



Clinical trial results:

A multi-centre, randomized, two-armed, parallel group and evaluator-blinded study of efficacy and safety of topical MOB015B in the treatment of mild to moderate distal subungual onychomycosis (DSO)

Summary

EudraCT number	2016-001204-39
Trial protocol	DE PL GB
Global end of trial date	20 March 2020

Results information

Result version number	v1 (current)
This version publication date	01 April 2021
First version publication date	01 April 2021

Trial information

Trial identification

Sponsor protocol code	MOB015B-III
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Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Moberg Pharma AB
Sponsor organisation address	Gustavslundsvägen 42, Bromma, Sweden, 167 51
Public contact	Project Leader, Moberg Pharma AB (publ) , +46 852230711, christin.strid@mobergpharma.se
Scientific contact	Project Leader, Moberg Pharma AB (publ) , +46 852230711, christin.strid@mobergpharma.se

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 March 2020
Is this the analysis of the primary completion data?	Yes
Primary completion date	20 March 2020
Global end of trial reached?	Yes
Global end of trial date	20 March 2020
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective was to evaluate the efficacy of topical MOB015B in subjects with mild to moderate distal subungual onychomycosis (DSO).

The secondary objective was to evaluate the safety of topical MOB015B in subjects with mild to moderate DSO.

Protection of trial subjects:

The study began when all of the requirements of the appropriate regulatory authorities had been fulfilled. The study was conducted in accordance with the ethical principles of the Declaration of Helsinki and the International Council on Harmonisation (ICH) - good clinical practice (GCP) guidelines. Each subject had many opportunities to ask questions and to be informed about the right to withdraw from the study at any time without any disadvantage and without having to provide reasons for that decision.

Following this informative discussion the subject was asked if he/she was willing to sign a statement of informed consent. Only if the subject voluntarily agreed to sign the ICF and had done so, were they entered into the study. The subject received a copy of the subject information sheet and of the signed and dated ICF.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	27 September 2016
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: 45
Country: Number of subjects enrolled	United Kingdom: 52
Country: Number of subjects enrolled	Germany: 355
Worldwide total number of subjects	452
EEA total number of subjects	452

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)	318
From 65 to 84 years	134
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

Altogether, 3273 subjects were screened, resulting in the randomization of 452 subjects. 2821 subjects were screening failures due to not meeting the eligibility criteria or other reasons.

Period 1

Period 1 title	overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Single blind
Roles blinded	Investigator ^[1]

Arms

Are arms mutually exclusive?	Yes
Arm title	MOB015B
Arm description: -	
Arm type	Experimental
Investigational medicinal product name	MOB015B 10% Terbinafine Nail Solution
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Cutaneous solution
Routes of administration	Topical use

Dosage and administration details:

Route and dose of administration

Topical;

Cover all affected toenails and fingernails with a thin layer and apply under the free edge of the nails

Dosage regimen

Once daily

Time of dosing

Evening/bedtime

At least 8 hours before washing the feet after application

The nails should be allowed to dry approximately 5 min

Arm title	Ciclopirox
Arm description: -	
Arm type	Active comparator
Investigational medicinal product name	Ciclopirox 80 mg/g nail lacquer
Investigational medicinal product code	
Other name	Miclast ®
Pharmaceutical forms	Medicated nail lacquer
Routes of administration	Topical use

Dosage and administration details:

Route and dose of administration

Topical;

Cover all affected toenails and fingernails with a thin layer

Dosage regimen

Once daily

Time of dosing

Evening/bedtime

At least 8 hours before washing the feet allow lacquer to dry approximately 30 seconds before putting on socks or stockings

Notes:

[1] - The roles blinded appear inconsistent with a simple blinded trial.

Justification: The Investigator(s) at each site were blinded but patients were not blinded.

Number of subjects in period 1	MOB015B	Ciclopirox
Started	296	156
Completed	245	135
Not completed	51	21
Consent withdrawn by subject	17	7
Work commitments	1	-
Decision of central assessor	-	1
Lack of efficiency	1	-
Adverse event, non-fatal	17	3
Time commitments	1	-
Lost to follow-up	12	6
Family reasons	-	1
Protocol deviation	2	3

Baseline characteristics

Reporting groups

Reporting group title	overall trial (overall period)
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Reporting group description: -

Reporting group values	overall trial (overall period)	Total	
Number of subjects	452	452	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	318	318	
From 65-84 years	134	134	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female	139	139	
Male	313	313	

Subject analysis sets

Subject analysis set title	Full analysis set
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Subject analysis set type	Full analysis
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Subject analysis set description:

Full analysis set

Reporting group values	Full analysis set		
Number of subjects	452		
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)	318		
From 65-84 years	134		
85 years and over			

Gender categorical			
Units: Subjects			
Female	139		
Male	313		

End points

End points reporting groups

Reporting group title	MOB015B
Reporting group description: -	
Reporting group title	Ciclopirox
Reporting group description: -	
Subject analysis set title	Full analysis set
Subject analysis set type	Full analysis
Subject analysis set description:	
Full analysis set	

Primary: Proportion of subjects with complete cure at Week 52

End point title	Proportion of subjects with complete cure at Week 52
End point description:	Complete cure was defined as negative fungal culture of dermatophytes, negative direct potassium hydroxide (KOH) microscopy and 0% clinical disease involvement of the target toenail.
End point type	Primary
End point timeframe:	week 52

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of subjects with complete cure	6	2		

Statistical analyses

Statistical analysis title	Non-inferiority
Comparison groups	MOB015B v Ciclopirox
Number of subjects included in analysis	452
Analysis specification	Pre-specified
Analysis type	non-inferiority
P-value	= 0.001
Method	Confidence interval testing
Parameter estimate	Proportion
Point estimate	0.7
Confidence interval	
level	95 %
sides	2-sided
lower limit	-1.6
upper limit	3.1

Secondary: Proportion of subjects with mycological cure at Week 52

End point title	Proportion of subjects with mycological cure at Week 52
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End point description:

Mycological cure was defined as negative fungal culture of dermatophytes and negative direct KOH microscopy of the target toenail.

End point type	Secondary
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End point timeframe:

week 52

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of subjects with mycological cure	238	64		

Statistical analyses

Statistical analysis title	Non-inferiority
Comparison groups	MOB015B v Ciclopirox
Number of subjects included in analysis	452
Analysis specification	Pre-specified
Analysis type	non-inferiority
P-value	< 0.0001
Method	Confidence interval testing
Parameter estimate	Proportion
Point estimate	39.4
Confidence interval	
level	95 %
sides	2-sided
lower limit	30.4
upper limit	48.3

Secondary: Proportion of subjects with treatment success at Week 52

End point title	Proportion of subjects with treatment success at Week 52
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End point description:

Treatment success was defined as negative fungal culture of dermatophytes, negative direct KOH microscopy and ≤10% clinical disease involvement of the target toenail.

End point type	Secondary
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End point timeframe:

week 52

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of subjects with treat. success	57	25		

Statistical analyses

Statistical analysis title	Non-inferiority
Comparison groups	MOB015B v Ciclopirox
Number of subjects included in analysis	452
Analysis specification	Pre-specified
Analysis type	non-inferiority
P-value	= 0.0472
Method	Confidence interval testing
Parameter estimate	Proportion
Point estimate	3.2
Confidence interval	
level	95 %
sides	2-sided
lower limit	-4.1
upper limit	10.5

Other pre-specified: Proportion of subjects with complete cure weeks 12, 24, 36 and 48

End point title	Proportion of subjects with complete cure weeks 12, 24, 36 and 48
End point description:	Proportion of subjects with complete cure (negative fungal culture of dermatophytes, negative direct KOH microscopy and 0% clinical disease involvement) of target toenail at other time points than the primary endpoint (i.e., Weeks 12, 24, 36 and 48 [Visits 3, 4, 5, and 6])
End point type	Other pre-specified
End point timeframe:	
Weeks 12, 24, 36 and 48	

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of subjects with complete cure				
Week 12	0	0		
Week 24	1	1		
Week 36	0	0		
Week 48	3	1		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Proportion of subjects with mycological cure weeks 12, 24, 36 and 48

End point title	Proportion of subjects with mycological cure weeks 12, 24, 36 and 48
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End point description:

Proportion of subjects with mycological cure (negative fungal culture of dermatophytes and negative direct KOH microscopy) of target toenail during the treatment period (Weeks 12, 24, 36 and 48 [Visits 3, 4, 5, and 6])

End point type	Other pre-specified
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End point timeframe:

Weeks 12, 24, 36 and 48

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of subjects with mycological cure				
Week 12	140	56		
Week 24	225	62		
Week 36	224	73		
Week 48	227	65		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Proportion of subjects with negative fungal culture weeks 12, 24, 36, 48, 52

End point title	Proportion of subjects with negative fungal culture weeks 12, 24, 36, 48, 52
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End point description:

Proportion of subjects with negative fungal culture of target toenail during the treatment period (Weeks 12, 24, 36 and 48 [Visits 3, 4, 5, and 6]) and at the end of follow-up (Week 52 [Visit 7])

End point type	Other pre-specified
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End point timeframe:

Weeks 12, 24, 36, 48, 52

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of subjects with neg. fung. cult.				
Week 12	275	128		
Week 24	282	123		
Week 36	282	137		
Week 48	282	133		
Week 52	282	119		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Proportion of subjects with negative direct KOH microscopy weeks 12, 24, 36, 48, 52

End point title	Proportion of subjects with negative direct KOH microscopy weeks 12, 24, 36, 48, 52
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End point description:

Proportion of subjects with negative direct KOH microscopy of target toenail during the treatment period (Weeks 12, 24, 36 and 48 [Visits 3, 4, 5, and 6]) and at the end of follow-up (Week 52 [Visit 7])

End point type	Other pre-specified
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End point timeframe:

Weeks 12, 24, 36, 48, 52

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of subjects neg. dir. KOH micro.				
Week 12	140	59		
Week 24	225	66		
Week 36	224	74		
Week 48	229	68		
Week 52	240	70		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Proportion of subjects with “completely clear” or “almost clear” target toenail weeks 12, 24, 36, 48, 52

End point title	Proportion of subjects with “completely clear” or “almost clear” target toenail weeks 12, 24, 36, 48, 52
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End point description:

Proportion of subjects with “completely clear” or “almost clear” target toenail (i.e., 0–10% clinical disease involvement of the target toenail) during the treatment period (Weeks 12, 24, 36 and 48 [Visits 3, 4, 5, and 6]) and at the end of follow-up (Week 52 [Visit 7])

End point type	Other pre-specified
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End point timeframe:

Weeks 12, 24, 36, 48, 52

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of sub. comp. clear or alm. clear				
Week 12	7	9		
Week 24	14	14		
Week 36	23	24		
Week 48	36	34		
Week 52	65	42		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Proportion of subjects with treatment success weeks 12, 24, 36, 48

End point title	Proportion of subjects with treatment success weeks 12, 24, 36, 48
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End point description:

Proportion of subjects with treatment success (defined as “completely clear” or “almost clear” and negative mycology) of target toenail during the treatment period (Weeks 12, 24, 36 and 48 [Visits 3, 4, 5, and 6])

End point type	Other pre-specified
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End point timeframe:

Weeks 12, 24, 36, 48

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Number of subjects with treat. success				
Week 12	4	6		
Week 24	11	8		
Week 36	17	18		
Week 48	30	24		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Subject´s subjective score of all treated toenails except the little toenail(s) weeks 12, 24, 36, 48, 52

End point title	Subject´s subjective score of all treated toenails except the little toenail(s) weeks 12, 24, 36, 48, 52
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End point description:

Subject´s subjective score of all treated toenails except the little toenail(s) during the treatment period (Weeks 12, 24, 36 and 48 [Visits 3, 4, 5, and 6]) and at the end of follow-up (Week 52 [Visit 7])

End point type	Other pre-specified
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End point timeframe:

Weeks 12, 24, 36, 48, 52

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Subject´s subjective score				
Week 12 No improvement	84	38		
Week 12 Slight improvement	128	85		
Week 12 Improvement	67	27		
Week 12 Almost cured	2	1		
Week 12 Cured	0	0		
Week 12 Missing	15	5		
Week 24 No improvement	68	31		
Week 24 Slight improvement	107	66		
Week 24 Improvement	79	47		
Week 24 Almost cured	7	2		
Week 24 Cured	1	0		
Week 24 Missing	34	10		
Week 36 No improvement	65	37		
Week 36 Slight improvement	94	61		

Week 36 Improvement	72	35		
Week 36 Almost cured	16	9		
Week 36 Cured	0	1		
Week 36 Missing	49	13		
Week 48 No improvement	83	35		
Week 48 Slight improvement	88	60		
Week 48 Improvement	68	32		
Week 48 Almost cured	31	16		
Week 48 Cured	3	3		
Week 48 Missing	23	10		
Week 52 No improvement	69	41		
Week 52 Slight improvement	67	45		
Week 52 Improvement	67	30		
Week 52 Almost cured	32	18		
Week 52 Cured	11	1		
Week 52 Missing	50	21		

Statistical analyses

No statistical analyses for this end point

Other pre-specified: Subject's assessment of IMP handling week 12

End point title	Subject's assessment of IMP handling week 12
End point description:	Subject's assessment of IMP handling (Weeks 12 [Visit 3])
End point type	Other pre-specified
End point timeframe:	Weeks 12

End point values	MOB015B	Ciclopirox		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	296	156		
Units: Subject's assessment of IMP handling				
Week 12 Very easy	186	89		
Week 12 Easy	79	54		
Week 12 Neither easy nor difficult	11	8		
Week 12 Somewhat difficult	5	0		
Week 12 Very difficult	1	0		
Week 12 Missing	14	5		

Statistical analyses

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Occurrence of adverse events (AEs) throughout the study (i.e., from Week 0 [Baseline/Visit 2] to Week 52 [Visit 7])

Assessment type	Systematic
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Dictionary used

Dictionary name	MedDRA
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Dictionary version	21.0
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Reporting groups

Reporting group title	MOB015B
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Reporting group description: -

Reporting group title	Ciclopirox
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Reporting group description: -

Serious adverse events	MOB015B	Ciclopirox	
Total subjects affected by serious adverse events			
subjects affected / exposed	13 / 296 (4.39%)	13 / 156 (8.33%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Pancreatic carcinoma metastatic			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Renal cell carcinoma			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Squamous cell carcinoma of skin			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Squamous cell carcinoma of the tongue			

subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Surgical and medical procedures			
Shoulder operation			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Spinal operation			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Thyroidectomy			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ureteral stent insertion			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urinary bladder suspension			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Immune system disorders			
Anaphylactic reaction			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Reproductive system and breast disorders			
Benign prostatic hyperplasia			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Respiratory, thoracic and mediastinal disorders			
Pulmonary embolism			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Injury, poisoning and procedural complications			
Chest injury			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Craniocerebral injury			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Radius fracture			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Subarachnoid haemorrhage			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Tendon rupture			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cardiac disorders			
Acute myocardial infarction			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Atrial fibrillation			

subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Coronary artery disease			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Nervous system disorders			
Cerebrovascular accident			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastrointestinal disorders			
Gastrooesophageal reflux disease			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hiatus hernia			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Inguinal hernia			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Rectal prolapse			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skin and subcutaneous tissue disorders			
Dermal cyst			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Renal and urinary disorders			
Urethral polyp			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Musculoskeletal and connective tissue disorders			
Fibromyalgia			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			
Echinococciasis			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Erysipelas			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Frequency threshold for reporting non-serious adverse events: 3 %

Non-serious adverse events	MOB015B	Ciclopirox	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	150 / 296 (50.68%)	68 / 156 (43.59%)	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Acrochordon			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Basal cell carcinoma			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Dysplastic naevus			
subjects affected / exposed	0 / 296 (0.00%)	2 / 156 (1.28%)	
occurrences (all)	0	2	

Seborrhoeic keratosis			
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)	
occurrences (all)	2	0	
Skin papilloma			
subjects affected / exposed	3 / 296 (1.01%)	0 / 156 (0.00%)	
occurrences (all)	3	0	
Uterine leiomyoma			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Injury, poisoning and procedural complications			
Contusion			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Foot fracture			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Joint injury			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Ligament injury			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Limb injury			
subjects affected / exposed	3 / 296 (1.01%)	4 / 156 (2.56%)	
occurrences (all)	3	4	
Nail injury			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Patella fracture			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Rib fracture			
subjects affected / exposed	1 / 296 (0.34%)	2 / 156 (1.28%)	
occurrences (all)	1	2	
Road traffic accident			

subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Scapula fracture			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Skin abrasion			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Wrist fracture			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Surgical and medical procedures			
Dental implantation			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Female sterilisation			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Hip arthroplasty			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Shoulder operation			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Nervous system disorders			
Burning sensation			
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)	
occurrences (all)	2	0	
Dizziness			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Dysgeusia			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Headache			

subjects affected / exposed	1 / 296 (0.34%)	3 / 156 (1.92%)	
occurrences (all)	1	3	
Hyperaesthesia			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Migraine			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Paraesthesia			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Parosmia			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Sciatica			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Syncope			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
General disorders and administration site conditions			
Chest discomfort			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Cyst			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Inflammation			
subjects affected / exposed	5 / 296 (1.69%)	0 / 156 (0.00%)	
occurrences (all)	5	0	
Pyrexia			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Swelling			

subjects affected / exposed occurrences (all)	2 / 296 (0.68%) 2	0 / 156 (0.00%) 0	
Temperature intolerance subjects affected / exposed occurrences (all)	1 / 296 (0.34%) 1	0 / 156 (0.00%) 0	
Xerosis subjects affected / exposed occurrences (all)	1 / 296 (0.34%) 1	0 / 156 (0.00%) 0	
Gastrointestinal disorders			
Abdominal pain subjects affected / exposed occurrences (all)	0 / 296 (0.00%) 0	1 / 156 (0.64%) 1	
Colitis ulcerative subjects affected / exposed occurrences (all)	1 / 296 (0.34%) 1	0 / 156 (0.00%) 0	
Diarrhoea subjects affected / exposed occurrences (all)	1 / 296 (0.34%) 1	2 / 156 (1.28%) 2	
Gastrooesophageal reflux disease subjects affected / exposed occurrences (all)	1 / 296 (0.34%) 1	0 / 156 (0.00%) 0	
Haemorrhoids subjects affected / exposed occurrences (all)	1 / 296 (0.34%) 1	0 / 156 (0.00%) 0	
Hiatus hernia subjects affected / exposed occurrences (all)	0 / 296 (0.00%) 0	1 / 156 (0.64%) 1	
Paraesthesia oral subjects affected / exposed occurrences (all)	0 / 296 (0.00%) 0	1 / 156 (0.64%) 1	
Pharyngo-oesophageal diverticulum subjects affected / exposed occurrences (all)	0 / 296 (0.00%) 0	1 / 156 (0.64%) 1	
Toothache subjects affected / exposed occurrences (all)	0 / 296 (0.00%) 0	1 / 156 (0.64%) 1	

Vomiting			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Skin and subcutaneous tissue disorders			
Actinic keratosis			
subjects affected / exposed	1 / 296 (0.34%)	1 / 156 (0.64%)	
occurrences (all)	1	1	
Alopecia			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Alopecia areata			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Dermatitis			
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)	
occurrences (all)	2	0	
Dermatitis allergic			
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)	
occurrences (all)	2	0	
Dermatitis contact			
subjects affected / exposed	7 / 296 (2.36%)	0 / 156 (0.00%)	
occurrences (all)	7	0	
Dry skin			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Dyshidrotic eczema			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Eczema			
subjects affected / exposed	6 / 296 (2.03%)	1 / 156 (0.64%)	
occurrences (all)	6	1	
Eczema nummular			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Erythema			

subjects affected / exposed	5 / 296 (1.69%)	0 / 156 (0.00%)
occurrences (all)	5	0
Ingrowing nail		
subjects affected / exposed	3 / 296 (1.01%)	2 / 156 (1.28%)
occurrences (all)	3	2
Nail discolouration		
subjects affected / exposed	13 / 296 (4.39%)	2 / 156 (1.28%)
occurrences (all)	13	2
Nail disorder		
subjects affected / exposed	3 / 296 (1.01%)	0 / 156 (0.00%)
occurrences (all)	3	0
Nail fold inflammation		
subjects affected / exposed	3 / 296 (1.01%)	0 / 156 (0.00%)
occurrences (all)	3	0
Nail growth abnormal		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Onychoclasia		
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)
occurrences (all)	2	0
Onycholysis		
subjects affected / exposed	5 / 296 (1.69%)	2 / 156 (1.28%)
occurrences (all)	5	2
Onychomadesis		
subjects affected / exposed	7 / 296 (2.36%)	0 / 156 (0.00%)
occurrences (all)	7	0
Onychomalacia		
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)
occurrences (all)	2	0
Papulopustular rosacea		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Pityriasis rosea		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Pruritus		

subjects affected / exposed	4 / 296 (1.35%)	0 / 156 (0.00%)
occurrences (all)	4	0
Psoriasis		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Rash		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Rosacea		
subjects affected / exposed	3 / 296 (1.01%)	0 / 156 (0.00%)
occurrences (all)	3	0
Scab		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Seborrhoeic dermatitis		
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)
occurrences (all)	0	1
Skin discolouration		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Skin exfoliation		
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)
occurrences (all)	2	0
Skin irritation		
subjects affected / exposed	4 / 296 (1.35%)	0 / 156 (0.00%)
occurrences (all)	4	0
Skin maceration		
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)
occurrences (all)	2	0
Skin mass		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Skin reaction		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Urticaria		

subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Musculoskeletal and connective tissue disorders			
Arthralgia			
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)	
occurrences (all)	2	0	
Back pain			
subjects affected / exposed	3 / 296 (1.01%)	0 / 156 (0.00%)	
occurrences (all)	3	0	
Dupuytren's contracture			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Intervertebral disc protrusion			
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)	
occurrences (all)	2	0	
Joint swelling			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Muscle tightness			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Pain in extremity			
subjects affected / exposed	1 / 296 (0.34%)	1 / 156 (0.64%)	
occurrences (all)	1	1	
Plantar fasciitis			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Spinal column injury			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Spinal pain			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Tendon disorder			

subjects affected / exposed occurrences (all)	0 / 296 (0.00%) 0	1 / 156 (0.64%) 1	
Infections and infestations			
Abscess limb			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Acarodermatitis			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Bronchitis			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Chlamydial infection			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Conjunctivitis			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Conjunctivitis viral			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	
Cystitis			
subjects affected / exposed	2 / 296 (0.68%)	1 / 156 (0.64%)	
occurrences (all)	2	1	
Diverticulitis			
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)	
occurrences (all)	2	0	
Erysipelas			
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)	
occurrences (all)	2	0	
Fungal infection			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Herpes virus infection			
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)	
occurrences (all)	1	0	

Herpes zoster		
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)
occurrences (all)	2	0
Infection		
subjects affected / exposed	3 / 296 (1.01%)	0 / 156 (0.00%)
occurrences (all)	3	0
Influenza		
subjects affected / exposed	1 / 296 (0.34%)	1 / 156 (0.64%)
occurrences (all)	1	1
Localised infection		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Lower respiratory tract infection		
subjects affected / exposed	1 / 296 (0.34%)	1 / 156 (0.64%)
occurrences (all)	1	1
Nail bed infection		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Nasopharyngitis		
subjects affected / exposed	27 / 296 (9.12%)	14 / 156 (8.97%)
occurrences (all)	27	14
Onychomycosis		
subjects affected / exposed	15 / 296 (5.07%)	4 / 156 (2.56%)
occurrences (all)	15	4
Paronychia		
subjects affected / exposed	11 / 296 (3.72%)	0 / 156 (0.00%)
occurrences (all)	11	0
Pertussis		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Pharyngitis		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Pilonidal cyst		
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)
occurrences (all)	0	1

Pneumonia		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Pulpitis dental		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Rash pustular		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Rhinitis		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Roseola		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Rotavirus infection		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Sinusitis		
subjects affected / exposed	2 / 296 (0.68%)	0 / 156 (0.00%)
occurrences (all)	2	0
Staphylococcal infection		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Superinfection		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0
Tinea pedis		
subjects affected / exposed	28 / 296 (9.46%)	32 / 156 (20.51%)
occurrences (all)	28	32
Tinea versicolour		
subjects affected / exposed	1 / 296 (0.34%)	1 / 156 (0.64%)
occurrences (all)	1	1
Tonsillitis		
subjects affected / exposed	1 / 296 (0.34%)	0 / 156 (0.00%)
occurrences (all)	1	0

Trichophytosis			
subjects affected / exposed	0 / 296 (0.00%)	1 / 156 (0.64%)	
occurrences (all)	0	1	
Upper respiratory tract infection			
subjects affected / exposed	5 / 296 (1.69%)	1 / 156 (0.64%)	
occurrences (all)	5	1	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
07 March 2017	Amendment 1 presented an increase in number of subjects to be screened due to a higher screening failure rate than initially expected. Accordingly, the planned number of study sites was increased. The efficacy variables "Mycological cure" and "Treatment success at Week 52 (Visit 7)" were defined as key secondary efficacy variables. According to this leading function within the secondary variables these variables were analyzed on a confirmatory basis. In addition, the FAS definition was extended and additional methods for handling missing data were defined. Moreover, some modifications in assessment of treatment compliance were implemented and handling of unblinding information was clarified.
22 June 2017	Amendment 2: To increase the potential study population, some eligibility criteria were modified. Moreover, a possibility to re-screen subjects and the timing and separation of screening procedures were also specified in order to increase the potential study population. To exclude any potential effects on efficacy variables also by non-drug treatments the definition for prohibited treatments was clarified. In addition, a second central laboratory was added.
28 February 2018	Amendment 4: The planned number of subjects to be screened was further increased.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported