



Clinical trial results:

A Randomised, Multicentre, Investigator-Blind, Parallel-Group Trial to Evaluate the Efficacy and Safety of MC2-01 Cream Compared to Vehicle and Active Comparator in Subjects with Mild-to-Moderate Psoriasis Vulgaris

Summary

EudraCT number	2018-001970-66
Trial protocol	CZ
Global end of trial date	02 October 2020

Results information

Result version number	v1 (current)
This version publication date	30 November 2020
First version publication date	30 November 2020

Trial information

Trial identification

Sponsor protocol code	MC2-01-C7
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Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT03802344
WHO universal trial number (UTN)	-
Other trial identifiers	IND number: 127152

Notes:

Sponsors

Sponsor organisation name	MC2 Therapeutics Ltd
Sponsor organisation address	C/O Agern Allé 24-26, Hørsholm, Denmark, 2970
Public contact	Senior Project Manager, Clinical Operations, MC2 Therapeutics Ltd, +45 20157033, isa@mc2Therapeutics.com
Scientific contact	Senior Project Manager, Clinical Operations, MC2 Therapeutics Ltd, +45 20157033, isa@mc2Therapeutics.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	02 October 2020
Is this the analysis of the primary completion data?	Yes
Primary completion date	02 October 2020
Global end of trial reached?	Yes
Global end of trial date	02 October 2020
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective is to evaluate the efficacy of MC2-01 cream compared to active comparator in subjects with psoriasis vulgaris.

Protection of trial subjects:

The MC2-01 cream contains two well-known active compounds (CAL/BDP) in a novel topical formulation. The efficacy and safety profile of the combination is well established and have proven to be safe and efficacious, and available data for MC2-01 cream suggest a very benign safety profile resembling that known from the approved CAL/BDP products. A cream formulation of CAL and BDP may benefit subjects by providing improved convenience and ease of use resulting in increased patient adherence to therapy which will improve real-life treatment outcome.

Daivobet gel is used as comparator for this trial. The common AE (>1%) is pruritus. Other uncommon AEs are folliculitis, skin infections, exacerbation of psoriasis, dermatitis, erythema, rash, skin irritation, skin burning sensation, application site pain, as well as eye irritation (i.e. $\geq 0.1\%$ and $< 1\%$).

It was thus considered that the benefit of obtaining clinical data for this trial outweighed any potential risks.

AEs were collected/assessed from the time of the signature of the informed consent form by the subject and until the final follow-up visit. AEs that were considered related to the trial product would be followed until they were resolved, or until the medical condition of the subject was stable.

Background therapy: -

Evidence for comparator:

Daivobet gel was used as comparator product. It is a approved product with a well known safety profile.

Actual start date of recruitment	12 December 2018
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	Poland: 129
Country: Number of subjects enrolled	Czech Republic: 147
Country: Number of subjects enrolled	Germany: 214
Worldwide total number of subjects	490
EEA total number of subjects	490

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)	407
From 65 to 84 years	83
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

All subjects approached for the study were either ongoing or new patients referred to the clinics with the diagnosis Psoriasis Vulgaris.

Pre-assignment

Screening details:

Prior to randomization, the subject entered a washout period (if required) where anti-psoriatic treatment and other relevant medication/treatments were discontinued as defined by the exclusion criteria. The washout/screening period could last for up to 30 days, depending on which disallowed treatments the subject received.

Period 1

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

Blinding implementation details:

Due to difference in formulation and packaging, the investigator and staff could not see the IP. Several precautions were taken to maintain the blind. To keep the staff blinded, packing and labelling of the outer box was identical for all IPs, but the content varied. Handling of individual IPs was therefore handled by a designated third unblinded person. This person was only involved in the handling of IP and did not perform any trial related assessment.

Arms

Are arms mutually exclusive?	Yes
Arm title	MC2-01 Cream

Arm description:

MC2-01 (calcipotriene/betamethasone dipropionate, w/w 0,005%/0,064%) cream.

One application daily for 8 weeks.

Arm type	Experimental
Investigational medicinal product name	MC2-01 Cream
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Cream
Routes of administration	Topical use

Dosage and administration details:

MC2-01 (calcipotriene/betamethasone dipropionate, w/w 0,005%/0,064%) cream

Arm title	Active Comparator
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Arm description:

Calcipotriene/betamethasone (Calcipotriene/betamethasone dipropionate, w/w 0,005%/0,064%) cream. One application daily for 8 weeks.

Arm type	Active comparator
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Investigational medicinal product name	Devobet/Devobet gel
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Gel
Routes of administration	Topical use
Dosage and administration details:	
Devobet / Devobet gel: (calcipotriene/betamethasone dipropionate, w/w 0,005%/0,064%)	
Arm title	Vehicle

Arm description:

Vehicle

One application daily for 8 weeks.

Arm type	Placebo
Investigational medicinal product name	Vehicle
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Cream
Routes of administration	Topical use

Dosage and administration details:

One application daily for 8 weeks.

Number of subjects in period 1	MC2-01 Cream	Active Comparator	Vehicle
Started	213	209	68
Completed	205	203	55
Not completed	8	6	13
Consent withdrawn by subject	2	3	9
Adverse event, non-fatal	1	2	2
Withdrew consent, did not make any IP	-	-	1
Lost to follow-up	5	1	1

Baseline characteristics

Reporting groups

Reporting group title	MC2-01 Cream
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Reporting group description:

MC2-01 (calcipotriene/betamethasone dipropionate, w/w 0,005%/0,064%) cream.

One application daily for 8 weeks.

Reporting group title	Active Comparator
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Reporting group description:

Calcipotriene/betamethasone (Calcipotriene/betamethasone dipropionate, w/w 0,005%/0,064%) cream.
One application daily for 8 weeks.

Reporting group title	Vehicle
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Reporting group description:

Vehicle

One application daily for 8 weeks.

Reporting group values	MC2-01 Cream	Active Comparator	Vehicle
Number of subjects	213	209	68
Age categorical Units: Subjects			
In utero			
Preterm newborn infants (gestational age < 37 wks)			
Newborns (0-27 days)			
Infants and toddlers (28 days-23 months)			
Children (2-11 years)			
Adolescents (12-17 years)			
Adults (18-64 years)			
From 65-84 years			
85 years and over			
Age continuous Units: years			
arithmetic mean	48.6	51.5	50.8
standard deviation	± 13.7	± 14.8	± 13.1
Gender categorical Units: Subjects			
Female	77	96	22
Male	136	113	46
Fitzpatrick Skin Type Units: Subjects			
Skintype I	6	2	0
Skintype II	104	103	29
Skintype III	77	76	25
Skintype IV	20	19	9
Skintype V	6	7	5
Skintype VI	0	2	0

Reporting group values	Total		
Number of subjects	490		
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)	0		
From 65-84 years	0		
85 years and over	0		
Age continuous			
Units: years			
arithmetic mean			
standard deviation	-		
Gender categorical			
Units: Subjects			
Female	195		
Male	295		
Fitzpatrick Skin Type			
Units: Subjects			
Skintype I	8		
Skintype II	236		
Skintype III	178		
Skintype IV	48		
Skintype V	18		
Skintype VI	2		

End points

End points reporting groups

Reporting group title	MC2-01 Cream
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Reporting group description:

MC2-01 (calcipotriene/betamethasone dipropionate, w/w 0,005%/0,064%) cream.

One application daily for 8 weeks.

Reporting group title	Active Comparator
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Reporting group description:

Calcipotriene/betamethasone (Calcipotriene/betamethasone dipropionate, w/w 0,005%/0,064%) cream.
One application daily for 8 weeks.

Reporting group title	Vehicle
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Reporting group description:

Vehicle

One application daily for 8 weeks.

Primary: mPASI

End point title	mPASI
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End point description:

Percentage Change in mPASI (Modified Psoriasis Area and Severity Index) Score.

The extent and severity of the participant's psoriasis is assessed using a modified PASI scoring system (minus scalp, face, and flexures) at each 3 areas (arms, trunk and legs) using a scale from 0 - 6, where 0 = no psoriasis involvement and 6 = 90-100% involvement.

The severity is assessed at the 3 areas for each of the sign redness, thickness and scaliness using a scale from 0 - 4, where 0 represents none and 4 represents very severe.

The mPASI score is calculated from the individual scores by use of the following equation:

Arms 0.2 (Redness + Thickness + Scaliness) E = X Trunk 0.3 (Redness + Thickness + Scaliness) E = Y
Legs 0.4 (Redness + Thickness + Scaliness) E = Z The sum of X + Y + Z = m-PASI score resulting in a minimum score of 0 and a maximum score (worst possible) of 64.8.

End point type	Primary
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End point timeframe:

The percent change in mPASI score is defined as the Baseline minus the Week 8 divided by Baseline score multiplied by 100 (this value is negative)

End point values	MC2-01 Cream	Active Comparator	Vehicle	
Subject group type	Reporting group	Reporting group	Reporting group	
Number of subjects analysed	213	209	68	
Units: Percentage Change in mPASI Score				
arithmetic mean (standard deviation)	-67.5 (± 20.8)	-63.5 (± 22.2)	-11.7 (± 21.9)	

Statistical analyses

Statistical analysis title	mPASI
Comparison groups	Active Comparator v MC2-01 Cream v Vehicle
Number of subjects included in analysis	490
Analysis specification	Pre-specified
Analysis type	superiority
P-value	< 0.05
Method	ANCOVA
Confidence interval	
level	95 %
sides	2-sided

Adverse events

Adverse events information

Timeframe for reporting adverse events:

AEs were collected/assessed from the time of the signature of the informed consent form by the subject and until the final follow-up visit.

Adverse event reporting additional description:

AEs that were considered related to the trial product would be followed until they were resolved, or until the medical condition was stable.

Assessment type	Non-systematic
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Dictionary used

Dictionary name	MedDRA
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Dictionary version	22
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Reporting groups

Reporting group title	MC2-01 Cream
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Reporting group description: -

Reporting group title	Cal/BDP Combination
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Reporting group description: -

Reporting group title	Vehicle
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Reporting group description: -

Serious adverse events	MC2-01 Cream	Cal/BDP Combination	Vehicle
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 213 (0.47%)	3 / 209 (1.44%)	1 / 68 (1.47%)
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)			
Testicular seminoma (pure)			
subjects affected / exposed	1 / 213 (0.47%)	0 / 209 (0.00%)	0 / 68 (0.00%)
occurrences causally related to treatment / all	0 / 1	0 / 0	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Gastrointestinal disorders			
Cholecystitis acute			
subjects affected / exposed	0 / 213 (0.00%)	0 / 209 (0.00%)	1 / 68 (1.47%)
occurrences causally related to treatment / all	0 / 0	0 / 0	0 / 1
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Musculoskeletal and connective tissue disorders			
Humerus fracture			

subjects affected / exposed	0 / 213 (0.00%)	1 / 209 (0.48%)	0 / 68 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0
Infections and infestations			
Herpes zoster meningitis			
subjects affected / exposed	0 / 213 (0.00%)	1 / 209 (0.48%)	0 / 68 (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
Pulmonary tuberculosis			
subjects affected / exposed	0 / 213 (0.00%)	1 / 209 (0.48%)	0 / 68 (0.00%)
occurrences causally related to treatment / all	0 / 0	0 / 1	0 / 0
deaths causally related to treatment / all	0 / 0	0 / 0	0 / 0

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

Non-serious adverse events	MC2-01 Cream	Cal/BDP Combination	Vehicle
Total subjects affected by non-serious adverse events			
subjects affected / exposed	10 / 213 (4.69%)	11 / 209 (5.26%)	1 / 68 (1.47%)
Infections and infestations			
Nasopharyngitis			
subjects affected / exposed	10 / 213 (4.69%)	11 / 209 (5.26%)	1 / 68 (1.47%)
occurrences (all)	10	11	1

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported