Clinical trial results:
A randomised, placebo-controlled trial to investigate the effectiveness of an antimicrobial product in the elimination of Staphylococcus aureus colonisation from the anterior nares of adult subjects with atopic eczema. A proof of concept study (the NASSAELIM pilot).

Summary

EudraCT number	2011-004183-29
Trial protocol	GB
Global end of trial date	21 April 2015

Results information

Result version number	v1 (current)
This version publication date	06 May 2016
First version publication date	06 May 2016

Trial information

Trial identification

Sponsor protocol code	DERC-03

Additional study identifiers

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

Notes:

Sponsors

Sponsor organisation name	Dermal Laboratories Limited
Sponsor organisation address	Tatmore Place, Gosmore, Hitchin, United Kingdom, SG4 7QR
Public contact	Krystyna Sykes, Dermal Laboratories, 01462 458866, clinical@dermal.co.uk
Scientific contact	Krystyna Sykes, Dermal Laboratories, 01462 458866, clinical@dermal.co.uk

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	11 April 2016
Is this the analysis of the primary completion data?	Yes
Primary completion date	21 April 2015
Global end of trial reached?	Yes
Global end of trial date	21 April 2015
Was the trial ended prematurely?	Yes

Notes:

General information about the trial

Main objective of the trial:

The principal objective was to determine whether the test cream is more effective than placebo (blank product) at removing Staphylococcus aureus bacteria from the nostrils of individuals with atopic eczema, when instilled into the nostrils 3 times daily for 7 days. This was determined by microbiological screening of swabs taken from the nostrils before and after treatment.

Protection of trial subjects:

Nasal Staphylococcus aureus decolonisation was not, at the time of the study, undertaken as part of standard care in atopic eczema, and so treatment with a test IMP of unknown effectiveness for this particular purpose, or indeed with a placebo IMP, raised no added risks as such to human subjects. Also the study design was such that admitted subjects' participation did not affect their standard of care or their ongoing treatment for atopic eczema or any other ongoing medical condition. Microbiological swabbing, although frequent, was minimally invasive and, at worse, an inconvenience.

Background therapy:

The subjects were allowed to carry on applying their usual treatments to manage their eczema or any other ongoing medical condition with the exception of oral corticosteroid, oral immunosuppressant or oral antibacterial treatment. However, the subjects were asked not to use any other topically applied nasal treatments apart from the test products.

Evidence for comparator:

The use of the Placebo comparator in this study was chosen because this is the gold standard when assessing effectiveness and because this did not present any significant ethical issues; given that Nasal Staphylococcus Aureus decolonisation was not, at the time of the study, undertaken as part of standard care in atopic eczema.

Actual start date of recruitment	27 October 2014
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	United Kingdom: 6
Worldwide total number of subjects	6
EEA total number of subjects	6

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37	0

wk	
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)	6
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The recruitment rate was exceptionally slow (only 18 were screened and 6 randomised in 6 months compared to the expectation in the study protocol of screening 60-100 potential subjects in this period). The study was therefore terminated.

Pre-assignment

Screening details:

Eligible subjects were adults aged >16 years old, diagnosed with Atopic Eczema and screened positive for the presence of Staphylococcus aureus (SA) in the nostrils. 18 subjects attended screening, of which 1 subject did not meet initial eligibility criteria, 1 subject dropped out and 10 subjects tested negative for SA and so were not randomised.

Period 1

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

Blinding implementation details:

The test product and placebo were presented in identical containers and labelled (in accordance with the randomisation list) by an independent Sponsor department; blinded from the clinical team. Investigators were issued code-break envelopes for use in case of emergency. The primary endpoint was Staphylococcus Aureus elimination determined microbiologically. Subjects were asked to refrain from discussing their particular study treatment with other subjects and with the investigator/CRO staff.

Arms

Are arms mutually exclusive?	Yes
Arm title	Active

Arm description:

Test product (DERC)

Arm type	Experimental
Investigational medicinal product name	DERC
Investigational medicinal product code	PR1
Other name	
Pharmaceutical forms	Cream
Routes of administration	Intranasal use

Dosage and administration details:

Subjects were asked to gently apply a match head size of the product into each nostril 3 times daily for a treatment period of 7 days.

Arm title	Placebo

Arm description:

Placebo comparator

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	PL1
Other name	
Pharmaceutical forms	Ointment
Routes of administration	Intranasal use

Dosage and administration details:

Subjects were asked to gently apply a match head size of the product into each nostril 3 times daily for a treatment period of 7 days.

Number of subjects in period 1	Active	Placebo
Started	2	4
Completed	2	3
Not completed	0	1
Withdrawn due to early termination	-	1

Baseline characteristics

Reporting groups	
Reporting group title	Overall trial
Reporting group description:	
All randomised subjects	

Reporting group values	Overall trial	Total	
Number of subjects	6	6	
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)	6	6	
From 65-84 years	0	0	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female	3	3	
Male	3	3	
Ethnic group Units: Subjects			
Caucasian	6	6	
Solar skin type Units: Subjects			
White (always burns, never tans)	0	0	
White (usually burns, tans with difficulty)	2	2	
Cream (sometimes mild burn, gradually tans)	4	4	
Brown (rarely burns, tans with ease)	0	0	
Dark brown (very rarely burns, tans very easily)	0	0	
Black (never burns, tans very easily)	0	0	
Baseline swab result: Staphylococcus Aureus Units: Subjects			
Positive (colony count >1000 CFU)	6	6	
Negative	0	0	
Baseline swab result: Presence of MRSA Units: Subjects			
Positive	0	0	
Negative	6	6	

Objective SCORAD classification of Atopic Eczema Units: Subjects			
Mild Atopic Eczema	5	5	
Moderate Atopic Eczema	1	1	
Severe Atopic Eczema	0	0	
Baseline Objective SCORAD Units: Objective SCORAD			
median	9		
full range (min-max)	3 to 18	-	

End points

End points reporting groups

Reporting group title	Active
Reporting group description: Test product (DERC)	
Reporting group title	Placebo
Reporting group description: Placebo comparator	

Primary: Primary

End point title	Primary[1]

End point description:

The percentage of subjects with Staphylococcus Aureus (SA) eradicated from the anterior nares at the end of the treatment period (day 8 swabbing), for each treatment group.

End point type	Primary

End point timeframe:

End of treatment (day 8 microbiological swabbing)

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 statistical analysis for this end point as study terminated owing to unacceptably slow recruitment.

End point values	Active	Placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	2	3[2]		
Units: % Subjects with SA eradicated	0	0		

Notes:

[2] - One subject withdrawn due to early termination

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Baseline up to 50 days depending on subjects' microbiological screening results for Staphylococcus Aureus nasal colonisation (this includes 2 weeks late onset)

Assessment type	Systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	17.0

Reporting groups

Reporting group title	All randomised patients

Reporting group description: -

Serious adverse events	All randomised patients		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 6 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	All randomised patients		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	4 / 6 (66.67%)		
General disorders and administration site conditions			
Influenza like illness	Additional description: MedDRA LLT - Flu like symptoms		
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	1		
Respiratory, thoracic and mediastinal disorders			
Nasal mucosal disorder	Additional description: MedDRA LLT - Nasal Mucosal Erythema		
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	1		
Epistaxis	Additional description: MedDRA LLT - Nasal mucus blood tinged		
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	1		

Infections and infestations			
Nasopharyngitis	Additional description: MedDRA LLT - Cold		
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	1		
Nasal herpes	Additional description: MedDRA LLT - Nasal herpes		
subjects affected / exposed	1 / 6 (16.67%)		
occurrences (all)	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? Yes

Date	Interruption	Restart date
21 April 2015	Study terminated by the Sponsor because of recruitment difficulties - only 6 subjects recruited in 6 months compared to the expected number of 60-100 in the same period.	-

Notes:

Limitations and caveats

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

Because the study was terminated early with only 6 subjects randomised compared to the planned sample size of 32 evaluable subjects, no comparative analyses of DERC vs. the Placebo were conducted. Only simple data summaries are available.

Notes: