2
Back pain			
subjects affected / exposed	9 / 96 (9.38%)	7 / 94 (7.45%)	1 / 65 (1.54%)
occurrences (all)	9	8	1
Dactylitis			
subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	0	2	0
Joint swelling			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	3	0	0
Muscle spasms			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	0 / 65 (0.00%)
occurrences (all)	2	0	0
Musculoskeletal pain			
subjects affected / exposed	1 / 96 (1.04%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	1	2	0
Pain in extremity			
subjects affected / exposed	5 / 96 (5.21%)	1 / 94 (1.06%)	2 / 65 (3.08%)
occurrences (all)	6	1	2
Psoriatic arthropathy			

subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	1 / 65 (1.54%)
occurrences (all)	2	1	1
Infections and infestations			
Bronchitis			
subjects affected / exposed	4 / 96 (4.17%)	7 / 94 (7.45%)	0 / 65 (0.00%)
occurrences (all)	6	8	0
Cellulitis			
subjects affected / exposed	1 / 96 (1.04%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	1	4	0
Conjunctivitis			
subjects affected / exposed	3 / 96 (3.13%)	4 / 94 (4.26%)	0 / 65 (0.00%)
occurrences (all)	4	6	0
Ear infection			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Erysipelas			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	1 / 65 (1.54%)
occurrences (all)	2	1	1
Fungal skin infection			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	1 / 65 (1.54%)
occurrences (all)	2	1	1
Gastroenteritis			
subjects affected / exposed	6 / 96 (6.25%)	6 / 94 (6.38%)	0 / 65 (0.00%)
occurrences (all)	7	7	0
Herpes zoster			
subjects affected / exposed	3 / 96 (3.13%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	3	3	0
Hordeolum			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	4	1	0
Influenza			
subjects affected / exposed	0 / 96 (0.00%)	6 / 94 (6.38%)	2 / 65 (3.08%)
occurrences (all)	0	6	2
Localised infection			
subjects affected / exposed	0 / 96 (0.00%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	0	3	0

Lower respiratory tract infection			
subjects affected / exposed	2 / 96 (2.08%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	2	4	0
Nasopharyngitis			
subjects affected / exposed	25 / 96 (26.04%)	27 / 94 (28.72%)	8 / 65 (12.31%)
occurrences (all)	56	42	10
Onychomycosis			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Oral candidiasis			
subjects affected / exposed	1 / 96 (1.04%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	1	5	0
Oral herpes			
subjects affected / exposed	2 / 96 (2.08%)	2 / 94 (2.13%)	4 / 65 (6.15%)
occurrences (all)	2	2	4
Otitis externa			
subjects affected / exposed	1 / 96 (1.04%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	1	3	0
Pharyngitis			
subjects affected / exposed	2 / 96 (2.08%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	2	3	0
Pneumonia			
subjects affected / exposed	0 / 96 (0.00%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	0	2	0
Pulpitis dental			
subjects affected / exposed	4 / 96 (4.17%)	4 / 94 (4.26%)	1 / 65 (1.54%)
occurrences (all)	7	4	1
Respiratory tract infection			
subjects affected / exposed	2 / 96 (2.08%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	3	2	0
Rhinitis			
subjects affected / exposed	2 / 96 (2.08%)	7 / 94 (7.45%)	0 / 65 (0.00%)
occurrences (all)	2	9	0
Sinusitis			
subjects affected / exposed	3 / 96 (3.13%)	6 / 94 (6.38%)	0 / 65 (0.00%)
occurrences (all)	3	6	0

Skin infection			
subjects affected / exposed	1 / 96 (1.04%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	1	4	0
Tinea pedis			
subjects affected / exposed	5 / 96 (5.21%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	5	1	0
Tonsillitis			
subjects affected / exposed	4 / 96 (4.17%)	4 / 94 (4.26%)	0 / 65 (0.00%)
occurrences (all)	5	5	0
Tooth abscess			
subjects affected / exposed	0 / 96 (0.00%)	3 / 94 (3.19%)	0 / 65 (0.00%)
occurrences (all)	0	3	0
Upper respiratory tract infection			
subjects affected / exposed	15 / 96 (15.63%)	8 / 94 (8.51%)	2 / 65 (3.08%)
occurrences (all)	18	16	2
Urinary tract infection			
subjects affected / exposed	3 / 96 (3.13%)	5 / 94 (5.32%)	0 / 65 (0.00%)
occurrences (all)	3	11	0
Viral upper respiratory tract infection			
subjects affected / exposed	3 / 96 (3.13%)	2 / 94 (2.13%)	0 / 65 (0.00%)
occurrences (all)	3	2	0
Vulvovaginal candidiasis			
subjects affected / exposed	2 / 96 (2.08%)	1 / 94 (1.06%)	0 / 65 (0.00%)
occurrences (all)	2	1	0
Metabolism and nutrition disorders			
Gout			
subjects affected / exposed	2 / 96 (2.08%)	0 / 94 (0.00%)	1 / 65 (1.54%)
occurrences (all)	2	0	1

Non-serious adverse events	Any AIN457 dose		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	155 / 190 (81.58%)		
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Melanocytic naevus			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Skin papilloma			

subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	4		
Vascular disorders			
Hypertension			
subjects affected / exposed	9 / 190 (4.74%)		
occurrences (all)	9		
General disorders and administration site conditions			
Fatigue			
subjects affected / exposed	9 / 190 (4.74%)		
occurrences (all)	9		
Influenza like illness			
subjects affected / exposed	4 / 190 (2.11%)		
occurrences (all)	5		
Injection site erythema			
subjects affected / exposed	0 / 190 (0.00%)		
occurrences (all)	0		
Pyrexia			
subjects affected / exposed	4 / 190 (2.11%)		
occurrences (all)	5		
Immune system disorders			
Seasonal allergy			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	4		
Respiratory, thoracic and mediastinal disorders			
Asthma			
subjects affected / exposed	4 / 190 (2.11%)		
occurrences (all)	5		
Chronic obstructive pulmonary disease			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Cough			
subjects affected / exposed	14 / 190 (7.37%)		
occurrences (all)	15		
Dyspnoea			

subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 3		
Nasal congestion subjects affected / exposed occurrences (all)	4 / 190 (2.11%) 5		
Oropharyngeal pain subjects affected / exposed occurrences (all)	4 / 190 (2.11%) 4		
Productive cough subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Rhinitis allergic subjects affected / exposed occurrences (all)	4 / 190 (2.11%) 4		
Rhinorrhoea subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 3		
Wheezing subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Psychiatric disorders			
Anxiety subjects affected / exposed occurrences (all)	6 / 190 (3.16%) 10		
Depression subjects affected / exposed occurrences (all)	7 / 190 (3.68%) 8		
Insomnia subjects affected / exposed occurrences (all)	5 / 190 (2.63%) 6		
Stress subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 3		
Investigations			
Aspartate aminotransferase increased			

subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	5		
Weight increased			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		
Injury, poisoning and procedural complications			
Arthropod sting			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Avulsion fracture			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		
Contusion			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		
Fall			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	3		
Ligament sprain			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Limb injury			
subjects affected / exposed	4 / 190 (2.11%)		
occurrences (all)	4		
Skin abrasion			
subjects affected / exposed	0 / 190 (0.00%)		
occurrences (all)	0		
Tendon rupture			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		
Cardiac disorders			
Palpitations			
subjects affected / exposed	4 / 190 (2.11%)		
occurrences (all)	5		
Nervous system disorders			

Dizziness subjects affected / exposed occurrences (all)	4 / 190 (2.11%) 4		
Headache subjects affected / exposed occurrences (all)	19 / 190 (10.00%) 29		
Poor quality sleep subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Sciatica subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 3		
Ear and labyrinth disorders Vertigo subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 3		
Eye disorders Dry eye subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Eye irritation subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Eye pruritus subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Visual impairment subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Gastrointestinal disorders Abdominal pain subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Abdominal pain upper subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 2		
Diarrhoea			

subjects affected / exposed occurrences (all)	10 / 190 (5.26%) 10		
Dyspepsia subjects affected / exposed occurrences (all)	8 / 190 (4.21%) 17		
Haemorrhoids subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 4		
Loose tooth subjects affected / exposed occurrences (all)	2 / 190 (1.05%) 3		
Nausea subjects affected / exposed occurrences (all)	7 / 190 (3.68%) 7		
Toothache subjects affected / exposed occurrences (all)	4 / 190 (2.11%) 4		
Vomiting subjects affected / exposed occurrences (all)	4 / 190 (2.11%) 4		
Hepatobiliary disorders Hepatic steatosis subjects affected / exposed occurrences (all)	4 / 190 (2.11%) 4		
Skin and subcutaneous tissue disorders Acne subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 3		
Actinic keratosis subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 4		
Alopecia areata subjects affected / exposed occurrences (all)	3 / 190 (1.58%) 3		
Dermatitis			

subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Dry skin			
subjects affected / exposed	7 / 190 (3.68%)		
occurrences (all)	7		
Eczema			
subjects affected / exposed	5 / 190 (2.63%)		
occurrences (all)	7		
Intertrigo			
subjects affected / exposed	4 / 190 (2.11%)		
occurrences (all)	4		
Pruritus			
subjects affected / exposed	8 / 190 (4.21%)		
occurrences (all)	8		
Pruritus generalised			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		
Psoriasis			
subjects affected / exposed	22 / 190 (11.58%)		
occurrences (all)	27		
Seborrhoeic dermatitis			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		
Skin fissures			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Renal and urinary disorders			
Haematuria			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Endocrine disorders			
Hypothyroidism			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Musculoskeletal and connective tissue disorders			

Arthralgia			
subjects affected / exposed	12 / 190 (6.32%)		
occurrences (all)	14		
Back pain			
subjects affected / exposed	16 / 190 (8.42%)		
occurrences (all)	17		
Dactylitis			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		
Joint swelling			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	3		
Muscle spasms			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		
Musculoskeletal pain			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Pain in extremity			
subjects affected / exposed	6 / 190 (3.16%)		
occurrences (all)	7		
Psoriatic arthropathy			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Infections and infestations			
Bronchitis			
subjects affected / exposed	11 / 190 (5.79%)		
occurrences (all)	14		
Cellulitis			
subjects affected / exposed	4 / 190 (2.11%)		
occurrences (all)	5		
Conjunctivitis			
subjects affected / exposed	7 / 190 (3.68%)		
occurrences (all)	10		
Ear infection			

subjects affected / exposed	3 / 190 (1.58%)			
occurrences (all)	3			
Erysipelas				
subjects affected / exposed	3 / 190 (1.58%)			
occurrences (all)	3			
Fungal skin infection				
subjects affected / exposed	3 / 190 (1.58%)			
occurrences (all)	3			
Gastroenteritis				
subjects affected / exposed	12 / 190 (6.32%)			
occurrences (all)	14			
Herpes zoster				
subjects affected / exposed	6 / 190 (3.16%)			
occurrences (all)	6			
Hordeolum				
subjects affected / exposed	3 / 190 (1.58%)			
occurrences (all)	5			
Influenza				
subjects affected / exposed	6 / 190 (3.16%)			
occurrences (all)	6			
Localised infection				
subjects affected / exposed	3 / 190 (1.58%)			
occurrences (all)	3			
Lower respiratory tract infection				
subjects affected / exposed	5 / 190 (2.63%)			
occurrences (all)	6			
Nasopharyngitis				
subjects affected / exposed	52 / 190 (27.37%)			
occurrences (all)	98			
Onychomycosis				
subjects affected / exposed	3 / 190 (1.58%)			
occurrences (all)	3			
Oral candidiasis				
subjects affected / exposed	4 / 190 (2.11%)			
occurrences (all)	6			
Oral herpes				

subjects affected / exposed	4 / 190 (2.11%)			
occurrences (all)	4			
Otitis externa				
subjects affected / exposed	3 / 190 (1.58%)			
occurrences (all)	4			
Pharyngitis				
subjects affected / exposed	5 / 190 (2.63%)			
occurrences (all)	5			
Pneumonia				
subjects affected / exposed	2 / 190 (1.05%)			
occurrences (all)	2			
Pulpitis dental				
subjects affected / exposed	8 / 190 (4.21%)			
occurrences (all)	11			
Respiratory tract infection				
subjects affected / exposed	4 / 190 (2.11%)			
occurrences (all)	5			
Rhinitis				
subjects affected / exposed	9 / 190 (4.74%)			
occurrences (all)	11			
Sinusitis				
subjects affected / exposed	9 / 190 (4.74%)			
occurrences (all)	9			
Skin infection				
subjects affected / exposed	4 / 190 (2.11%)			
occurrences (all)	5			
Tinea pedis				
subjects affected / exposed	6 / 190 (3.16%)			
occurrences (all)	6			
Tonsillitis				
subjects affected / exposed	8 / 190 (4.21%)			
occurrences (all)	10			
Tooth abscess				
subjects affected / exposed	3 / 190 (1.58%)			
occurrences (all)	3			
Upper respiratory tract infection				

subjects affected / exposed	23 / 190 (12.11%)		
occurrences (all)	34		
Urinary tract infection			
subjects affected / exposed	8 / 190 (4.21%)		
occurrences (all)	14		
Viral upper respiratory tract infection			
subjects affected / exposed	5 / 190 (2.63%)		
occurrences (all)	5		
Vulvovaginal candidiasis			
subjects affected / exposed	3 / 190 (1.58%)		
occurrences (all)	3		
Metabolism and nutrition disorders			
Gout			
subjects affected / exposed	2 / 190 (1.05%)		
occurrences (all)	2		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
29 January 2015	Study title was revised, to reflect the new treatment duration; Sections 1.2, 2.2, 3.1, 3.2, 5.2, 5.4, 5.5.4, 6 and 9.1 were updated with the treatment duration and Figure 3.1 was revised accordingly; Section 3.1: an explanation was added on the need to consent patients before starting extended treatment; Sections 3.5 and 9.6: added Week 16 and Week 80 interim analyses and the possibility of additional interim analyses, if requested by health authorities or for publications purposes; Section 5.5.12: revised, to reflect context of possible early study termination by the sponsor; Section 6: Updated content, including in Table 6-1, to reflect the additional procedures; Sections 6.4.6 and 6.6.6: revised target lesions for photography; Sections 8.4 and 8.5: updated content pertaining to Data Monitoring Committee (DMC) and Adjudication committee; Appendix 2: updated, to include collection of PK and IG samples at additional visits
12 March 2015	Sections 3.1 and 5.5.5: amended to allow treatment to be extended for patients who had their Week 80 completed before protocol Amendment 1 was implemented at sites and who wished to have their treatment extended; Table 6-1: deleted obsolete statement and amended, to include comment on timing of patients' consent before treatment was extended.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

The overall study completed. However, in Spain, the study terminated early in accordance with study protocol amendment 1.

Notes: