



## Clinical trial results:

### Open-label Exploratory Study to Evaluate the Effect of Dupilumab on Skin Barrier Function in Pediatric Patients with Moderate to Severe Atopic Dermatitis

#### Summary

EudraCT number	2020-001518-40
Trial protocol	GB
Global end of trial date	30 November 2022

#### Results information

Result version number	v1 (current)
This version publication date	12 June 2023
First version publication date	12 June 2023

#### Trial information

##### Trial identification

Sponsor protocol code	LPS16764
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##### Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04718870
WHO universal trial number (UTN)	U1111-1255-4378
Other trial identifiers	IND number: 107969, Study name: PELISTAD

Notes:

#### Sponsors

Sponsor organisation name	Sanofi aventis recherche & développement
Sponsor organisation address	1 avenue Pierre Brossolette, Chilly-Mazarin Cedex, France, 91380
Public contact	Trial Transparency Team, Sanofi aventis recherche & développement, Contact-US@sanofi.com
Scientific contact	Trial Transparency Team, Sanofi aventis recherche & développement, Contact-US@sanofi.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?	Yes

Notes:

## Results analysis stage

Analysis stage	Final
Date of interim/final analysis	23 December 2022
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	30 November 2022
Was the trial ended prematurely?	No

Notes:

## General information about the trial

Main objective of the trial:

Evaluate changes in skin barrier function with transepidermal water loss (TEWL) assessed after skin tape stripping (STS) in predefined lesional skin in pediatric subjects with moderate to severe atopic dermatitis (AD) treated with dupilumab.

Protection of trial subjects:

The study was conducted by investigators experienced in the treatment of paediatric subjects. The parent(s) or guardian(s) as well as the children were fully informed of all pertinent aspects of the clinical trial as well as the possibility to discontinue at any time. In addition to the consent form for the parent(s)/guardian(s), an assent form in child-appropriate language was provided and explained to the child. Repeated invasive procedures were minimised. The number of blood samples as well as the amount of blood drawn were adjusted according to age and weight. A topical anesthesia may have been used to minimise distress and discomfort.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	19 February 2021
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 States: 18
Country: Number of subjects enrolled	United Kingdom: 23
Worldwide total number of subjects	41
EEA total number of subjects	0

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)	41
Adolescents (12-17 years)	0

Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details:

Study was conducted at 3 active sites in the United States and United Kingdom. A total of 43 subjects were screened between 19 Feb 2021 and 12 May 2022, out of which 41 were enrolled and 2 were screen failures due to not meeting inclusion criteria.

### Pre-assignment

Screening details:

Healthy volunteer's cohort received no treatment and was considered as a reference comparator group.

### Period 1

Period 1 title	Overall study (overall period)
Is this the baseline period?	Yes
Allocation method	Non-randomised - controlled
Blinding used	Not blinded

### Arms

Are arms mutually exclusive?	Yes
<b>Arm title</b>	Healthy Volunteers

Arm description:

Healthy volunteers with age, gender, location of targeted skin lesion area and study site matched to selected atopic dermatitis (AD) subjects, received no treatment, but were monitored in similar way as AD subjects.

Arm type	No intervention
No investigational medicinal product assigned in this arm	
<b>Arm title</b>	Atopic Dermatitis Subjects

Arm description:

Pediatric subjects with moderate-to-severe AD and with baseline body weight more than or equal to ( $\geq$ ) 15 kilograms (kg) and less than ( $<$ ) 30 kg received a subcutaneous (SC) loading dose of dupilumab 600 milligrams (mg) (2 injections of dupilumab 300 mg) on Day 1 (Week 0) followed by dupilumab 300 mg SC injection every 4 week (Q4W), from Week 4 to Week 12. Pediatric subjects with body weight  $\geq$  30 kg and  $<$  60 kg received SC loading dose of dupilumab 400 mg (2 injections of dupilumab 200 mg) on Day 1 (Week 0), followed by dupilumab 200 mg SC injection every 2 week (Q2W), from Week 2 to Week 14.

Arm type	Experimental
Investigational medicinal product name	Dupilumab
Investigational medicinal product code	SAR231893
Other name	Dupixent®, REGN668
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

Dupilumab loading dose of 600 mg (body weight  $\geq$  15 kg and  $<$  30 kg) and 400 mg (body weight  $\geq$  30 kg and  $<$  60 kg) SC injections followed by subsequent doses of dupilumab 300 mg SC injection every 4 weeks and dupilumab 200 mg every 2 weeks respectively.

<b>Number of subjects in period 1</b>	Healthy Volunteers	Atopic Dermatitis Subjects
Started	18	23
Completed	18	23

## Baseline characteristics

### Reporting groups

Reporting group title	Healthy Volunteers
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Reporting group description:

Healthy volunteers with age, gender, location of targeted skin lesion area and study site matched to selected atopic dermatitis (AD) subjects, received no treatment, but were monitored in similar way as AD subjects.

Reporting group title	Atopic Dermatitis Subjects
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Reporting group description:

Pediatric subjects with moderate-to-severe AD and with baseline body weight more than or equal to ( $\geq$ ) 15 kilograms (kg) and less than ( $<$ ) 30 kg received a subcutaneous (SC) loading dose of dupilumab 600 milligrams (mg) (2 injections of dupilumab 300 mg) on Day 1 (Week 0) followed by dupilumab 300 mg SC injection every 4 week (Q4W), from Week 4 to Week 12. Pediatric subjects with body weight  $\geq$  30 kg and  $<$ 60 kg received SC loading dose of dupilumab 400 mg (2 injections of dupilumab 200 mg) on Day 1 (Week 0), followed by dupilumab 200 mg SC injection every 2 week (Q2W), from Week 2 to Week 14.

Reporting group values	Healthy Volunteers	Atopic Dermatitis Subjects	Total
Number of subjects	18	23	41
Age categorical			
Units: Subjects			

Age continuous			
Units: years			
arithmetic mean	8.2	7.8	
standard deviation	$\pm 1.8$	$\pm 1.6$	-
Gender categorical			
Units: Subjects			
Female	8	8	16
Male	10	15	25
Race			
Units: Subjects			
White	9	16	25
Black or african american	2	2	4
Asian	6	3	9
Multiple	0	1	1
Not reported	1	1	2

## End points

### End points reporting groups

Reporting group title	Healthy Volunteers
Reporting group description:	
Healthy volunteers with age, gender, location of targeted skin lesion area and study site matched to selected atopic dermatitis (AD) subjects, received no treatment, but were monitored in similar way as AD subjects.	
Reporting group title	Atopic Dermatitis Subjects
Reporting group description:	
Pediatric subjects with moderate-to-severe AD and with baseline body weight more than or equal to ( $\geq$ ) 15 kilograms (kg) and less than ( $<$ ) 30 kg received a subcutaneous (SC) loading dose of dupilumab 600 milligrams (mg) (2 injections of dupilumab 300 mg) on Day 1 (Week 0) followed by dupilumab 300 mg SC injection every 4 week (Q4W), from Week 4 to Week 12. Pediatric subjects with body weight $\geq$ 30 kg and $<$ 60 kg received SC loading dose of dupilumab 400 mg (2 injections of dupilumab 200 mg) on Day 1 (Week 0), followed by dupilumab 200 mg SC injection every 2 week (Q2W), from Week 2 to Week 14.	

### Primary: Percent Change From Baseline in Transepidermal Water Loss (TEWL) After 5 Skin Tape Stripping (STS) on Lesional Skin (LS) in AD Subjects at Week 16

End point title	Percent Change From Baseline in Transepidermal Water Loss (TEWL) After 5 Skin Tape Stripping (STS) on Lesional Skin (LS) in AD Subjects at Week 16 <sup>[1][2]</sup>
End point description:	
TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise skin barrier function (SBF). With STS, the uppermost layers of skin are peeled away using adhesive discs. LS areas for TEWL assessment and STS was identified at baseline (predefined skin area). Within predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS & after 5, 10, 15 & 20 STS on pre-defined LS areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on 1st spot. Percent change from baseline at Week 16 in TEWL after 5 STS on LS (1st spot) in AD subjects were reported in this endpoint. mITT population: AD subjects, had at least 1 dose of IMP & healthy volunteers, had at least 1 TEWL/STS. If prohibited therapies used, only visits prior to rescue therapy were considered. Number of subjects analysed = subjects with available data for this endpoint.	
End point type	Primary
End point timeframe:	
Baseline, Week 16	
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: Statistical analysis is not presented due to normality issues with the repeated measure mixed model.

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	18			
Units: percent change				
arithmetic mean (standard deviation)	-38.5633 ( $\pm$ 27.1211)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Percent Change From Baseline in TEWL After 20 STS on Lesional Skin in AD Subjects at Week 16

End point title	Percent Change From Baseline in TEWL After 20 STS on Lesional Skin in AD Subjects at Week 16 <sup>[3]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined LS areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 20 STS on LS (first spot) in AD subjects were reported in this endpoint. Analysed on modified intent-to-treat (mITT) population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

[3] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: percent change				
arithmetic mean (standard deviation)	-33.1336 (± 28.1613)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Absolute Change From Baseline in TEWL After 20 STS on Lesional Skin in AD Subjects at Week 16

End point title	Absolute Change From Baseline in TEWL After 20 STS on Lesional Skin in AD Subjects at Week 16 <sup>[4]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that was used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The LS areas for TEWL assessment and STS were



identified at baseline (predefined skin area). Within the predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 20 STS on LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

[4] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: Data for this endpoint is reported for the applicable arm in the study.

<b>End point values</b>	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-35.6671 ( $\pm$ 31.2267)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 20 STS on Non-lesional Skin (Non-LS) in AD Subjects at Week 16

End point title	Percent Change From Baseline in TEWL After 20 STS on Non-lesional Skin (Non-LS) in AD Subjects at Week 16 <sup>[5]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 20 STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

[5] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: percent change				
arithmetic mean (standard deviation)	-6.1452 ( $\pm$ 67.9496)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Absolute Change From Baseline in TEWL After 20 STS on Non-lesional Skin in AD Subjects at Week 16

End point title	Absolute Change From Baseline in TEWL After 20 STS on Non-lesional Skin in AD Subjects at Week 16 <sup>[6]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 20 STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

[6] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-13.6682 ( $\pm$ 33.3065)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Percent Change From Baseline in TEWL After 20 STS on Normal Skin in Healthy Volunteers at Week 16

End point title	Percent Change From Baseline in TEWL After 20 STS on Normal
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## End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 20 STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	11			
Units: percent change				
arithmetic mean (standard deviation)	13.2578 (± 64.3880)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 20 STS on Normal Skin in Healthy Volunteers at Week 16

End point title	Absolute Change From Baseline in TEWL After 20 STS on Normal Skin in Healthy Volunteers at Week 16 <sup>[8]</sup>
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## End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 20 STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

<b>End point values</b>	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	11			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	5.9327 ( $\pm$ 32.0123)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 15 STS on Lesional Skin in AD Subjects at Week 16

End point title	Percent Change From Baseline in TEWL After 15 STS on Lesional Skin in AD Subjects at Week 16 <sup>[9]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 15 STS on LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on MITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

[9] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period. Justification: Data for this endpoint is reported for the applicable arm in the study.

<b>End point values</b>	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	18			
Units: percent change				
arithmetic mean (standard deviation)	-33.3119 ( $\pm$ 32.7125)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 15 STS on Lesional Skin in AD Subjects at Week 16

End point title	Absolute Change From Baseline in TEWL After 15 STS on Lesional Skin in AD Subjects at Week 16 <sup>[10]</sup>
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**End point description:**

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 15 STS on LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

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End point type	Secondary
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**End point timeframe:**

Baseline, Week 16

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**Notes:**

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	18			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-33.4028 (± 31.1957)			

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**Statistical analyses**

No statistical analyses for this end point

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**Secondary: Percent Change From Baseline in TEWL After 15 STS on Non-lesional Skin in AD Subjects at Week 16**

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End point title	Percent Change From Baseline in TEWL After 15 STS on Non-lesional Skin in AD Subjects at Week 16 <sup>[11]</sup>
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**End point description:**

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 15 STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

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End point type	Secondary
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**End point timeframe:**

Baseline, Week 16

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**Notes:**

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: percent change				
arithmetic mean (standard deviation)	-7.6067 ( $\pm$ 54.7945)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 15 STS on Non-lesional Skin in AD Subjects at Week 16

End point title	Absolute Change From Baseline in TEWL After 15 STS on Non-lesional Skin in AD Subjects at Week 16 <sup>[12]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 15 STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-12.6576 ( $\pm$ 30.0412)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 15 STS on Normal Skin in Healthy Volunteers at Week 16

End point title	Percent Change From Baseline in TEWL After 15 STS on Normal Skin in Healthy Volunteers at Week 16 <sup>[13]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 15 STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	11			
Units: percent change				
arithmetic mean (standard deviation)	4.5364 (± 42.7525)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 15 STS on Normal Skin in Healthy Volunteers at Week 16

End point title	Absolute Change From Baseline in TEWL After 15 STS on Normal Skin in Healthy Volunteers at Week 16 <sup>[14]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 15 STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

<b>End point values</b>	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	11			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	0.1082 ( $\pm$ 17.5865)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 10 STS on Lesional Skin in AD Subjects at Week 16

End point title	Percent Change From Baseline in TEWL After 10 STS on Lesional Skin in AD Subjects at Week 16 <sup>[15]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 10 STS on LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

<b>End point values</b>	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: percent change				
arithmetic mean (standard deviation)	-34.7741 ( $\pm$ 31.0541)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 10 STS on Lesional Skin in AD Subjects at Week 16

End point title	Absolute Change From Baseline in TEWL After 10 STS on
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## End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 10 STS on LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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## End point timeframe:

Baseline, Week 16

## Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-33.1024 (± 36.2286)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 10 STS on Non-lesional Skin in AD Subjects at Week 16

End point title	Percent Change From Baseline in TEWL After 10 STS on Non-lesional Skin in AD Subjects at Week 16 <sup>[17]</sup>
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## End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 10 STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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## End point timeframe:

Baseline, Week 16

## Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: percent change				
arithmetic mean (standard deviation)	-3.8193 ( $\pm$ 74.6263)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 10 STS on Non-lesional Skin in AD Subjects at Week 16

End point title	Absolute Change From Baseline in TEWL After 10 STS on Non-lesional Skin in AD Subjects at Week 16 <sup>[18]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified timepoints. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 10 STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-10.9488 ( $\pm$ 31.1300)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 10 STS on Normal Skin in Healthy Volunteers at Week 16

End point title	Percent Change From Baseline in TEWL After 10 STS on Normal Skin in Healthy Volunteers at Week 16 <sup>[19]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 10 STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	11			
Units: percent change				
arithmetic mean (standard deviation)	0.7091 ( $\pm$ 25.0615)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 10 STS on Normal Skin in Healthy Volunteers at Week 16

End point title	Absolute Change From Baseline in TEWL After 10 STS on Normal Skin in Healthy Volunteers at Week 16 <sup>[20]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 10 STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

<b>End point values</b>	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	11			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-1.3482 ( $\pm$ 6.6778)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 5 STS on Non-lesional Skin in AD Subjects at Week 16

End point title	Percent Change From Baseline in TEWL After 5 STS on Non-lesional Skin in AD Subjects at Week 16 <sup>[21]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 5 STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

<b>End point values</b>	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: percent change				
arithmetic mean (standard deviation)	-4.8842 ( $\pm$ 70.5670)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 5 STS on Non-lesional Skin in AD Subjects at Week 16

End point title	Absolute Change From Baseline in TEWL After 5 STS on Non-
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## End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 5 STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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## End point timeframe:

Baseline, Week 16

## Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	17			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-9.0771 ( $\pm$ 21.3022)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 5 STS on Normal Skin in Healthy Volunteers at Week 16

End point title	Percent Change From Baseline in TEWL After 5 STS on Normal Skin in Healthy Volunteers at Week 16 <sup>[23]</sup>
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## End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Percent change from baseline at Week 16 in TEWL after 5 STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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## End point timeframe:

Baseline, Week 16

## Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	11			
Units: percent change				
arithmetic mean (standard deviation)	1.4464 ( $\pm$ 26.7257)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Absolute Change From Baseline in TEWL After 5 STS on Normal Skin in Healthy Volunteers at Week 16

End point title	Absolute Change From Baseline in TEWL After 5 STS on Normal Skin in Healthy Volunteers at Week 16 <sup>[24]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, the uppermost layers of the skin are peeled away using adhesive discs. The normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within the predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1) and Week 16 was conducted on first spot. Absolute change from baseline at Week 16 in TEWL after 5 STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint.

End point type	Secondary
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End point timeframe:

Baseline, Week 16

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	11			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)	-1.0255 ( $\pm$ 4.3657)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Percent Change From Baseline in TEWL Before STS on Lesional Skin in AD Subjects at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

End point title	Percent Change From Baseline in TEWL Before STS on Lesional Skin in AD Subjects at Days 8, 15, 22, 29, 43, 57, 85, 113,
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## End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. LS areas for TEWL assessment were identified at baseline (predefined skin area). Within predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS on pre-defined LS areas at specified time points. At each visit, before STS, all 3 spots were assessed. Percent change from baseline at specified time points in TEWL before STS on LS (at each spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'n' = subjects with available data for each specified category.

End point type	Secondary
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## End point timeframe:

Baseline, Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

## Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	23			
Units: percent change				
arithmetic mean (standard deviation)				
Day 8 - Spot 1 (n=22)	-7.1596 (± 36.6637)			
Day 8 - Spot 2 (n=23)	-6.3439 (± 33.8145)			
Day 8 - Spot 3 (n=23)	-7.0747 (± 28.3554)			
Day 15 - Spot 1 (n=22)	-15.3096 (± 45.6163)			
Day 15 - Spot 2 (n=22)	-11.0740 (± 35.5483)			
Day 15 - Spot 3 (n=22)	-8.1780 (± 44.9382)			
Day 22 - Spot 1 (n=21)	-30.3070 (± 33.6643)			
Day 22 - Spot 2 (n=21)	-29.1730 (± 31.7167)			
Day 22 - Spot 3 (n=21)	-27.0015 (± 25.8528)			
Day 29 - Spot 1 (n=20)	-37.8349 (± 24.7709)			
Day 29 - Spot 2 (n=20)	-33.0139 (± 27.8560)			
Day 29 - Spot 3 (n=20)	-32.7080 (± 28.8445)			
Day 43 - Spot 1 (n=17)	-37.8675 (± 29.0275)			
Day 43 - Spot 2 (n=17)	-36.1625 (± 28.9829)			
Day 43 - Spot 3 (n=17)	-32.9996 (± 33.2028)			
Day 57 - Spot 1 (n=19)	-38.2449 (± 40.0558)			
Day 57 - Spot 2 (n=19)	-39.3104 (± 27.6888)			

Day 57 - Spot 3 (n=19)	-35.8992 (± 27.9526)			
Day 85 - Spot 1 (n=18)	-45.6060 (± 23.2839)			
Day 85 - Spot 2 (n=18)	-40.8609 (± 30.8002)			
Day 85 - Spot 3 (n=18)	-41.1371 (± 24.5842)			
Day 113 - Spot 1 (n=18)	-36.0863 (± 33.7259)			
Day 113 - Spot 2 (n=18)	-37.4815 (± 30.8507)			
Day 113 - Spot 3 (n=18)	-32.3491 (± 29.2966)			
Day 155 - Spot 1 (n=14)	-40.9536 (± 30.9966)			
Day 155 - Spot 2 (n=14)	-20.8463 (± 50.6518)			
Day 155 - Spot 3 (n=14)	-31.3185 (± 42.0614)			
Day 197 - Spot 1 (n=15)	-35.2305 (± 45.8818)			
Day 197 - Spot 2 (n=15)	-30.3358 (± 48.3028)			
Day 197 - Spot 3 (n=15)	-36.5267 (± 37.7230)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL Before STS on Lesional Skin in AD Subjects at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

End point title	Absolute Change From Baseline in TEWL Before STS on Lesional Skin in AD Subjects at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197 <sup>[26]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. LS areas for TEWL assessment were identified at baseline (predefined skin area). Within predefined LS and areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS on pre-defined LS areas at specified time points. At each visit, before STS, all 3 spots were assessed. Absolute change from baseline at specified time points in TEWL before STS on LS (at each spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'n' = subjects with available data for each specified category.

End point type	Secondary
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End point timeframe:

Baseline, Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.



End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	23			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)				
Day 8 - Spot 1 (n=22)	-9.3486 ( $\pm$ 21.2256)			
Day 8 - Spot 2 (n=23)	-6.0491 ( $\pm$ 17.5810)			
Day 8 - Spot 3 (n=23)	-3.1965 ( $\pm$ 14.4640)			
Day 15 - Spot 1 (n=22)	-15.4336 ( $\pm$ 25.0975)			
Day 15 - Spot 2 (n=22)	-9.8073 ( $\pm$ 19.7385)			
Day 15 - Spot 3 (n=22)	-7.6682 ( $\pm$ 21.9239)			
Day 22 - Spot 1 (n=21)	-23.0157 ( $\pm$ 26.8847)			
Day 22 - Spot 2 (n=21)	-20.7186 ( $\pm$ 23.4149)			
Day 22 - Spot 3 (n=21)	-15.6557 ( $\pm$ 20.1212)			
Day 29 - Spot 1 (n=20)	-23.9585 ( $\pm$ 21.7106)			
Day 29 - Spot 2 (n=20)	-21.2010 ( $\pm$ 21.2593)			
Day 29 - Spot 3 (n=20)	-17.9170 ( $\pm$ 19.7310)			
Day 43 - Spot 1 (n=17)	-27.0535 ( $\pm$ 28.0249)			
Day 43 - Spot 2 (n=17)	-24.5188 ( $\pm$ 25.6684)			
Day 43 - Spot 3 (n=17)	-20.7018 ( $\pm$ 22.5936)			
Day 57 - Spot 1 (n=19)	-25.1221 ( $\pm$ 27.0210)			
Day 57 - Spot 2 (n=19)	-24.2358 ( $\pm$ 24.6028)			
Day 57 - Spot 3 (n=19)	-20.3379 ( $\pm$ 20.3751)			
Day 85 - Spot 1 (n=18)	-29.1917 ( $\pm$ 24.3114)			
Day 85 - Spot 2 (n=18)	-24.4494 ( $\pm$ 24.2054)			
Day 85 - Spot 3 (n=18)	-23.1056 ( $\pm$ 20.4692)			
Day 113 - Spot 1 (n=18)	-24.6678 ( $\pm$ 27.8013)			
Day 113 - Spot 2 (n=18)	-23.2878 ( $\pm$ 26.5670)			
Day 113 - Spot 3 (n=18)	-17.9028 ( $\pm$ 22.2483)			
Day 155 - Spot 1 (n=14)	-28.2564 ( $\pm$ 29.2212)			
Day 155 - Spot 2 (n=14)	-18.7786 ( $\pm$ 31.4917)			
Day 155 - Spot 3 (n=14)	-19.8921 ( $\pm$ 27.8520)			

Day 197 - Spot 1 (n=15)	-27.4493 ( $\pm$ 33.7080)			
Day 197 - Spot 2 (n=15)	-22.5607 ( $\pm$ 31.7696)			
Day 197 - Spot 3 (n=15)	-22.0860 ( $\pm$ 27.1286)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Percent Change From Baseline in TEWL Before STS on Non-lesional Skin in AD Subjects at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

End point title	Percent Change From Baseline in TEWL Before STS on Non-lesional Skin in AD Subjects at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197 <sup>[27]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. Non-LS areas for TEWL assessment were identified at baseline (predefined skin area). Within predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS on pre-defined non-LS areas at specified time points. At each visit, before STS, all 3 spots were assessed. Percent change from baseline at specified time points in TEWL before STS on non-LS (at each spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'n' = subjects with available data for each specified category.

End point type	Secondary
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End point timeframe:

Baseline, Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	23			
Units: percent change				
arithmetic mean (standard deviation)				
Day 8 - Spot 1 (n=23)	41.0825 ( $\pm$ 91.3744)			
Day 8 - Spot 2 (n=21)	13.5236 ( $\pm$ 49.3733)			
Day 8 - Spot 3 (n=23)	9.7943 ( $\pm$ 43.9272)			
Day 15 - Spot 1 (n=22)	19.0612 ( $\pm$ 58.1703)			
Day 15 - Spot 2 (n=21)	9.6866 ( $\pm$ 52.6831)			
Day 15 - Spot 3 (n=21)	13.2574 ( $\pm$ 55.8095)			
Day 22 - Spot 1 (n=21)	-3.9277 ( $\pm$ 35.9880)			
Day 22 - Spot 2 (n=20)	8.9306 ( $\pm$ 70.2617)			

Day 22 - Spot 3 (n=21)	0.4973 ( $\pm$ 49.5636)			
Day 29 - Spot 1 (n=20)	-8.9585 ( $\pm$ 39.0443)			
Day 29 - Spot 2 (n=19)	-10.5728 ( $\pm$ 35.2672)			
Day 29 - Spot 3 (n=20)	-13.0407 ( $\pm$ 44.5264)			
Day 43 - Spot 1 (n=17)	-15.6919 ( $\pm$ 29.7995)			
Day 43 - Spot 2 (n=16)	-21.6885 ( $\pm$ 30.1255)			
Day 43 - Spot 3 (n=17)	-16.2025 ( $\pm$ 42.7984)			
Day 57 - Spot 1 (n=19)	-24.5008 ( $\pm$ 26.9801)			
Day 57 - Spot 2 (n=18)	-27.6040 ( $\pm$ 23.0969)			
Day 57 - Spot 3 (n=19)	-25.7321 ( $\pm$ 33.1310)			
Day 85 - Spot 1 (n=18)	-21.9316 ( $\pm$ 34.3620)			
Day 85 - Spot 2 (n=17)	-16.7008 ( $\pm$ 62.4384)			
Day 85 - Spot 3 (n=18)	-29.2721 ( $\pm$ 40.0673)			
Day 113 - Spot 1 (n=17)	-20.4359 ( $\pm$ 42.6948)			
Day 113 - Spot 2 (n=16)	-23.1303 ( $\pm$ 41.2717)			
Day 113 - Spot 3 (n=17)	-27.4981 ( $\pm$ 33.5326)			
Day 155 - Spot 1 (n=14)	-6.7535 ( $\pm$ 73.4261)			
Day 155 - Spot 2 (n=13)	-16.3903 ( $\pm$ 41.9864)			
Day 155 - Spot 3 (n=14)	-19.3970 ( $\pm$ 46.5302)			
Day 197 - Spot 1 (n=16)	-23.3812 ( $\pm$ 39.5978)			
Day 197 - Spot 2 (n=15)	-27.3104 ( $\pm$ 32.8267)			
Day 197 - Spot 3 (n=16)	-22.1813 ( $\pm$ 40.5124)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL Before STS on Non-lesional Skin in AD Subjects at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

End point title	Absolute Change From Baseline in TEWL Before STS on Non-lesional Skin in AD Subjects at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197 <sup>[28]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. Non-LS areas for TEWL assessment were identified at baseline (predefined skin area). Within predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for

subsequent SBF assessment. TEWL was measured prior to STS on pre-defined non-LS areas at specified time points. At each visit, before STS, all 3 spots were assessed. Absolute change from baseline at specified time points in TEWL before STS on non-LS (at each spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'n' = subjects with available data for each specified category.

End point type	Secondary
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End point timeframe:

Baseline, Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	23			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)				
Day 8 - Spot 1 (n=23)	4.1752 ( $\pm$ 14.1047)			
Day 8 - Spot 2 (n=21)	-0.0248 ( $\pm$ 11.8585)			
Day 8 - Spot 3 (n=23)	-0.3413 ( $\pm$ 9.8571)			
Day 15 - Spot 1 (n=22)	0.4723 ( $\pm$ 9.7975)			
Day 15 - Spot 2 (n=21)	-2.6176 ( $\pm$ 13.1001)			
Day 15 - Spot 3 (n=21)	-1.0171 ( $\pm$ 11.3877)			
Day 22 - Spot 1 (n=21)	-3.8162 ( $\pm$ 10.3046)			
Day 22 - Spot 2 (n=20)	-3.5735 ( $\pm$ 16.4593)			
Day 22 - Spot 3 (n=21)	-5.3314 ( $\pm$ 12.8392)			
Day 29 - Spot 1 (n=20)	-5.3400 ( $\pm$ 10.8674)			
Day 29 - Spot 2 (n=19)	-6.7411 ( $\pm$ 13.5999)			
Day 29 - Spot 3 (n=20)	-9.5905 ( $\pm$ 14.0754)			
Day 43 - Spot 1 (n=17)	-6.7424 ( $\pm$ 9.7834)			
Day 43 - Spot 2 (n=16)	-8.8444 ( $\pm$ 12.4876)			
Day 43 - Spot 3 (n=17)	-10.5600 ( $\pm$ 14.1984)			
Day 57 - Spot 1 (n=19)	-8.2874 ( $\pm$ 8.5546)			
Day 57 - Spot 2 (n=18)	-9.7772 ( $\pm$ 11.7879)			
Day 57 - Spot 3 (n=19)	-11.9179 ( $\pm$ 13.1662)			
Day 85 - Spot 1 (n=18)	-8.2272 ( $\pm$ 11.6158)			
Day 85 - Spot 2 (n=17)	-7.6171 ( $\pm$ 16.1511)			

Day 85 - Spot 3 (n=18)	-13.1811 ( $\pm$ 14.4647)			
Day 113 - Spot 1 (n=17)	-8.0665 ( $\pm$ 11.9970)			
Day 113 - Spot 2 (n=16)	-9.2906 ( $\pm$ 13.7202)			
Day 113 - Spot 3 (n=17)	-11.2776 ( $\pm$ 12.9322)			
Day 155 - Spot 1 (n=14)	-7.0229 ( $\pm$ 15.4066)			
Day 155 - Spot 2 (n=13)	-7.0408 ( $\pm$ 12.8562)			
Day 155 - Spot 3 (n=14)	-10.4414 ( $\pm$ 14.5146)			
Day 197 - Spot 1 (n=16)	-8.9200 ( $\pm$ 11.3266)			
Day 197 - Spot 2 (n=15)	-11.2953 ( $\pm$ 15.3452)			
Day 197 - Spot 3 (n=16)	-11.1625 ( $\pm$ 16.2087)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL Before STS on Normal Skin in Healthy Volunteers at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

End point title	Percent Change From Baseline in TEWL Before STS on Normal Skin in Healthy Volunteers at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197 <sup>[29]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. Normal skin areas for TEWL assessment were identified at baseline (predefined skin area). Within predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS on pre-defined normal skin areas at specified time points. At each visit, before STS, all 3 spots were assessed. Percent change from baseline at specified time points in TEWL before STS on normal skin (at each spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint and 'n' = subjects with available data for each specified category.

End point type	Secondary
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End point timeframe:

Baseline, Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: percent change				
arithmetic mean (standard deviation)				
Day 8 - Spot 1 (n=13)	5.0103 ( $\pm$ 39.4170)			

Day 8 - Spot 2 (n=13)	-8.7688 ( $\pm$ 20.5764)			
Day 8 - Spot 3 (n=13)	-3.8203 ( $\pm$ 19.5160)			
Day 15 - Spot 1 (n=14)	1.9837 ( $\pm$ 27.7012)			
Day 15 - Spot 2 (n=14)	-4.0758 ( $\pm$ 22.1886)			
Day 15 - Spot 3 (n=14)	-1.7489 ( $\pm$ 21.1652)			
Day 22 - Spot 1 (n=12)	-2.6655 ( $\pm$ 19.8558)			
Day 22 - Spot 2 (n=12)	7.5939 ( $\pm$ 22.7859)			
Day 22 - Spot 3 (n=12)	3.8603 ( $\pm$ 12.1068)			
Day 29 - Spot 1 (n=13)	-1.7648 ( $\pm$ 21.4820)			
Day 29 - Spot 2 (n=13)	9.9969 ( $\pm$ 14.4219)			
Day 29 - Spot 3 (n=13)	8.4098 ( $\pm$ 15.2499)			
Day 43 - Spot 1 (n=14)	1.4115 ( $\pm$ 27.8012)			
Day 43 - Spot 2 (n=14)	2.9668 ( $\pm$ 30.1272)			
Day 43 - Spot 3 (n=14)	13.4093 ( $\pm$ 35.9985)			
Day 57 - Spot 1 (n=12)	7.6533 ( $\pm$ 24.0747)			
Day 57 - Spot 2 (n=12)	5.3384 ( $\pm$ 17.9065)			
Day 57 - Spot 3 (n=12)	12.6926 ( $\pm$ 24.7125)			
Day 85 - Spot 1 (n=14)	5.2021 ( $\pm$ 23.1397)			
Day 85 - Spot 2 (n=14)	0.7096 ( $\pm$ 19.5448)			
Day 85 - Spot 3 (n=14)	5.1021 ( $\pm$ 20.0690)			
Day 113 - Spot 1 (n=11)	2.6054 ( $\pm$ 26.2241)			
Day 113 - Spot 2 (n=11)	9.4234 ( $\pm$ 24.1533)			
Day 113 - Spot 3 (n=11)	17.0905 ( $\pm$ 16.4596)			
Day 155 - Spot 1 (n=15)	10.3105 ( $\pm$ 52.8138)			
Day 155 - Spot 2 (n=15)	11.2398 ( $\pm$ 22.7028)			
Day 155 - Spot 3 (n=15)	11.5842 ( $\pm$ 27.2298)			
Day 197 - Spot 1 (n=15)	3.3636 ( $\pm$ 26.9400)			
Day 197 - Spot 2 (n=15)	5.3772 ( $\pm$ 19.9583)			
Day 197 - Spot 3 (n=15)	12.0900 ( $\pm$ 24.8690)			

## Statistical analyses

No statistical analyses for this end point

### Secondary: Absolute Change From Baseline in TEWL Before STS on Normal Skin in Healthy Volunteers at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

End point title	Absolute Change From Baseline in TEWL Before STS on Normal Skin in Healthy Volunteers at Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197 <sup>[30]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. Normal skin areas for TEWL assessment were identified at baseline (predefined skin area). Within predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS on pre-defined normal skin areas at specified time points. At each visit, before STS, all 3 spots were assessed. Absolute change from baseline at specified time points in TEWL before STS on normal skin (at each spot) in healthy volunteers were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint and 'n' = subjects with available data for each specified category.

End point type	Secondary
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End point timeframe:

Baseline, Days 8, 15, 22, 29, 43, 57, 85, 113, 155 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)				
Day 8 - Spot 1 (n=13)	-0.2508 (± 4.8798)			
Day 8 - Spot 2 (n=13)	-1.8215 (± 3.3907)			
Day 8 - Spot 3 (n=13)	-0.7869 (± 2.9791)			
Day 15 - Spot 1 (n=14)	-0.5786 (± 3.3947)			
Day 15 - Spot 2 (n=14)	-1.0029 (± 3.4320)			
Day 15 - Spot 3 (n=14)	-0.3829 (± 3.3925)			
Day 22 - Spot 1 (n=12)	-0.7575 (± 3.2991)			
Day 22 - Spot 2 (n=12)	1.0233 (± 3.7207)			
Day 22 - Spot 3 (n=12)	0.6433 (± 2.0759)			
Day 29 - Spot 1 (n=13)	-1.1631 (± 3.1429)			
Day 29 - Spot 2 (n=13)	0.8585 (± 1.8609)			
Day 29 - Spot 3 (n=13)	0.7938 (± 1.7624)			
Day 43 - Spot 1 (n=14)	-1.0129 (± 4.0940)			

Day 43 - Spot 2 (n=14)	-0.8357 ( $\pm$ 4.7103)			
Day 43 - Spot 3 (n=14)	0.7057 ( $\pm$ 5.1247)			
Day 57 - Spot 1 (n=12)	0.6308 ( $\pm$ 4.1304)			
Day 57 - Spot 2 (n=12)	0.2283 ( $\pm$ 2.6839)			
Day 57 - Spot 3 (n=12)	1.5142 ( $\pm$ 4.1943)			
Day 85 - Spot 1 (n=14)	0.0164 ( $\pm$ 3.2348)			
Day 85 - Spot 2 (n=14)	-0.3221 ( $\pm$ 3.5460)			
Day 85 - Spot 3 (n=14)	0.2779 ( $\pm$ 3.8491)			
Day 113 - Spot 1 (n=11)	-0.3791 ( $\pm$ 3.4231)			
Day 113 - Spot 2 (n=11)	0.4882 ( $\pm$ 2.5528)			
Day 113 - Spot 3 (n=11)	2.0527 ( $\pm$ 2.1762)			
Day 155 - Spot 1 (n=15)	-0.9293 ( $\pm$ 6.5972)			
Day 155 - Spot 2 (n=15)	0.6880 ( $\pm$ 3.7653)			
Day 155 - Spot 3 (n=15)	0.4793 ( $\pm$ 4.5057)			
Day 197 - Spot 1 (n=15)	-0.6153 ( $\pm$ 4.8187)			
Day 197 - Spot 2 (n=15)	-0.0427 ( $\pm$ 3.6560)			
Day 197 - Spot 3 (n=15)	0.6747 ( $\pm$ 4.8536)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in Area Under the Curve (AUC) of TEWL on Lesional Skin in AD Subjects at Days 57, 113 and 197

End point title	Percent Change From Baseline in Area Under the Curve (AUC) of TEWL on Lesional Skin in AD Subjects at Days 57, 113 and 197 <sup>[31]</sup>
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### End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum used to characterise SBF. TEWL combined with STS measures SBF. TEWL AUC done over defined number of STS used to reflect overall integrity of stratum corneum. LS areas for TEWL assessment & STS was identified at baseline (predefined skin area). Within predefined LS areas, 3 closely adjacent nonoverlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS & after 5, 10, 15 & 20 STS on pre-defined LS areas at specified time points. TEWL AUC was composite measure before and after 5, 10, 15 and 20 STS at each specified time point. AUC of TEWL: calculated for each visit using trapezoidal method. STS assessment at baseline (Week 0, Day 1), Days 57, 113 & 197 was conducted on first spot. Percent change from baseline at specified time points in TEWL AUC (first spot) in AD subjects were reported in this endpoint. mITT. 'Number of subjects analysed' = subjects with available data.

End point type	Secondary
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### End point timeframe:

Baseline, Days 57, 113 and 197



Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	19 <sup>[32]</sup>			
Units: percent change				
arithmetic mean (standard deviation)				
Day 57 (n=19)	-38.2091 (± 25.6654)			
Day 113 (n=18)	-34.0025 (± 29.1866)			
Day 197 (n=15)	-40.0143 (± 26.9737)			

Notes:

[32] - Here, 'n' = subjects with available data for each category.

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in AUC of TEWL on Lesional Skin in AD Subjects at Days 57, 113 and 197

End point title	Absolute Change From Baseline in AUC of TEWL on Lesional Skin in AD Subjects at Days 57, 113 and 197 <sup>[33]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum to characterise SBF. TEWL combined with STS measures SBF. TEWL AUC done over defined number of STS (nsts) used to reflect overall integrity of stratum corneum. LS areas for TEWL assessment & STS was identified at baseline (predefined skin area). Within predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS & after 5, 10, 15 & 20 STS on pre-defined LS areas at specified time points. TEWL AUC was composite measure before and after 5, 10, 15 & 20 STS at each specified time point. AUC of TEWL: calculated for each visit using trapezoidal method. STS assessment at baseline (Week 0, Day 1), Days 57, 113 & 197 was conducted on first spot. Absolute change from baseline at specified time points in TEWL AUC (first spot) in AD subjects reported in this endpoint. mITT. 'Number of subjects analysed' = subjects with available data.

End point type	Secondary
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End point timeframe:

Baseline, Days 57, 113 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	19 <sup>[34]</sup>			
Units: nsts*grams per square metre per hour				

arithmetic mean (standard deviation)				
Day 57 (n=19)	-632.0224 (± 494.4981)			
Day 113 (n=18)	-608.1875 (± 601.7999)			
Day 197 (n=15)	-659.4033 (± 570.2425)			

Notes:

[34] - Here, 'n' = subjects with available data for each category.

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in AUC of TEWL on Non-lesional Skin in AD Subjects at Days 57, 113 and 197

End point title	Percent Change From Baseline in AUC of TEWL on Non-lesional Skin in AD Subjects at Days 57, 113 and 197 <sup>[35]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum used to characterise SBF. TEWL combined with STS measures SBF. TEWL AUC done over defined number of STS reflect the overall integrity of stratum corneum. Non-LS areas for TEWL assessment & STS was identified at baseline (predefined skin area). Within predefined non-LS areas, 3 closely adjacent nonoverlapping spots identified for subsequent SBF assessment. TEWL measured prior to STS & after 5, 10, 15 & 20 STS on pre-defined non-LS areas at specified time points. TEWL AUC was composite measure before & after 5, 10, 15 & 20 STS at each specified time point. AUC of TEWL: calculated for each visit using trapezoidal method. STS assessment at baseline (Week 0, Day 1), Days 57, 113 & 197 was conducted on first spot. Percent change from baseline at specified time points in TEWL AUC (first spot) in AD subjects were reported in this endpoint. mITT. 'Number of subjects analysed' = subjects with available data.

End point type	Secondary
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End point timeframe:

Baseline, Days 57, 113 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	19 <sup>[36]</sup>			
Units: percent change				
arithmetic mean (standard deviation)				
Day 57 (n=19)	-21.7570 (± 29.1137)			
Day 113 (n=17)	-10.8940 (± 50.7679)			
Day 197 (n=16)	-28.6897 (± 26.0253)			

Notes:

[36] - Here, 'n' = subjects with available data for each category.

## Statistical analyses

No statistical analyses for this end point

### Secondary: Absolute Change From Baseline in AUC of TEWL on Non-lesional Skin in AD Subjects at Days 57, 113 and 197

End point title	Absolute Change From Baseline in AUC of TEWL on Non-lesional Skin in AD Subjects at Days 57, 113 and 197 <sup>[37]</sup>
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End point description:

TEWL assessment: a noninvasive in vivo measurement of water loss across stratum corneum to characterise SBF. TEWL combined with STS measures SBF. TEWL AUC done over defined number of STS used to reflect overall integrity of stratum corneum. Non-LS areas for TEWL assessment & STS was identified at baseline (predefined skin area). Within predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS & after 5, 10, 15 & 20 STS on pre-defined non-LS areas at specified time points. TEWL AUC was composite measure before & after 5, 10, 15 & 20 STS at each specified time point. AUC of TEWL: calculated for each visit using trapezoidal method. STS assessment at baseline(Week 0, Day 1), Days 57, 113 & 197 was conducted on first spot. Absolute change from baseline at specified time points in TEWL AUC (first spot) in AD subjects reported in this endpoint. mITT. 'Number of subjects analysed' = subjects with available data.

End point type	Secondary
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End point timeframe:

Baseline, Days 57, 113 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	19 <sup>[38]</sup>			
Units: nsts*grams per square metre per hour				
arithmetic mean (standard deviation)				
Day 57 (n=19)	-281.9579 (± 342.1271)			
Day 113 (n=17)	-217.7544 (± 462.0173)			
Day 197 (n=16)	-367.5469 (± 340.1948)			

Notes:

[38] - Here, 'n' = subjects with available data for each category.

### Statistical analyses

No statistical analyses for this end point

### Secondary: Percent Change From Baseline in AUC of TEWL on Normal Skin in Healthy Volunteers at Days 57, 113 and 197

End point title	Percent Change From Baseline in AUC of TEWL on Normal Skin in Healthy Volunteers at Days 57, 113 and 197 <sup>[39]</sup>
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End point description:

TEWL: noninvasive in vivo measurement of water loss across stratum corneum to characterise SBF. TEWL combined with STS measures SBF. TEWL AUC done over defined number of STS used to reflect overall integrity of stratum corneum. Normal skin areas for TEWL assessment & STS was identified at baseline (predefined skin area). Within predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL measured prior to STS & after 5, 10, 15 & 20 STS

on pre-defined normal skin areas at specified time points. TEWL AUC: composite measure before & after 5, 10, 15 & 20 STS at each specified time point. AUC of TEWL: calculated for each visit using trapezoidal method. STS assessment at baseline (Week 0, Day 1), Days 57, 113 & 197 conducted on first spot. Percent Change from baseline at specified time points in TEWL AUC (first spot) in healthy volunteers reported in this endpoint. mITT. 'Number of subjects analysed' = subjects with available data.

End point type	Secondary
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End point timeframe:

Baseline, Days 57, 113 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

<b>End point values</b>	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	15 <sup>[40]</sup>			
Units: percent change				
arithmetic mean (standard deviation)				
Day 57 (n=12)	3.2794 (± 15.6493)			
Day 113 (n=11)	3.4753 (± 30.2504)			
Day 197 (n=15)	-10.1582 (± 18.4753)			

Notes:

[40] - Here, 'n' = subjects with available data for each category.

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in AUC of TEWL on Normal Skin in Healthy Volunteers at Days 57, 113 and 197

End point title	Absolute Change From Baseline in AUC of TEWL on Normal Skin in Healthy Volunteers at Days 57, 113 and 197 <sup>[41]</sup>
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End point description:

TEWL: noninvasive in vivo measurement of water loss across stratum corneum to characterise SBF. TEWL combined with STS measures SBF. TEWL AUC done over defined number of STS used to reflect overall integrity of stratum corneum. Normal skin areas for TEWL assessment & STS identified at baseline (predefined skin area). Within predefined Normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL measured prior to STS & after 5, 10, 15 & 20 STS on pre-defined Normal skin areas at specified time points. TEWL AUC was composite measure before & after 5, 10, 15 & 20 STS at each specified time point. AUC of TEWL: calculated for each visit using trapezoidal method. STS assessment at baseline (Week 0, Day 1), Days 57, 113 & 197 conducted on first spot. Percent Change from baseline at specified time points in TEWL AUC (first spot) in healthy volunteers reported in this endpoint. mITT. 'Number of subjects analysed' = subjects with available data.

End point type	Secondary
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End point timeframe:

Baseline, Days 57, 113 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	15 <sup>[42]</sup>			
Units: nsts*grams per square metre per hour				
arithmetic mean (standard deviation)				
Day 57 (n=12)	16.8563 (± 70.4582)			
Day 113 (n=11)	2.5568 (± 197.8379)			
Day 197 (n=15)	-72.9050 (± 108.8230)			

Notes:

[42] - Here, 'n' = subjects with available data for each category.

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Lesional Skin in AD Subjects at Days 57, 113 and 197

End point title	Percent Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Lesional Skin in AD Subjects at Days 57, 113 and 197 <sup>[43]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, uppermost layers of skin are peeled away using adhesive discs. LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL: measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined LS areas at specified time points. STS assessment at baseline (Week 0, Day 1), Day 57, 113 and 197 was conducted on first spot. Percent change from baseline at specified time points in TEWL after STS on LS (first spot) in AD subjects were reported in this endpoint. mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint and 'n' = subjects with available data for each specified category.

End point type	Secondary
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End point timeframe:

Baseline, Days 57, 113 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: percent change				
arithmetic mean (standard deviation)				
After 5 STS: Day 57 (n=19)	-42.2019 (± 22.5314)			
After 5 STS: Day 113 (n=18)	-38.5633 (± 27.1211)			
After 5 STS: Day 197 (n=15)	-36.4601 (± 47.5902)			

After 10 STS: Day 57 (n=18)	-40.4595 (± 27.4572)			
After 10 STS: Day 113 (n=17)	-34.7741 (± 31.0541)			
After 10 STS: Day 197 (n=13)	-39.9440 (± 29.2084)			
After 15 STS: Day 57 (n=19)	-41.6561 (± 24.0960)			
After 15 STS: Day 113 (n=18)	-33.3119 (± 32.7125)			
After 15 STS: Day 197 (n=14)	-38.4286 (± 27.0978)			
After 20 STS: Day 57 (n=19)	-34.8297 (± 23.0520)			
After 20 STS: Day 113 (n=17)	-33.1336 (± 28.1613)			
After 20 STS: Day 197 (n=14)	-35.6561 (± 23.0987)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Lesional Skin in AD Subjects at Days 57, 113 and 197

End point title	Absolute Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Lesional Skin in AD Subjects at Days 57, 113 and 197 <sup>[44]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, uppermost layers of skin are peeled away using adhesive discs. LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within predefined LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL: measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined LS areas at specified time points. STS assessment at baseline (Week 0, Day 1), Day 57, 113 and 197 was conducted on first spot. Absolute change from baseline at specified time points in TEWL after STS on LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint and 'n' = subjects with available data for each specified category.

End point type	Secondary
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End point timeframe:

Baseline, Days 57, 113 and 197

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)				
After 5 STS: Day 57 (n=19)	-31.3795 (± 25.4943)			

After 5 STS: Day 113 (n=18)	-31.1761 (± 31.3420)			
After 5 STS: Day 197 (n=15)	-33.5753 (± 40.1857)			
After 10 STS: Day 57 (n=18)	-36.4267 (± 31.1758)			
After 10 STS: Day 113 (n=17)	-33.1024 (± 36.2286)			
After 10 STS: Day 197 (n=13)	-35.8254 (± 33.3362)			
After 15 STS: Day 57 (n=19)	-37.9779 (± 23.3049)			
After 15 STS: Day 113 (n=18)	-33.4028 (± 31.1957)			
After 15 STS: Day 197 (n=14)	-36.0843 (± 27.5612)			
After 20 STS: Day 57 (n=19)	-35.0726 (± 23.5765)			
After 20 STS: Day 113 (n=17)	-35.6671 (± 31.2267)			
After 20 STS: Day 197 (n=14)	-34.5257 (± 23.9001)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Non-lesional Skin in AD Subjects at Days 57, 113 and 197

End point title	Percent Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Non-lesional Skin in AD Subjects at Days 57, 113 and 197 <sup>[45]</sup>
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### End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, uppermost layers of skin are peeled away using adhesive discs. Non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL: measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified time points. STS assessment at baseline (Week 0, Day 1), Day 57, 113 and 197 was conducted on first spot. Percent change from baseline at specified time points in TEWL after STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint and 'n' = subjects with available data for each specified category.

End point type	Secondary
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### End point timeframe:

Baseline, Days 57, 113 and 197

### Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: percent change				
arithmetic mean (standard deviation)				
After 5 STS: Day 57 (n=19)	-24.8218 ( $\pm$ 31.4633)			
After 5 STS: Day 113 (n=17)	-4.8842 ( $\pm$ 70.5670)			
After 5 STS: Day 197 (n=16)	-29.7635 ( $\pm$ 44.0691)			
After 10 STS: Day 57 (n=19)	-20.3640 ( $\pm$ 43.5318)			
After 10 STS: Day 113 (n=17)	-3.8193 ( $\pm$ 74.6263)			
After 10 STS: Day 197 (n=16)	-29.6888 ( $\pm$ 38.9536)			
After 15 STS: Day 57 (n=19)	-18.4348 ( $\pm$ 33.3647)			
After 15 STS: Day 113 (n=17)	-7.6067 ( $\pm$ 54.7945)			
After 15 STS: Day 197 (n=16)	-27.2268 ( $\pm$ 25.1580)			
After 20 STS: Day 57 (n=19)	-19.2584 ( $\pm$ 30.1343)			
After 20 STS: Day 113 (n=17)	-6.1452 ( $\pm$ 67.9496)			
After 20 STS: Day 197 (n=16)	-22.3311 ( $\pm$ 23.0908)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Non-lesional Skin in AD Subjects at Days 57, 113 and 197

End point title	Absolute Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Non-lesional Skin in AD Subjects at Days 57, 113 and 197 <sup>[46]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, uppermost layers of skin are peeled away using adhesive discs. Non-LS areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within predefined non-LS areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL: measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined non-LS areas at specified time points. STS assessment at baseline (Week 0, Day 1), Day 57, 113 and 197 was conducted on first spot. Absolute change from baseline at specified time points in TEWL after STS on non-LS (first spot) in AD subjects were reported in this endpoint. Analysis was performed on mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint and 'n'=subjects with available data for each specified category.

End point type	Secondary
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End point timeframe:

Baseline, Days 57, 113 and 197



Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Atopic Dermatitis Subjects			
Subject group type	Reporting group			
Number of subjects analysed	19			
Units: grams per square metre per hour arithmetic mean (standard deviation)				
After 5 STS: Day 57 (n=19)	-11.8526 ( $\pm$ 12.6180)			
After 5 STS: Day 113 (n=17)	-9.0771 ( $\pm$ 21.3022)			
After 5 STS: Day 197 (n=16)	-15.8375 ( $\pm$ 18.0369)			
After 10 STS: Day 57 (n=19)	-15.0005 ( $\pm$ 20.1721)			
After 10 STS: Day 113 (n=17)	-10.9488 ( $\pm$ 31.1300)			
After 10 STS: Day 197 (n=16)	-21.2825 ( $\pm$ 23.2998)			
After 15 STS: Day 57 (n=19)	-16.1047 ( $\pm$ 26.4807)			
After 15 STS: Day 113 (n=17)	-12.6576 ( $\pm$ 30.0412)			
After 15 STS: Day 197 (n=16)	-21.9006 ( $\pm$ 19.2885)			
After 20 STS: Day 57 (n=19)	-18.5800 ( $\pm$ 30.3574)			
After 20 STS: Day 113 (n=17)	-13.6682 ( $\pm$ 33.3065)			
After 20 STS: Day 197 (n=16)	-20.0575 ( $\pm$ 16.1537)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Percent Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Normal Skin in Healthy Volunteers at Days 57, 113 and 197

End point title	Percent Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Normal Skin in Healthy Volunteers at Days 57, 113 and 197 <sup>[47]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, uppermost layers of skin are peeled away using adhesive discs. Normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1), Day 57, 113 and 197 was conducted on first spot. Percent change from baseline at specified time points in TEWL after STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. mITT population. Here, 'number of subjects analysed' = subjects with available data for this endpoint and 'n'=subjects with available data for each specified category.

End point type	Secondary
End point timeframe:	
Baseline, Days 57, 113 and 197	
Notes:	
[47] - The end point is not reporting statistics for all the arms in the baseline period. It is expected all the baseline period arms will be reported on when providing values for an end point on the baseline period.	
Justification: Data for this endpoint is reported for the applicable arm in the study.	

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: percent change				
arithmetic mean (standard deviation)				
After 5 STS: Day 57 (n=12)	4.9595 ( $\pm$ 16.0950)			
After 5 STS: Day 113 (n=11)	1.4464 ( $\pm$ 26.7257)			
After 5 STS: Day 197 (n=15)	-1.6729 ( $\pm$ 25.2293)			
After 10 STS: Day 57 (n=12)	4.0996 ( $\pm$ 20.4647)			
After 10 STS: Day 113 (n=11)	0.7091 ( $\pm$ 25.0615)			
After 10 STS: Day 197 (n=15)	-7.4475 ( $\pm$ 19.7215)			
After 15 STS: Day 57 (n=12)	3.2339 ( $\pm$ 20.9086)			
After 15 STS: Day 113 (n=11)	4.5364 ( $\pm$ 42.7525)			
After 15 STS: Day 197 (n=15)	-14.0103 ( $\pm$ 18.5552)			
After 20 STS: Day 57 (n=12)	4.3494 ( $\pm$ 27.5527)			
After 20 STS: Day 113 (n=11)	13.2578 ( $\pm$ 64.3880)			
After 20 STS: Day 197 (n=15)	-18.0480 ( $\pm$ 22.6193)			

## Statistical analyses

No statistical analyses for this end point

## Secondary: Absolute Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Normal Skin in Healthy Volunteers at Days 57, 113 and 197

End point title	Absolute Change From Baseline in TEWL After 5, 10, 15 and 20 STS on Normal Skin in Healthy Volunteers at Days 57, 113 and 197 <sup>[48]</sup>
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End point description:

TEWL assessment: noninvasive in vivo measurement of water loss across stratum corneum that is used to characterise SBF. TEWL combined with STS measures SBF. With STS, uppermost layers of skin are peeled away using adhesive discs. Normal skin areas for TEWL assessment and STS were identified at baseline (predefined skin area). Within predefined normal skin areas, 3 closely adjacent non-overlapping spots identified for subsequent SBF assessment. TEWL was measured prior to STS and after 5, 10, 15 and 20 STS on pre-defined normal skin areas at specified time points. STS assessment at baseline (Week 0, Day 1), Day 57, 113 and 197 was conducted on first spot. Absolute change from baseline at

specified time points in TEWL after STS on normal skin (first spot) in healthy volunteers were reported in this endpoint. mITT population. Here, 'number of subjects analysed' =subjects with available data for this endpoint and 'n' = subjects with available data for each specified category.

End point type	Secondary
End point timeframe:	
Baseline, Days 57, 113 and 197	

Notes:

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

Justification: Data for this endpoint is reported for the applicable arm in the study.

End point values	Healthy Volunteers			
Subject group type	Reporting group			
Number of subjects analysed	15			
Units: grams per square metre per hour				
arithmetic mean (standard deviation)				
After 5 STS: Day 57 (n=12)	0.5642 ( $\pm$ 3.3355)			
After 5 STS: Day 113 (n=11)	-1.0255 ( $\pm$ 4.3657)			
After 5 STS: Day 197 (n=15)	-1.5627 ( $\pm$ 5.2934)			
After 10 STS: Day 57 (n=12)	0.2825 ( $\pm$ 4.5142)			
After 10 STS: Day 113 (n=11)	-1.3482 ( $\pm$ 6.6778)			
After 10 STS: Day 197 (n=15)	-3.0880 ( $\pm$ 5.2754)			
After 15 STS: Day 57 (n=12)	0.4750 ( $\pm$ 6.4442)			
After 15 STS: Day 113 (n=11)	0.1082 ( $\pm$ 17.5865)			
After 15 STS: Day 197 (n=15)	-5.8847 ( $\pm$ 8.1968)			
After 20 STS: Day 57 (n=12)	3.4683 ( $\pm$ 9.8235)			
After 20 STS: Day 113 (n=11)	5.9327 ( $\pm$ 32.0123)			
After 20 STS: Day 197 (n=15)	-7.4760 ( $\pm$ 9.3514)			

## Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

For AD subjects: from first dose (i.e., Day 1) of IMP administration up to end of treatment visit (i.e., Day 113). For healthy volunteers: from signature of consent form to end of study (i.e., up to Day 197)

Adverse event reporting additional description:

Analysis was performed on safety population that included all subjects, who actually received at least 1 dose of IMP or had at least 1 TEWL/STS assessment and all healthy volunteers who have at least 1 TEWL/STS assessment performed.

Assessment type	Systematic
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### Dictionary used

Dictionary name	MedDRA
Dictionary version	25.1

### Reporting groups

Reporting group title	Atopic Dermatitis Subjects
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Reporting group description:

Pediatric subjects with moderate-to-severe AD and with baseline body weight  $\geq 15$  kg and  $< 30$  kg received SC loading dose of dupilumab 600 mg (2 injections of dupilumab 300 mg) on Day 1 (Week 0) followed by dupilumab 300 mg SC injection Q4W, from Week 4 to Week 12. Pediatric subjects with body weight  $\geq 30$  kg and  $< 60$  kg received SC loading dose of dupilumab 400 mg (2 injections of dupilumab 200 mg) on Day 1 (Week 0), followed by dupilumab 200 mg SC injection Q2W, from Week 2 to Week 14.

Reporting group title	Healthy Volunteers
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Reporting group description:

Healthy volunteers with age, gender, location of targeted skin lesion area and study site matched to selected AD subjects, received no treatment, but were monitored in similar way as AD subjects.

Serious adverse events	Atopic Dermatitis Subjects	Healthy Volunteers	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 23 (0.00%)	0 / 18 (0.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	

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

Non-serious adverse events	Atopic Dermatitis Subjects	Healthy Volunteers	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	21 / 23 (91.30%)	6 / 18 (33.33%)	
Injury, poisoning and procedural complications			
Wound			

subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Tendon Injury subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Arthropod Sting subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Nervous system disorders Headache subjects affected / exposed occurrences (all)	3 / 23 (13.04%) 4	1 / 18 (5.56%) 1	
Lethargy subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Blood and lymphatic system disorders Lymphadenopathy subjects affected / exposed occurrences (all)	0 / 23 (0.00%) 0	1 / 18 (5.56%) 1	
General disorders and administration site conditions Medical Device Site Haemorrhage subjects affected / exposed occurrences (all)	6 / 23 (26.09%) 7	0 / 18 (0.00%) 0	
Pyrexia subjects affected / exposed occurrences (all)	0 / 23 (0.00%) 0	2 / 18 (11.11%) 2	
Immune system disorders Food Allergy subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Seasonal Allergy subjects affected / exposed occurrences (all)	0 / 23 (0.00%) 0	1 / 18 (5.56%) 1	
Eye disorders Dry Eye			

subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Eye Irritation			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Vision Blurred			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Ocular Hyperaemia			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Eye Pruritus			
subjects affected / exposed	2 / 23 (8.70%)	0 / 18 (0.00%)	
occurrences (all)	2	0	
Eye Pain			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
Vomiting			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Nausea			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Abdominal Pain Upper			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	2	0	
Respiratory, thoracic and mediastinal disorders			
Cough			
subjects affected / exposed	1 / 23 (4.35%)	1 / 18 (5.56%)	
occurrences (all)	1	1	
Oropharyngeal Pain			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Skin and subcutaneous tissue disorders			

Dermatitis Atopic subjects affected / exposed occurrences (all)	9 / 23 (39.13%) 10	0 / 18 (0.00%) 0	
Urticaria subjects affected / exposed occurrences (all)	3 / 23 (13.04%) 3	0 / 18 (0.00%) 0	
Rash Erythematous subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Erythema subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Musculoskeletal and connective tissue disorders Pain In Extremity subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Infections and infestations Upper Respiratory Tract Infection subjects affected / exposed occurrences (all)	4 / 23 (17.39%) 5	0 / 18 (0.00%) 0	
Urinary Tract Infection subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Tonsillitis subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Suspected Covid-19 subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Skin Bacterial Infection subjects affected / exposed occurrences (all)	0 / 23 (0.00%) 0	1 / 18 (5.56%) 1	
Pneumonia subjects affected / exposed occurrences (all)	1 / 23 (4.35%) 1	0 / 18 (0.00%) 0	
Otitis Media Chronic			

subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Molluscum Contagiosum			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Impetigo			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal Viral Infection			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Gastroenteritis			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Dermatitis Infected			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Cellulitis			
subjects affected / exposed	1 / 23 (4.35%)	0 / 18 (0.00%)	
occurrences (all)	1	0	
Covid-19			
subjects affected / exposed	1 / 23 (4.35%)	1 / 18 (5.56%)	
occurrences (all)	1	1	



## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

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### Interruptions (globally)

Were there any global interruptions to the trial? No

### Limitations and caveats

None reported