Clinical trial results:
A Multicenter, 48-Week, Double-Blind, Placebo-Controlled, Parallel-Group Extension Study to Assess the Long-Term Safety, Tolerability, and Efficacy of Bimekizumab in Adult Subjects with Moderate to Severe Chronic Plaque Psoriasis

Summary

EudraCT number	2016-001892-57
Trial protocol	HU CZ PL
Global end of trial date	25 September 2018

Results information

Result version number	v1 (current)
This version publication date	12 October 2019
First version publication date	12 October 2019

Trial information

Trial identification

Sponsor protocol code	PS0011

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT03010527
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	UCB Biopharma, SPRL
Sponsor organisation address	Allée de la Recherche 60, Brussels, Belgium, B-1070
Public contact	Clin Trial Reg & Results Disclosure, UCB BIOSCIENCES GmbH, clinicaltrials@ucb.com
Scientific contact	Clin Trial Reg & Results Disclosure, UCB BIOSCIENCES GmbH, clinicaltrials@ucb.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	20 November 2018
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	25 September 2018
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

Assess the long-term safety and tolerability of bimekizumab

Protection of trial subjects:

During the conduct of the study all participants were closely monitored.

Background therapy:

Background therapy as permitted in the protocol

Evidence for comparator:

Not Applicable

Actual start date of recruitment	14 December 2016
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Canada: 36
Country: Number of subjects enrolled	Czech Republic: 20
Country: Number of subjects enrolled	Hungary: 16
Country: Number of subjects enrolled	Japan: 11
Country: Number of subjects enrolled	Poland: 99
Country: Number of subjects enrolled	United States: 35
Worldwide total number of subjects	217
EEA total number of subjects	135

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)	199
From 65 to 84 years	18
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The study started to enroll participants in December 2016 and concluded in September 2018. Among the 217 participants in PS0011, no participants were assigned to receive placebo.

Pre-assignment

Screening details:

Participant Flow refers to the Full Analysis Set (FAS), which consisted of all enrolled participants who received at least 1 dose of the investigational medicinal product (IMP) and had a valid measurement of the primary efficacy variable at Baseline of PS0011.

Period 1

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

Arms

Are arms mutually exclusive?	Yes
Arm title	Bimekizumab Dose 1

Arm description:

Participants received bimekizumab Dose 1 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 1 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011.

Arm type	Experimental
Investigational medicinal product name	Bimekizumab
Investigational medicinal product code	BKZ
Other name	UCB4940
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants were administered different dosages of BKZ, by subcutaneous (sc) injection, every four weeks (Q4W).

Arm title	Bimekizumab Dose 2

Arm description:

Participants received bimekizumab Dose 2 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 loading dose (w/LD) Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 w/LD Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011.

Arm type	Experimental
Investigational medicinal product name	Bimekizumab
Investigational medicinal product code	BKZ
Other name	UCB4940
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants were administered different dosages of BKZ, by subcutaneous (sc) injection, every four weeks (Q4W).

Arm title	Bimekizumab Dose 3

Arm description:

Participants received bimekizumab Dose 3 injections, sc every four weeks (Q4W). Participants receiving bimekizumab Dose 3 Q4W and bimekizumab Dose 4 Q4W, in PS0010 were assigned to receive bimekizumab Dose 3 Q4W in PS0011, regardless of their PASI90 response at Week 12 in PS0010.

Arm type	Experimental
Investigational medicinal product name	Bimekizumab
Investigational medicinal product code	BKZ
Other name	UCB4940
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

Participants were administered different dosages of BKZ, by subcutaneous (sc) injection, every four weeks (Q4W).

Number of subjects in period 1	Bimekizumab Dose 1	Bimekizumab Dose 2	Bimekizumab Dose 3
Started	15	111	91
Completed	15	92	75
Not completed	0	19	16
WITHDRAWAL CRITERIA #9	-	4	6
Adverse event, serious fatal	-	-	1
Consent withdrawn by subject	-	3	4
Adverse event, non-fatal	-	4	2
PDILI and WITHDRAWAL CRITERIA #9	-	1	-
Lost to follow-up	-	2	1
WITHDRAWAL CRITERIA #12	-	4	2
Protocol deviation	-	1	-

Baseline characteristics

Reporting groups	
Reporting group title	Bimekizumab Dose 1
Reporting group description:	
Participants received bimekizumab Dose 1 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 1 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011.	
Reporting group title	Bimekizumab Dose 2
Reporting group description:	
Participants received bimekizumab Dose 2 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 loading dose (w/LD) Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 w/LD Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011.	
Reporting group title	Bimekizumab Dose 3
Reporting group description:	
Participants received bimekizumab Dose 3 injections, sc every four weeks (Q4W). Participants receiving bimekizumab Dose 3 Q4W and bimekizumab Dose 4 Q4W, in PS0010 were assigned to receive bimekizumab Dose 3 Q4W in PS0011, regardless of their PASI90 response at Week 12 in PS0010.	

Reporting group values	Bimekizumab Dose 1	Bimekizumab Dose 2	Bimekizumab Dose 3
Number of subjects	15	111	91
Age categorical Units: Subjects			
<=18 years	0	1	2
Between 18 and 65 years	14	105	77
>=65 years	1	5	12
Age continuous Units: years			
arithmetic mean	44.5	44.5	43.5
standard deviation	± 14.7	± 12.8	± 14.7
Gender categorical Units: Subjects			
Male	9	71	60
Female	6	40	31

Reporting group values	Total		
Number of subjects	217		
Age categorical Units: Subjects			
<=18 years	3		
Between 18 and 65 years	196		
>=65 years	18		
Age continuous Units: years			
arithmetic mean			
standard deviation	-		

Gender categorical Units: Subjects			
Male	140		
Female	77		

End points

End points reporting groups

Reporting group title	Bimekizumab Dose 1

Reporting group description:

Participants received bimekizumab Dose 1 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 1 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011.

Reporting group title	Bimekizumab Dose 2

Reporting group description:

Participants received bimekizumab Dose 2 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 loading dose (w/LD) Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 w/LD Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011.

Reporting group title	Bimekizumab Dose 3

Reporting group description:

Participants received bimekizumab Dose 3 injections, sc every four weeks (Q4W). Participants receiving bimekizumab Dose 3 Q4W and bimekizumab Dose 4 Q4W, in PS0010 were assigned to receive bimekizumab Dose 3 Q4W in PS0011, regardless of their PASI90 response at Week 12 in PS0010.

Subject analysis set title	Bimekizumab Dose 1 (SS)
Subject analysis set type	Safety analysis

Subject analysis set description:

Participants received bimekizumab Dose 1 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 1 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants who received at least one dose of the IMP formed the Safety Set (SS).

Subject analysis set title	Bimekizumab Dose 2 (SS)
Subject analysis set type	Safety analysis

Subject analysis set description:

Participants received bimekizumab Dose 2 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 loading dose (w/LD) Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 w/LD Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011. Participants who received at least one dose of the IMP formed the SS.

Subject analysis set title	Bimekizumab Dose 3 (SS)
Subject analysis set type	Safety analysis

Subject analysis set description:

Participants received bimekizumab Dose 3 injections, sc every four weeks (Q4W). Participants receiving bimekizumab Dose 3 Q4W and bimekizumab Dose 4 Q4W, in PS0010 were assigned to receive bimekizumab Dose 3 Q4W in PS0011, regardless of their PASI90 response at Week 12 in PS0010. Participants who received at least one dose of the IMP formed the SS.

Subject analysis set title	Bimekizumab Dose 1/Bimekizumab Dose 1/R (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 1 Q4W in PS0011. Participants formed the Full Analysis Set (FAS).

Subject analysis set title	Bimekizumab Dose 2/Bimekizumab Dose 2/R (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 loading dose (w/LD) Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants formed the FAS.

Subject analysis set title	Bimekizumab Dose 3/Bimekizumab Dose 3/R (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 3 Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011. Participants formed the FAS.

Subject analysis set title	Bimekizumab Dose 4/Bimekizumab Dose 3/R (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 4 Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011. Participants formed the FAS.

Subject analysis set title	Placebo/Bimekizumab Dose 2/NR (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who did not achieve PASI90 response at Week 12 and received placebo Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants formed the FAS.

Subject analysis set title	Bimekizumab Dose 1/Bimekizumab Dose 2/NR (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants formed the FAS.

Subject analysis set title	Bimekizumab Dose 2/Bimekizumab Dose 3/NR (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 w/LD Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011. Participants formed the FAS.

Subject analysis set title	Bimekizumab Dose 3/Bimekizumab Dose 3/NR (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 3 Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011. Participants formed the FAS.

Subject analysis set title	Bimekizumab Dose 4/Bimekizumab Dose 3/NR (FAS)
Subject analysis set type	Full analysis

Subject analysis set description:

Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 4 Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011. Participants formed the FAS.

Primary: Incidence of Treatment Emergent Adverse Events (TEAEs) adjusted by duration of subject exposure to treatment

End point title	Incidence of Treatment Emergent Adverse Events (TEAEs) adjusted by duration of subject exposure to treatment[1]

End point description:

Treatment-emergent Adverse Events (TEAEs) were defined as those events which started on or after the date of first dose of PS0011 investigational medicinal product (IMP), or events in which severity worsened on or after the date of first dose of PS0011 study medication.
The exposure adjusted incidence rate (EAIR) is defined as the number of subjects (n) with a specific AE adjusted for the exposure and was scaled to 100 subject-years: where the numerator is the total number of subjects experiencing the AE and the denominator is the total time at risk scaled to 100 subject-years; that is, the total summation of individual subject-years at risk up to the first occurrence of the AE for subjects with that AE, and the total subject-years at risk for those subjects not experiencing that AE, divided by 100.

End point type	Primary

End point timeframe:

From Baseline until Safety Follow-Up Visit (up to Week 64)

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: No formal statistical hypothesis testing was planned for this study. Results were summarized as descriptive statistics only.

End point values	Bimekizumab Dose 1 (SS)	Bimekizumab Dose 2 (SS)	Bimekizumab Dose 3 (SS)	
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	
Number of subjects analysed	15	111	91	
Units: no. of new events per 100 subject-years				
number (confidence interval 95%)	110.68 (53.08 to 203.55)	225.26 (182.88 to 274.53)	206.82 (162.95 to 258.86)	

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of participants with Psoriasis Area Severity Index (PASI90) response over time

End point title	Percentage of participants with Psoriasis Area Severity Index (PASI90) response over time

End point description:

The PASI90 response assessments are based on at least 90% improvement in the PASI score from Baseline. It averages the redness, thickness, and scaliness of the psoriatic lesions (on a 0-4 scale) and weights the resulting score by the area of skin involved. Body divided into 4 areas: head, arms, trunk to groin, and legs to top of buttocks.
Assignment of an average score for the redness, thickness, and scaling for each of the 4 body areas with a score of 0 (clear) to 4 (very marked). The PASI score ranges from 0 to 72 with a higher score indicating increased disease severity.
PASI90 response is defined to be equal to 1 if the percentage improvement from Baseline in the PASI scores is 90% or greater and 0 if the percentage improvement from Baseline is less than 90%.
This Outcome Measure presents results relative to PS0010 Baseline starting at PS0011 Baseline by PS0010 Week 12 response status.

End point type	Secondary

End point timeframe:

From Baseline during the Treatment Period (up to Week 48)

End point values	Bimekizumab Dose 1/Bimekizumab Dose 1/R (FAS)	Bimekizumab Dose 2/Bimekizumab Dose 2/R (FAS)	Bimekizumab Dose 3/Bimekizumab Dose 3/R (FAS)	Bimekizumab Dose 4/Bimekizumab Dose 3/R (FAS)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	15	55	33	30
Units: percentage of participants				
number (not applicable)				
PS0011 Baseline	100	100	100	100
Week 4	100	100	97.0	100
Week 8	100	96.4	100	100
Week 12	100	96.4	100	96.7
Week 16	100	92.7	100	96.7

Week 20	100	89.1	93.9	96.7
Week 24	100	85.5	97.0	96.7
Week 28	93.3	90.9	97.0	96.7
Week 32	100	89.1	97.0	93.3
Week 36	100	85.5	97.0	93.3
Week 40	100	83.6	87.9	86.7
Week 44	100	81.8	87.9	86.7
Week 48	100	80.0	87.9	86.7

End point values	Placebo/Bimekizumab Dose 2/NR (FAS)	Bimekizumab Dose 1/Bimekizumab Dose 2/NR (FAS)	Bimekizumab Dose 2/Bimekizumab Dose 3/NR (FAS)	Bimekizumab Dose 3/Bimekizumab Dose 3/NR (FAS)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	37	19	14	6
Units: percentage of participants				
number (not applicable)				
PS0011 Baseline	0	0	0	0
Week 4	45.9	42.1	42.9	66.7
Week 8	67.6	73.7	57.1	83.3
Week 12	81.1	78.9	64.3	100
Week 16	83.8	78.9	64.3	100
Week 20	89.2	84.2	78.6	83.3
Week 24	83.8	78.9	71.4	83.3
Week 28	91.9	84.2	71.4	83.3
Week 32	91.9	73.7	71.4	83.3
Week 36	91.9	73.7	71.4	66.7
Week 40	89.2	78.9	71.4	83.3
Week 44	89.2	78.9	71.4	83.3
Week 48	91.9	68.4	71.4	66.7

End point values	Bimekizumab Dose 4/Bimekizumab Dose 3/NR (FAS)			
Subject group type	Subject analysis set			
Number of subjects analysed	8			
Units: percentage of participants				
number (not applicable)				
PS0011 Baseline	0			
Week 4	50.0			
Week 8	50.0			
Week 12	62.5			
Week 16	62.5			
Week 20	62.5			
Week 24	75.0			
Week 28	50.0			

Week 32	50.0			
Week 36	50.0			
Week 40	50.0			
Week 44	50.0			
Week 48	50.0			

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of participants with Investigator´s Global Assessment response (Clear or Almost clear with at least a 2 category improvement from Baseline on a 5-point scale) over time

End point title	Percentage of participants with Investigator´s Global Assessment response (Clear or Almost clear with at least a 2 category improvement from Baseline on a 5-point scale) over time

End point description:

The Investigator's Global Assessment (IGA) measures the overall severity following a 5-point scale (0-4), where scale 0= clear, no signs of psoriasis; presence of post-inflammatory hyperpigmentation, scale 1= almost clear, no thickening; normal to pink coloration; no to minimal focal scaling, scale 2= mild thickening, pink to light red coloration and predominately fine scaling, 3= moderate, clearly distinguishable to moderate thickening; dull to bright red, clearly distinguishable to moderate thickening; moderate scaling and 4= severe thickening with hard edges; bright to deep dark red coloration; severe/coarse scaling covering almost all or all lesions.
IGA response is defined as clear (0) or almost clear (1) with at least a two category improvement from Baseline.
This Outcome Measure presents results relative to PS0010 Baseline starting at PS0011 Baseline by PS0010 Week 12 response status.

End point type	Secondary

End point timeframe:

From Baseline during the Treatment Period (up to Week 48)

End point values	Bimekizumab Dose 1/Bimekizumab Dose 1/R (FAS)	Bimekizumab Dose 2/Bimekizumab Dose 2/R (FAS)	Bimekizumab Dose 3/Bimekizumab Dose 3/R (FAS)	Bimekizumab Dose 4/Bimekizumab Dose 3/R (FAS)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	15	55	33	30
Units: percentage of participants				
number (not applicable)				
PS0011 Baseline	100	96.4	100	100
Week 4	100	98.2	97.0	100
Week 8	100	96.4	97.0	100
Week 12	100	92.7	97.0	96.7
Week 16	100	90.9	97.0	96.7
Week 20	100	85.5	93.9	96.7
Week 24	100	81.8	97.0	93.3
Week 28	93.3	89.1	97.0	93.3
Week 32	100	85.5	93.9	93.3
Week 36	100	81.8	90.9	93.3

Week 40	100	83.6	87.9	86.7
Week 44	100	81.8	87.9	86.7
Week 48	100	78.2	87.9	86.7

End point values	Placebo/Bimekizumab Dose 2/NR (FAS)	Bimekizumab Dose 1/Bimekizumab Dose 2/NR (FAS)	Bimekizumab Dose 2/Bimekizumab Dose 3/NR (FAS)	Bimekizumab Dose 3/Bimekizumab Dose 3/NR (FAS)
Subject group type	Subject analysis set	Subject analysis set	Subject analysis set	Subject analysis set
Number of subjects analysed	37	19	14	6
Units: percentage of participants				
number (not applicable)				
PS0011 Baseline	5.4	10.5	35.7	50.0
Week 4	56.8	57.9	42.9	66.7
Week 8	75.7	84.2	57.1	83.3
Week 12	81.1	89.5	64.3	83.3
Week 16	83.8	78.9	57.1	66.7
Week 20	89.2	84.2	71.4	66.7
Week 24	83.8	84.2	64.3	83.3
Week 28	86.5	84.2	71.4	66.7
Week 32	89.2	78.9	71.4	66.7
Week 36	86.5	78.9	71.4	66.7
Week 40	86.5	78.9	71.4	66.7
Week 44	83.8	78.9	71.4	66.7
Week 48	89.2	68.4	71.4	66.7

End point values	Bimekizumab Dose 4/Bimekizumab Dose 3/NR (FAS)			
Subject group type	Subject analysis set			
Number of subjects analysed	8			
Units: percentage of participants				
number (not applicable)				
PS0011 Baseline	25.0			
Week 4	62.5			
Week 8	62.5			
Week 12	62.5			
Week 16	62.5			
Week 20	75.0			
Week 24	62.5			
Week 28	62.5			
Week 32	50.0			
Week 36	37.5			
Week 40	50.0			
Week 44	50.0			
Week 48	62.5			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events:	
From PS0011 Baseline and up to Safety-Follow Up (SFU)	
Assessment type	Non-systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	19.0

Reporting groups	
Reporting group title	Bimekizumab Dose 1 (SS)
Reporting group description:	
Participants received bimekizumab Dose 1 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 1 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 1 Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants who received at least one dose of the IMP formed the Safety Set (SS).	
Reporting group title	Bimekizumab Dose 3 (SS)
Reporting group description:	
Participants received bimekizumab Dose 3 injections, sc every four weeks (Q4W). Participants receiving bimekizumab Dose 3 Q4W and bimekizumab Dose 4 Q4W, in PS0010 were assigned to receive bimekizumab Dose 3 Q4W in PS0011, regardless of their PASI90 response at Week 12 in PS0010. Participants who received at least one dose of the IMP formed the SS.	
Reporting group title	Bimekizumab Dose 2 (SS)
Reporting group description:	
Participants received bimekizumab Dose 2 injections, sc every four weeks (Q4W). Participants who achieved PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 loading dose (w/LD) Q4W in PS0010, were assigned to bimekizumab Dose 2 Q4W in PS0011. Participants who did not achieve PASI90 response at Week 12 and received bimekizumab Dose 2 Q4W or bimekizumab Dose 2 w/LD Q4W in PS0010, were assigned to bimekizumab Dose 3 Q4W in PS0011. Participants who received at least one dose of the IMP formed the SS.	

Serious adverse events	Bimekizumab Dose 1 (SS)	Bimekizumab Dose 3 (SS)	Bimekizumab Dose 2 (SS)
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 15 (6.67%)	7 / 91 (7.69%)	7 / 111 (6.31%)
number of deaths (all causes)	0	2	0
number of deaths resulting from adverse events	0	0	0
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Acute myeloid leukaemia			
subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Vascular disorders			
Circulatory collapse			

subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Hypovolaemic shock			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Surgical and medical procedures			
Abortion induced			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (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			
Non-cardiac chest pain			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	0 / 111 (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
Reproductive system and breast disorders			
Uterine cervix stenosis			
subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Respiratory, thoracic and mediastinal disorders			
Dyspnoea			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Respiratory failure			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 1	0 / 0
Investigations			
Hepatic enzyme increased			

subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	1 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Injury, poisoning and procedural complications			
Humerus fracture			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (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
Tibia fracture			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Cardiac disorders			
Cardiac failure			
subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nervous system disorders			
Carpal tunnel syndrome			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 2	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Eye disorders			
Cataract			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (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
Renal and urinary disorders			
IgA nephropathy			
subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Nephrolithiasis			

subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Ureterolithiasis			
subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Renal colic			
subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 2
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Otitis externa bacterial			
subjects affected / exposed	0 / 15 (0.00%)	1 / 91 (1.10%)	0 / 111 (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
Staphylococcal abscess			
subjects affected / exposed	0 / 15 (0.00%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

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

Non-serious adverse events	Bimekizumab Dose 1 (SS)	Bimekizumab Dose 3 (SS)	Bimekizumab Dose 2 (SS)
Total subjects affected by non-serious adverse events			
subjects affected / exposed	10 / 15 (66.67%)	51 / 91 (56.04%)	56 / 111 (50.45%)
Investigations			
Gamma-glutamyl-transferase increased			
subjects affected / exposed	1 / 15 (6.67%)	3 / 91 (3.30%)	4 / 111 (3.60%)
occurrences (all)	1	4	6
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Benign ovarian tumour			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	0 / 111 (0.00%)
occurrences (all)	1	0	0

Injury, poisoning and procedural complications			
Joint injury			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	0 / 111 (0.00%)
occurrences (all)	1	0	0
Procedural pain			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	0 / 111 (0.00%)
occurrences (all)	2	0	0
Vascular disorders			
Hypertension			
subjects affected / exposed	2 / 15 (13.33%)	4 / 91 (4.40%)	8 / 111 (7.21%)
occurrences (all)	2	4	10
Ear and labyrinth disorders			
External ear inflammation			
subjects affected / exposed	1 / 15 (6.67%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences (all)	1	1	0
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	1 / 15 (6.67%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences (all)	1	1	0
Flatulence			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	0 / 111 (0.00%)
occurrences (all)	1	0	0
Hepatobiliary disorders			
Non-alcoholic fatty liver			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences (all)	1	0	1
Respiratory, thoracic and mediastinal disorders			
Oropharyngeal pain			
subjects affected / exposed	0 / 15 (0.00%)	6 / 91 (6.59%)	6 / 111 (5.41%)
occurrences (all)	0	8	6
Skin and subcutaneous tissue disorders			
Dermatitis contact			
subjects affected / exposed	1 / 15 (6.67%)	3 / 91 (3.30%)	5 / 111 (4.50%)
occurrences (all)	1	3	6
Seborrhoeic dermatitis			
subjects affected / exposed	1 / 15 (6.67%)	2 / 91 (2.20%)	3 / 111 (2.70%)
occurrences (all)	1	2	4

Pruritus generalised			
subjects affected / exposed	1 / 15 (6.67%)	1 / 91 (1.10%)	0 / 111 (0.00%)
occurrences (all)	1	1	0
Psoriasis			
subjects affected / exposed	2 / 15 (13.33%)	5 / 91 (5.49%)	5 / 111 (4.50%)
occurrences (all)	2	5	6
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	0 / 15 (0.00%)	6 / 91 (6.59%)	3 / 111 (2.70%)
occurrences (all)	0	7	4
Infections and infestations			
Oral candidiasis			
subjects affected / exposed	1 / 15 (6.67%)	15 / 91 (16.48%)	13 / 111 (11.71%)
occurrences (all)	2	19	17
Skin candida			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	0 / 111 (0.00%)
occurrences (all)	1	0	0
Angular cheilitis			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	2 / 111 (1.80%)
occurrences (all)	1	0	3
Gingivitis			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	0 / 111 (0.00%)
occurrences (all)	1	0	0
Vulvovaginal mycotic infection			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	1 / 111 (0.90%)
occurrences (all)	2	0	1
Nasopharyngitis			
subjects affected / exposed	2 / 15 (13.33%)	11 / 91 (12.09%)	15 / 111 (13.51%)
occurrences (all)	4	14	20
Upper respiratory tract infection			
subjects affected / exposed	1 / 15 (6.67%)	9 / 91 (9.89%)	10 / 111 (9.01%)
occurrences (all)	1	12	12
Pharyngitis			
subjects affected / exposed	1 / 15 (6.67%)	3 / 91 (3.30%)	1 / 111 (0.90%)
occurrences (all)	1	3	1
Urinary tract infection			

subjects affected / exposed	2 / 15 (13.33%)	1 / 91 (1.10%)	1 / 111 (0.90%)
occurrences (all)	3	2	1
Respiratory tract infection viral			
subjects affected / exposed	1 / 15 (6.67%)	1 / 91 (1.10%)	1 / 111 (0.90%)
occurrences (all)	1	1	1
Metabolism and nutrition disorders			
Hyperphagia			
subjects affected / exposed	1 / 15 (6.67%)	0 / 91 (0.00%)	0 / 111 (0.00%)
occurrences (all)	1	0	0

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
12 August 2016	This substantial amendment revised the study design of PS0011 to allow participants who were responding to placebo or the lowest dose of bimekizumab (Dose 1 Q4W) in PS0010 to continue into PS0011 with no change in treatment, while protecting the study blind. The study design changed from an open-label to a double-blind, placebo-controlled, parallel-group extension study with additional treatment groups included for consistency with PS0010. Following other changes were made: •Added details on study revisions, including study type, description, rationale for the revised design, and addition of placebo. •Clarified treatment arms and criteria and methods for treatment assignment •Reduced number of secondary objectives and reassigned secondary variables to other objectives •Classified efficacy variables into secondary and other efficacy variables •Extended timing of SFU Visit and maximum duration of subject participation •Adjustment and/or clarification of schedule for hematology, biochemistry, urinalysis, bimekizumab plasma concentrations, anti bimekizumab antibody levels, and Hospital Anxiety and Depression Scale •Removed population PK, legal representative for consent and exclusion of pre-existing clinically active or medically significant infection •Adjusted details on contraception requirements •Included eligibility requirement for negative interferon-gamma release assay and for completion of PS0010 •Clarifications to withdrawal criteria regarding concurrent illness, pustular psoriasis, topical treatments, HADS and PASI thresholds, AEs, and clinical laboratory values. •Provided details on maintaining and emergency breaking of the study blinding •Provided additional detail for recording the severity of AEs, duration of AE follow-up and adverse events for special monitoring (AESM) •Removed alcohol test in the potential drug-induced liver injury urine toxicology screen •Added clarifications to the statistics section and adapted sections that impacted by design change.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported