



Clinical trial results:

An Open-Label, Uncontrolled, Multicenter Study to Evaluate the Safety, Local Tolerability, Systemic Exposure, and Efficacy of 1% GPB Cream in Adolescents With Severe Primary Axillary Hyperhidrosis

PIP decision number updates: P/0565/2021; P/0497/2023

Summary

EudraCT number	2022-000922-46
Trial protocol	DE PL
Global end of trial date	06 March 2024

Results information

Result version number	v1 (current)
This version publication date	22 September 2024
First version publication date	22 September 2024

Trial information

Trial identification

Sponsor protocol code	GPBK-08/2018
-----------------------	--------------

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT05863104
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Dr. August Wolff GmbH & Co.KG Arzneimittel
Sponsor organisation address	Sudbrackstraße 56, Bielefeld, Germany, 33611
Public contact	Department of Clinical Affairs , Dr. August Wolff GmbH & Co. KG Arzneimittel, ClinicalTrialDisclosures@drwolffgroup.com
Scientific contact	Department of Clinical Affairs , Dr. August Wolff GmbH & Co. KG Arzneimittel, ClinicalTrialDisclosures@drwolffgroup.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	Yes
EMA paediatric investigation plan number(s)	EMA-002383-PIP01-18
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	Yes
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	25 April 2024
Is this the analysis of the primary completion data?	Yes
Primary completion date	06 March 2024
Global end of trial reached?	Yes
Global end of trial date	06 March 2024
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The evaluation of the safety, tolerability and systemic exposure (in a subset of patients) of topical administration of 1% GPB in adolescents with severe primary axillary hyperhidrosis.

Protection of trial subjects:

This study was in compliance with the ethical principles of current applicable regulations, International Council for Harmonisation (ICH) of Good Clinical Practice, the principles of the Declaration of Helsinki, as well as other applicable local ethical and legal requirements. All regulatory requirements relevant to the safety of the study participants were followed during the conduct of the trial.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	08 May 2023
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Poland: 33
Country: Number of subjects enrolled	Germany: 11
Worldwide total number of subjects	44
EEA total number of subjects	44

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	44
Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Adolescents of both sexes between 12 and 17 years with a body mass index percentile ≥ 10 and ≤ 90 and with a patient-rated hyperhidrosis severity score of ≥ 5 at Screening 2 and Day 1 that were diagnosed with severe primary axillary hyperhidrosis.

Pre-assignment

Screening details:

62 adolescents were screened. 44 patients were eligible to participate and enrolled in this study. 42 patients were treated as 2 patients withdrew consent before start of treatment.

Period 1

Period 1 title	1% Glycopyrronium bromide (GPB) cream (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

Arms

Arm title	1% glycopyrronium bromide (GPB) cream
------------------	---------------------------------------

Arm description:

In this arm, 42 patients were treated with 1 % GPB cream for 8 weeks, 40 patients completed the treatment until week 8, followed by a safety follow-up phase of 14 days.

Arm type	Experimental
Investigational medicinal product name	1% GPB cream
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Cream
Routes of administration	Topical use

Dosage and administration details:

Topical administration to both axillae, once daily for 4 weeks starting on Day 1, up to Day 29. After week 4 topical administration as needed up to Day 57 (at least twice per week and at most once daily).

Number of subjects in period 1^[1]	1% glycopyrronium bromide (GPB) cream
Started	42
Completed	40
Not completed	2
Consent withdrawn by subject	1
Protocol deviation	1

Notes:

[1] - The number of subjects reported to be in the baseline period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same.

Justification: In this study, 44 patients were enrolled. 2 patients withdrew consent before start of treatment, i.e. the first application of the IMP. Therefore, the number of subjects reported to be in the baseline period is 42.

Baseline characteristics

Reporting groups

Reporting group title	1% Glycopyrronium bromide (GPB) cream
-----------------------	---------------------------------------

Reporting group description:

44 patients were enrolled and as 2 patients withdrew consent before start of therapy, 42 patients were treated with 1% GPB cream for 4 weeks daily and then for 4 weeks flexible (ie, at least twice a week up to once daily, as needed)

Reporting group values	1% Glycopyrronium bromide (GPB) cream	Total	
Number of subjects	42	42	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	42	42	
Adults (18-64 years)	0	0	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous Units: years			
arithmetic mean	14.48		
standard deviation	± 1.53	-	
Gender categorical Units: Subjects			
Female	19	19	
Male	23	23	

Subject analysis sets

Subject analysis set title	1% GPB FAS
----------------------------	------------

Subject analysis set type	Full analysis
---------------------------	---------------

Subject analysis set description:

The FAS includes all patients enrolled who applied the 1% GPB cream at least once, i.e. all patients from SAF. The FAS is used key secondary and secondary endpoint analysis.

Subject analysis set title	1% GPB mSAF
----------------------------	-------------

Subject analysis set type	Safety analysis
---------------------------	-----------------

Subject analysis set description:

The mSAF (modified SAF) includes all patients of the SAF, who were assessed for systemic exposure and had at least an assessment at Day 1 and an additional assessment after Day 1. The mSAF is used for the analysis of systemic exposure.

Subject analysis set title	1% GPB PPS
----------------------------	------------

Subject analysis set type	Per protocol
---------------------------	--------------

Subject analysis set description:

The PPs includes all patients of the FAS without any major PDs.

PDs were reviewed during a data review meeting held before the data base lock to identify major deviations leading to the exclusion of patients from the PPS. The PPS is used for supplementary analyses of key secondary and selected secondary endpoints.

Subject analysis set title	1% GPB SAF
Subject analysis set type	Safety analysis

Subject analysis set description:

The SAF includes all patients enrolled who applied the IMP at least once. It is used for safety analyses including primary safety analyses.

Reporting group values	1% GPB FAS	1% GPB mSAF	1% GPB PPS
Number of subjects	42	22	30
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	0	0	0
Adolescents (12-17 years)	42	22	30
Adults (18-64 years)	0	0	0
From 65-84 years	0	0	0
85 years and over	0	0	0
Age continuous Units: years arithmetic mean standard deviation	±	±	±
Gender categorical Units: Subjects			
Female			
Male			

Reporting group values	1% GPB SAF		
Number of subjects	42		
Age categorical Units: Subjects			
In utero	0		
Preterm newborn infants (gestational age < 37 wks)	0		
Newborns (0-27 days)	0		
Infants and toddlers (28 days-23 months)	0		
Children (2-11 years)	0		
Adolescents (12-17 years)	42		
Adults (18-64 years)	0		
From 65-84 years	0		
85 years and over	0		
Age continuous Units: years arithmetic mean standard deviation	±		

Gender categorical			
Units: Subjects			
Female			
Male			

End points

End points reporting groups

Reporting group title	1% glycopyrronium bromide (GPB) cream
-----------------------	---------------------------------------

Reporting group description:

In this arm, 42 patients were treated with 1 % GPB cream for 8 weeks, 40 patients completed the treatment until week 8, followed by a safety follow-up phase of 14 days.

Subject analysis set title	1% GPB FAS
----------------------------	------------

Subject analysis set type	Full analysis
---------------------------	---------------

Subject analysis set description:

The FAS includes all patients enrolled who applied the 1% GPB cream at least once, i.e. all patients from SAF. The FAS is used key secondary and secondary endpoint analysis.

Subject analysis set title	1% GPB mSAF
----------------------------	-------------

Subject analysis set type	Safety analysis
---------------------------	-----------------

Subject analysis set description:

The mSAF (modified SAF) includes all patients of the SAF, who were assessed for systemic exposure and had at least an assessment at Day 1 and an additional assessment after Day 1. The mSAF is used for the analysis of systemic exposure.

Subject analysis set title	1% GPB PPS
----------------------------	------------

Subject analysis set type	Per protocol
---------------------------	--------------

Subject analysis set description:

The PPs includes all patients of the FAS without any major PDs.

PDs were reviewed during a data review meeting held before the data base lock to identify major deviations leading to the exclusion of patients from the PPS. The PPS is used for supplementary analyses of key secondary and selected secondary endpoints.

Subject analysis set title	1% GPB SAF
----------------------------	------------

Subject analysis set type	Safety analysis
---------------------------	-----------------

Subject analysis set description:

The SAF includes all patients enrolled who applied the IMP at least once. It is used for safety analyses including primary safety analyses.

Primary: Primary systemic exposure endpoint: Absolute change in glycopyrronium plasma concentration from Baseline to Day 15

End point title	Primary systemic exposure endpoint: Absolute change in glycopyrronium plasma concentration from Baseline to Day 15 ^[1]
-----------------	---

End point description:

Absolut change of GP Plasma concentration from Baseline to Day 15 will be assessed on the mSAF using the median absolute change from Baseline. If the value on Day 15 is missing, the value of Day 8 will be carried forward and used instead using LOCF. In the analysis without outliers, outliers at Baseline (>0 pg/mg) were excluded from the analysis, as applicable.

Hahn-Meeker Confidence Interval (95%) for the median change from Baseline:

Including outliers (N=22): 4.490; 23.400

Without outliers (N=19): 4.490; 23.400

End point type	Primary
----------------	---------

End point timeframe:

Baseline to Day 15

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: Due to technical limitations it was not possible to add the 1-sided t-test for this endpoint. For this reason, the statistics are described in the end point description.

End point values	1% GPB mSAF			
Subject group type	Subject analysis set			
Number of subjects analysed	22 ^[2]			
Units: GP concentration [pg/mL]				
median (full range (min-max))				
Including outliers	13.350 (- 234.60 to 279.50)			
Without outliers	11.000 (1.88 to 38.60)			

Notes:

[2] - Without outliers: 19

Statistical analyses

No statistical analyses for this end point

Primary: Primary safety endpoint: Number of patients with ADRs during treatment

End point title	Primary safety endpoint: Number of patients with ADRs during treatment ^[3]
End point description:	
In the primary endpoint analysis, ie, the number of patients with ADRs during treatment, 2 patients (out of 41 patients; 4.9%) had an ADR during treatment. Accordingly, 95.1% (39 of 41 patients) did not have an ADR during the study. 1 patient who prematurely discontinued the study and had no ADR was excluded from the analysis. Adverse drug reactions are defined as TEAEs certainly, probably, possibly related to the IMP, or with missing relationship assessment	
End point type	Primary
End point timeframe:	
Baseline to Day 57	

Notes:

[3] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.

Justification: No statistical analysis was performed in this endpoint. The percentages of patients with and without ADRs are indicated in the description.

End point values	1% GPB SAF			
Subject group type	Subject analysis set			
Number of subjects analysed	42 ^[4]			
Units: Patients				
BL to Day 29	2			
After Day 29 up to and incl Day 57	0			

Notes:

[4] - Patients who were discontinued prematurely are included in the analysis.

Statistical analyses

No statistical analyses for this end point

Primary: Primary tolerability endpoint: Number of patients with a local tolerability assessment based on the skin reaction score with a score >0

End point title	Primary tolerability endpoint: Number of patients with a local tolerability assessment based on the skin reaction score with a score >0 ^[5]
-----------------	--

End point description:

Number of patients with a local tolerability assessment based on the skin reaction score with a score >0. None of the 40 patients assessed had a score >0 during treatment. 2 patients who discontinued prematurely and had no score >0 were excluded from the analysis.

End point type Primary

End point timeframe:

Baseline to Day 57

Notes:

[5] - 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: Due to technical limitations it was not possible to add the 1-sided t-test for this endpoint. For this reason, the statistics are described in the end point description.

End point values	1% GPB SAF			
Subject group type	Subject analysis set			
Number of subjects analysed	40 ^[6]			
Units: Patients	0			

Notes:

[6] - 2 patients who discontinued prematurely and had no score >0 were excluded from the analysis.

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary systemic exposure endpoint: Absolute change in glycopyrronium plasma concentration from Baseline to Day 8

End point title Secondary systemic exposure endpoint: Absolute change in glycopyrronium plasma concentration from Baseline to Day 8

End point description:

Absolute change in glycopyrronium plasma concentration from Baseline to Day 8 is described including outliers and without outliers and was analyzed with median and a 95% Hahn-Meeker confidence interval for the median change from Baseline. Missing values at Day 15 were replaced with valid Day 8 values using LOCF.

In the analysis without outliers, outliers at Baseline (>0 pg/mg) were excluded from the analysis as applicable.

95% Hahn Meeker Confidence Intervall for the median change from Baseline (mSAF):

Including outliers (N=22): 3.690; 24.200

Without outliers (N=20): 3.690; 22.800

End point type Secondary

End point timeframe:

Baseline to Day 8

End point values	1% GPB mSAF			
Subject group type	Subject analysis set			
Number of subjects analysed	22 ^[7]			
Units: GP concentration [pg/mL]				
median (full range (min-max))				
Including outliers	8.955 (-230.80 to 122.50)			
Without outliers	8.955 (0 to 122.50)			

Notes:

[7] - Including outliers: 22
Without outliers: 20

Statistical analyses

No statistical analyses for this end point

Secondary: Key secondary efficacy endpoint: Absolute change in logarithmic values of total sweat production from Baseline to Day 29

End point title	Key secondary efficacy endpoint: Absolute change in logarithmic values of total sweat production from Baseline to Day 29
-----------------	--

End point description:

Absolut change in logarithmic values of total sweat production assessed by gravimetric measurement from Baseline to Day 29 (FAS, PPS).

1-sample t-test for the change from Baseline (2-sided, $\alpha = 0.05$):

FAS: p-value = 0.0004

PPS: p-value = 0.0165

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline to Day 29

End point values	1% GPB FAS	1% GPB PPS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	34	25		
Units: Total sweat production				
log mean (standard deviation)	-1.556 (\pm 2.311)	-1.207 (\pm 2.342)		

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary systemic exposure endpoint: Absolute change in glycopyrronium plasma concentration from Day 8 to Day 15

End point title	Secondary systemic exposure endpoint: Absolute change in glycopyrronium plasma concentration from Day 8 to Day 15
-----------------	---

End point description:

Absolute change in glycopyrronium plasma concentration from Day 8 to Day 15 is described including outliers and without outliers and was analyzed with median and a 95% Hahn-Meeker confidence interval for the median change from Baseline. Missing values at Day 15 were replaced with valid Day 8 values using LOCF.

In the analysis without outliers, outliers at Baseline (>0 pg/mg) were excluded from the analysis as applicable.

95% Hahn Meeker Confidence Intervall for the median change from Baseline (mSAF):

Including outliers (N=19): -3.800; 3.910

Without outliers (N=18): -5.300; 2.540

End point type	Secondary
End point timeframe:	
Day 8 to Day 15	

End point values	1% GPB mSAF			
Subject group type	Subject analysis set			
Number of subjects analysed	19 ^[8]			
Units: GP concentration [pg/mL]				
median (full range (min-max))				
Including outliers	-0.250 (-95.10 to 247.0)			
Excluding outliers	-0.525 (-95.10 to 22.36)			

Notes:

[8] - Including outliers: 19

Without outliers: 18

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Absolute change in logarithmic values of total sweat production from Baseline to Day 57

End point title	Secondary efficacy endpoint: Absolute change in logarithmic values of total sweat production from Baseline to Day 57
-----------------	--

End point description:

Absolute change in logarithmic values of total sweat production assessed by gravimetric measurement from Baseline to Day 57 (FAS, PPS).

1-sample t-test (2-sided, $\alpha=0.05$):

FAS: p-value <0.0001

PPS: p-value = 0.0003

End point type	Secondary
End point timeframe:	
Baseline to Day 57	

End point values	1% GPB FAS	1% GPB PPS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	37	27		
Units: Total sweat production [mg]				
log mean (standard deviation)	-2.233 (\pm 2.384)	-2.028 (\pm 2.511)		

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Absolute change in logarithmic values of total sweat production from Day 29 to Day 57

End point title	Secondary efficacy endpoint: Absolute change in logarithmic values of total sweat production from Day 29 to Day 57
-----------------	--

End point description:

Absolute change in logarithmic values of total sweat production from Day 29 to Day 57 (FAS).

1-sample t-test (2-sided, $\alpha = 0.05$):

FAS: p-value = 0.2858

End point type	Secondary
----------------	-----------

End point timeframe:

Day 29 to Day 57

End point values	1% GPB FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	42			
Units: Total sweat production [mg]				
log mean (standard deviation)	-0.388 (\pm 2.018)			

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Relative change in total sweat production from Baseline to Day 29 and Day 57

End point title	Secondary efficacy endpoint: Relative change in total sweat production from Baseline to Day 29 and Day 57
-----------------	---

End point description:

Relative change in total sweat production from Baseline to Day 29 and Day 57 (FAS, PPS).

Wilcoxon signed rank test for change from BL with 95% Hahn-Meeker CI (2-sided, $\alpha = 0.05$):

FAS: Day 29 p-value <0.0001; (-88.600;-57.670)

Day 57 p-value <0.0001; (-94.950;-75.960)

PPS: Day 29 p-value = 0.0025; (-84.360;-56.150)

Day 57 p-value<0.0001; (-94.950;-68.130)

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline to Day 29 and Day 57

End point values	1% GPB FAS	1% GPB PPS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	42 ^[9]	30 ^[10]		
Units: Relative change from Baseline [%]				
median (full range (min-max))				
Day 29	-72.815 (-99.87 to 129500.00)	-66.430 (-99.81 to 129500.00)		
Day 57	-91.120 (-99.89 to 32800.00)	-82.930 (-99.89 to 32800.00)		

Notes:

[9] - Day 29: N=34

Day 57: N=37

[10] - Day 29: N=25

Day 57: N=27

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Relative change in total sweat production from Day 29 to Day 57

End point title	Secondary efficacy endpoint: Relative change in total sweat production from Day 29 to Day 57
-----------------	--

End point description:

Relative change in total sweat production from Day 29 to Day 57 (FAS).

Wilcoxon signed rank test (2-sided, $\alpha = 0.05$):

FAS (n=32): p-value=0.7450

End point type	Secondary
----------------	-----------

End point timeframe:

Day 29 to Day 57

End point values	1% GPB FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	32 ^[11]			
Units: Relative change [%]				
median (full range (min-max))	-20.395 (-99.65 to 59350.00)			

Notes:

[11] - Number of patients in analysis

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Proportion of responders assessed by gravimetric measurement at Day 29

End point title	Secondary efficacy endpoint: Proportion of responders assessed by gravimetric measurement at Day 29
-----------------	---

End point description:

Proportion of responders assessed by gravimetric measurement at Day 29. Patients with missing values were considered non responders. Patients will be defined as responder if a certain criterium (e.g., sweat reduction of $\geq 50\%$) is reached. All other patients will be defined as non-responder.

End point type Secondary

End point timeframe:

Day 29

End point values	1% GPB FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	42			
Units: Number of patients [%] number (not applicable)				
Sweat reduction $\geq 50\%$	59.5			
Sweat reduction $\geq 75\%$	38.1			
Sweat reduction $\geq 90\%$	23.8			

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Proportion of responders assessed by gravimetric measurement at Day 57

End point title Secondary efficacy endpoint: Proportion of responders assessed by gravimetric measurement at Day 57

End point description:

Proportion of responders assessed by gravimetric measurement at Day 57. Patients with missing values were considered non responders. Patients will be defined as responder if a certain criterium (e.g., sweat reduction of $\geq 50\%$) is reached. All other patients will be defined as non-responder.

End point type Secondary

End point timeframe:

Day 57

End point values	1% GPB FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	42			
Units: Number of patients [%] number (not applicable)				
Sweat reduction $\geq 50\%$	69.0			
Sweat reduction $\geq 75\%$	59.5			
Sweat reduction $\geq 90\%$	50.0			

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Absolute change in patient-rated hyperhidrosis severity from Baseline to Day 29 and Day 57

End point title	Secondary efficacy endpoint: Absolute change in patient-rated hyperhidrosis severity from Baseline to Day 29 and Day 57
-----------------	---

End point description:

Absolute changes in PRHS (patient-rated hyperhidrosis severity; 11-point scale from 0 to 10) from Baseline to Day 29 and Day 57 (FAS, PPS).

1-sample t-test for the change from Baseline (2-sided, $\alpha = 0.05$):

FAS: Day 29 p-value<0.0001, Day 57 p-value<0.0001

PPS: Day 29 p-value<0.0001, Day 57 p-value<0.0001

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline to Day 29 and Day 57

End point values	1% GPB FAS	1% GPB PPS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	40	30		
Units: PRHS score				
arithmetic mean (standard deviation)				
Day 29	-4.2 (± 2.2)	-4.3 (± 2.3)		
Day 57	-5.1 (± 2.2)	-5.4 (± 2.2)		

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Absolute change in patient-rated hyperhidrosis severity from Day 29 to Day 57

End point title	Secondary efficacy endpoint: Absolute change in patient-rated hyperhidrosis severity from Day 29 to Day 57
-----------------	--

End point description:

Absolute changes in PRHS (patient-rated hyperhidrosis severity; 11-point scale from 0 to 10) from Day 29 to Day 57(FAS).

1-sample t-test for the change to Day 57 (2-sided, $\alpha = 0.05$):

FAS: p-value = 0.0012

End point type	Secondary
----------------	-----------

End point timeframe:

Day 29 to Day 57

End point values	1% GPB FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	40			
Units: PRHS score				
arithmetic mean (standard deviation)	-0.9 (± 1.6)			

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Absolute change in the children's dermatology life quality index score from Baseline to Day 29 and Day 57

End point title	Secondary efficacy endpoint: Absolute change in the children's dermatology life quality index score from Baseline to Day 29 and Day 57
-----------------	--

End point description:

Absolute change in the children's dermatology life quality index score (CDLQI) from Baseline to Day 29 and Day 57. If 1 answer was missing, the missing answer was scored with 0. If more than 1 answer was missing, no CDLQI score was calculated. Missing baseline values were replaced with the last non-missing values before Day 1.

1-sample t-test for the change from Baseline (2-sided, $\alpha = 0.05$):

FAS: Day 29 p-value<0.0001, Day 57 p-value<0.0001

PPS: Day 29 p-value=0.0005, Day 57 p-value<0.0001

End point type	Secondary
----------------	-----------

End point timeframe:

Baseline to Day 29 and Day 57

End point values	1% GPB FAS	1% GPB PPS		
Subject group type	Subject analysis set	Subject analysis set		
Number of subjects analysed	40	30		
Units: CDLQI				
arithmetic mean (standard deviation)				
Day 29	-3.5 (± 4.7)	-3.5 (± 4.9)		
Day 57	-4.2 (± 4.2)	-4.6 (± 4.3)		

Statistical analyses

No statistical analyses for this end point

Secondary: Secondary efficacy endpoint: Absolute change in the children's dermatology life quality index score from Day 29 to Day 57

End point title	Secondary efficacy endpoint: Absolute change in the children's dermatology life quality index score from Day 29 to Day 57
-----------------	---

End point description:

Absolute change in the children's dermatology life quality index score (CDLQI) from Day 29 to Day 57.

1-sample t-test for the change to Day 57 (2-sided, $\alpha = 0.05$):
FAS: p-value=0.1493

End point type	Secondary
End point timeframe:	
Day 29 to Day 57	

End point values	1% GPB FAS			
Subject group type	Subject analysis set			
Number of subjects analysed	40			
Units: CDLQI				
arithmetic mean (standard deviation)	-0.8 (\pm 3.3)			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Baseline to Day 57

Adverse event reporting additional description:

In this part, non-serious adverse events are described as Treatment-emergent adverse events (TEAEs), i.e. all AEs with start date on or after the date of IMP start.

Assessment type	Systematic
-----------------	------------

Dictionary used

Dictionary name	MedDRA
-----------------	--------

Dictionary version	25.1
--------------------	------

Reporting groups

Reporting group title	1% GPB SAF - Baseline to Day 29
-----------------------	---------------------------------

Reporting group description:

Treatment-emergent adverse events which started up to and including Day 29; patients self-administered the 1% GPB cream once daily in this period (SAF, N=42)

Reporting group title	1% GPB SAF - After Day 29 to Day 57
-----------------------	-------------------------------------

Reporting group description:

Treatment-emergent adverse events which started after Day 29 up to and including Day 57; patients self-administered the 1% GPB cream flexible in this period (at least twice per week and at most once daily; SAF, N=42)

Reporting group title	1% GPB SAF - Baseline to Day 57
-----------------------	---------------------------------

Reporting group description:

Treatment-emergent adverse events which started up to and including Day 57 (SAF, N=42)

Serious adverse events	1% GPB SAF - Baseline to Day 29	1% GPB SAF - After Day 29 to Day 57	1% GPB SAF - Baseline to Day 57
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 42 (0.00%)	0 / 42 (0.00%)	0 / 42 (0.00%)
number of deaths (all causes)	0	0	0
number of deaths resulting from adverse events	0	0	0

Frequency threshold for reporting non-serious adverse events: 2 %

Non-serious adverse events	1% GPB SAF - Baseline to Day 29	1% GPB SAF - After Day 29 to Day 57	1% GPB SAF - Baseline to Day 57
Total subjects affected by non-serious adverse events			
subjects affected / exposed	7 / 42 (16.67%)	9 / 42 (21.43%)	15 / 42 (35.71%)
Investigations			
Bilirubin conjugated increased			
subjects affected / exposed	1 / 42 (2.38%)	0 / 42 (0.00%)	1 / 42 (2.38%)
occurrences (all)	1	0	1

Nervous system disorders Headache subjects affected / exposed occurrences (all)	0 / 42 (0.00%) 0	1 / 42 (2.38%) 1	1 / 42 (2.38%) 1
Eye disorders Dry eye subjects affected / exposed occurrences (all)	1 / 42 (2.38%) 1	0 / 42 (0.00%) 0	1 / 42 (2.38%) 1
Respiratory, thoracic and mediastinal disorders Rhinorrhoea subjects affected / exposed occurrences (all)	0 / 42 (0.00%) 0	1 / 42 (2.38%) 1	1 / 42 (2.38%) 1
Skin and subcutaneous tissue disorders Eczema subjects affected / exposed occurrences (all)	0 / 42 (0.00%) 0	1 / 42 (2.38%) 1	1 / 42 (2.38%) 1
Infections and infestations Nasopharyngitis subjects affected / exposed occurrences (all)	4 / 42 (9.52%) 4	6 / 42 (14.29%) 6	10 / 42 (23.81%) 10
Oral herpes subjects affected / exposed occurrences (all)	1 / 42 (2.38%) 1	0 / 42 (0.00%) 0	1 / 42 (2.38%) 1

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
07 July 2023	Amendment 1.0 to protocol Version 4.0, dated 07-Jul-2023: Reworded safety endpoint for clarity and updated list of abbreviations; Changed inclusion criterion 1 for clarity; Added specification of timepoint of eligibility confirmation to inclusion criterion 2; Addition of medications causing secondary hyperhydrosis to exclusion criterion 1; Correction of inclusion criterion 4; Editorial correction to exclusion criterion 19; Addition of sympathomimetics to list of prohibited concomitant medications; Addition additional drug screening parameters (will not be recorded by study data).

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported