



Clinical trial results:

Subject reported outcomes on satisfaction, efficacy and safety with Luxerm® in the field-directed treatment of thin or non-hyperkeratotic and non-pigmented Actinic Keratosis of the face or the scalp

Summary

| | |
|--------------------------|------------------|
| EudraCT number | 2017-000066-29 |
| Trial protocol | DE |
| Global end of trial date | 28 November 2017 |

Results information

| | |
|--------------------------------|-----------------|
| Result version number | v1 (current) |
| This version publication date | 08 October 2020 |
| First version publication date | 08 October 2020 |

Trial information

Trial identification

| | |
|-----------------------|------------------|
| Sponsor protocol code | RD.03.SPR.114384 |
|-----------------------|------------------|

Additional study identifiers

| | |
|------------------------------------|-------------|
| ISRCTN number | - |
| ClinicalTrials.gov id (NCT number) | NCT03511326 |
| WHO universal trial number (UTN) | - |

Notes:

Sponsors

| | |
|------------------------------|---|
| Sponsor organisation name | Galderma R&D |
| Sponsor organisation address | 2400 route des colles, Biot, France, 06410 |
| Public contact | Rajeev Chavda, Galderma R&D, rajeev.chavda@galderma.com |
| Scientific contact | Rajeev Chavda, Galderma R&D, rajeev.chavda@galderma.com |

Notes:

Paediatric regulatory details

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

Notes:

Results analysis stage

| | |
|--|-------------------|
| Analysis stage | Final |
| Date of interim/final analysis | 03 September 2018 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 28 November 2017 |
| Global end of trial reached? | Yes |
| Global end of trial date | 28 November 2017 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

The main objective of this trial was to evaluate the subject reported outcomes on satisfaction with Luxerm® daylight field-directed treatment of thin or non-hyperkeratotic and non-pigmented Actinic Keratosis (AK) lesions on the face or scalp after one session (12 weeks).

Protection of trial subjects:

This clinical trial was conducted in accordance with the ethical principles originating from the Declaration of Helsinki declaration (1964) and subsequent amendments, the International Conference on Harmonization (ICH), Good Clinical Practice (GCP) and in compliance with local regulatory requirements. All subjects who participated in this trial were fully informed on the nature and the constraints of the clinical trial particularly the study treatment instructions before being asked to participate in the study.

Background therapy: -

Evidence for comparator: -

| | |
|---|--------------|
| Actual start date of recruitment | 07 June 2017 |
| 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 | Germany: 50 |
| Worldwide total number of subjects | 50 |
| EEA total number of subjects | 50 |

Notes:

Subjects enrolled per age group

| | |
|---|---|
| In utero | 0 |
| Preterm newborn - gestational age < 37 wk | 0 |
| Newborns (0-27 days) | 0 |
| Infants and toddlers (28 days-23 months) | 0 |
| Children (2-11 years) | 0 |
| Adolescents (12-17 years) | 0 |
| Adults (18-64 years) | 9 |

| | |
|---------------------|----|
| From 65 to 84 years | 41 |
| 85 years and over | 0 |

Subject disposition

Recruitment

Recruitment details:

This study was conducted at 7 centers in Germany between 07 June 2017 to 28 November 2017.

Pre-assignment

Screening details:

A total of 50 subjects were enrolled in the study.

Period 1

| | |
|------------------------------|--------------------------------|
| Period 1 title | Overall trial (overall period) |
| Is this the baseline period? | Yes |
| Allocation method | Not applicable |
| Blinding used | Not blinded |

Arms

| | |
|------------------|--|
| Arm title | Methyl Aminolevulinate Hydrochloride Cream |
|------------------|--|

Arm description:

Subjects applied methyl aminolevulinate hydrochloride cream (Luxerm) 160 milligrams per gram (mg/g) once topically with Daylight-Photodynamic Therapy (DL-PDT: after Luxerm application, subject went outdoor under direct daylight no later than 30 minutes) within 1 week of the Baseline visit (Day 0) on thin or non-hyperkeratotic and non-pigmented Actinic Keratosis (AK) on the face and scalp.

| | |
|--|--|
| Arm type | Experimental |
| Investigational medicinal product name | Methyl Aminolevulinate Hydrochloride Cream |
| Investigational medicinal product code | |
| Other name | Luxerm |
| Pharmaceutical forms | Cream |
| Routes of administration | Topical use |

Dosage and administration details:

Thin layer of methyl aminolevulinate hydrochloride cream at a dose of 160 mg/g was applied on the anatomical area (face and scalp) without occlusion.

| Number of subjects in period 1 | Methyl Aminolevulinate Hydrochloride Cream |
|--------------------------------|--|
| Started | 50 |
| Completed | 49 |
| Not completed | 1 |
| Consent withdrawn by subject | 1 |

Baseline characteristics

Reporting groups

| | |
|--------------------------------|---------------|
| Reporting group title | Overall trial |
| Reporting group description: - | |

| Reporting group values | Overall trial | Total | |
|--|---------------|-------|--|
| Number of subjects | 50 | 50 | |
| Age categorical | | | |
| Units: Subjects | | | |
| Age continuous | | | |
| Units: years | | | |
| arithmetic mean | 73.4 | | |
| standard deviation | ± 8 | - | |
| Gender categorical | | | |
| Units: Subjects | | | |
| Female | 7 | 7 | |
| Male | 43 | 43 | |
| Skin phototype | | | |
| Fitzpatrick skin phototype is a system used to describe a person's skin type. It ranges from skin phototype I to III. Where, skin phototype I = pale white skin, always burns easily, never tans; skin phototype II = fair skin, always burns easily, tans minimally and with difficulty; skin phototype III = darker white skin, burns minimally, tans gradually and uniformly. | | | |
| Units: Subjects | | | |
| Phototype I | 7 | 7 | |
| Phototype II | 35 | 35 | |
| Phototype III | 8 | 8 | |
| Duration of Actinic Keratosis | | | |
| Units: Subjects | | | |
| Less than 1 year | 8 | 8 | |
| Between 1 and 5 years | 14 | 14 | |
| Between 5 and 10 years | 12 | 12 | |
| Between 10 and 20 years | 12 | 12 | |
| More than 20 years | 4 | 4 | |
| With any relevant of major illnesses other than Actinic Keratosis | | | |
| Units: Subjects | | | |
| No | 1 | 1 | |
| Yes | 49 | 49 | |
| Duration of Actinic Keratosis | | | |
| Units: Years | | | |
| arithmetic mean | 7.77 | | |
| standard deviation | ± 6.78 | - | |

End points

End points reporting groups

| | |
|---|--|
| Reporting group title | Methyl Aminolevulinate Hydrochloride Cream |
| Reporting group description: | |
| Subjects applied methyl aminolevulinate hydrochloride cream (Luxerm) 160 milligrams per gram (mg/g) once topically with Daylight-Photodynamic Therapy (DL-PDT: after Luxerm application, subject went outdoor under direct daylight no later than 30 minutes) within 1 week of the Baseline visit (Day 0) on thin or non-hyperkeratotic and non-pigmented Actinic Keratosis (AK) on the face and scalp. | |

Primary: Number of Subjects Reported Satisfaction Questionnaire at Week 12

| | |
|-----------------|--|
| End point title | Number of Subjects Reported Satisfaction Questionnaire at Week 12 ^[1] |
|-----------------|--|

End point description:

Subject satisfaction questionnaire consisted of 9 questions (Q): Q1: how satisfied are you with effectiveness, Q2: how bothered were you by treatment side effect, Q3: how satisfied are you with skin aspect, Q4: how long was duration of social embarrassment, Q5: last treatment received prior Luxerm, Q6: how do you find Luxerm DL-PDT compared to your last treatment, Q7: would you consider using treatment again, Q8: overall, how satisfied are you, Q9: if dissatisfied what are reasons with different evaluations. ITT population included all enrolled subjects (i.e. treatment dispensed). Here 'N' (number of subjects analyzed) signifies subjects who were evaluable for this endpoint and 'n' (number analyzed) signifies number of subjects who were evaluable for each specified category.

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

End point timeframe:

Week 12

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: Only descriptive statistics was planned for this endpoint.

| End point values | Methyl Aminolevulinate Hydrochloride Cream | | | |
|--------------------------------|--|--|--|--|
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 49 | | | |
| Units: Number of subjects | | | | |
| Q1. Very satisfied (n=49) | 20 | | | |
| Q1. Satisfied (n=49) | 23 | | | |
| Q1. Somewhat satisfied (n=49) | 5 | | | |
| Q1. Not satisfied (n=49) | 1 | | | |
| Q2. Not bothered at all (n=49) | 38 | | | |
| Q2. Bothered somewhat (n=49) | 6 | | | |
| Q2. Bothered a little (n=49) | 2 | | | |
| Q2. Bothered (n=49) | 3 | | | |
| Q3. Very satisfied (n=49) | 14 | | | |
| Q3. Satisfied (n=49) | 25 | | | |
| Q3. Somewhat satisfied (n=49) | 8 | | | |
| Q3. Not satisfied (n=49) | 2 | | | |
| Q5. None (n=48) | 15 | | | |
| Q5. Cryotherapy (n=48) | 7 | | | |

| | | | | |
|---|----|--|--|--|
| Q5. Photo Therapy with red/blue lamp (n=48) | 2 | | | |
| Q5. Photo Therapy with daylight (n=48) | 2 | | | |
| Q5. Peelings (n=48) | 1 | | | |
| Q6. Better (n=46) | 25 | | | |
| Q6. Similar (n=46) | 5 | | | |
| Q6. Worse (n=46) | 2 | | | |
| Q6. Never treated with previous Tt (n=46) | 14 | | | |
| Q7. No (n=48) | 7 | | | |
| Q7. Yes (n=48) | 41 | | | |
| Q8. Very satisfied (n=48) | 19 | | | |
| Q8. Satisfied (n=48) | 22 | | | |
| Q8. Somewhat satisfied (n=48) | 5 | | | |
| Q8. Not satisfied (n=48) | 2 | | | |
| Q9. Treatment not effective (n=2) | 2 | | | |
| Q9. Side effects (n=2) | 0 | | | |
| Q9. Not easy to use (n=2) | 0 | | | |
| Q9. Skin aspect of the treated area (n=2) | 1 | | | |
| Q9. Other (n=2) | 0 | | | |
| Q5. Other Drugs/Drug Combinations (n=48) | 21 | | | |

Statistical analyses

No statistical analyses for this end point

Primary: Number of Subjects Reported Satisfaction Questionnaire (How long was duration of social embarrassment [Question 4]) at Week 12

| | |
|-----------------|---|
| End point title | Number of Subjects Reported Satisfaction Questionnaire (How long was duration of social embarrassment [Question 4]) at Week 12 ^[2] |
|-----------------|---|

End point description:

Subject satisfaction questionnaire consisted of 9 questions (Q): Q1: how satisfied are you with effectiveness, Q2: how bothered were you by treatment side effect, Q3: how satisfied are you with skin aspect, Q4: how long was duration of social embarrassment, Q5: last treatment received prior Luxerm, Q6: how do you find Luxerm DL-PDT compared to your last treatment, Q7: would you consider using treatment again, Q8: overall, how satisfied are you, Q9: if dissatisfied what are reasons with different evaluations. ITT population included all enrolled subjects (i.e. treatment dispensed). Here 'N' (number of subjects analyzed) signifies subjects who were evaluable for this endpoint and 'n' (number analyzed) signifies number of subjects who were evaluable for each specified category.

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

End point timeframe:

Week 12

Notes:

[2] - 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: Only descriptive statistics was planned for this endpoint.

| | | | | |
|--------------------------------------|--|--|--|--|
| End point values | Methyl Aminolevulinat e Hydrochloride Cream | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 49 | | | |
| Units: Days | | | | |
| arithmetic mean (standard deviation) | 2.8 (± 5.0) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage Change From Baseline in Lesion Complete Response Rate at Week 12

| | |
|--|---|
| End point title | Percentage Change From Baseline in Lesion Complete Response Rate at Week 12 |
| End point description: Lesion complete response rate was defined as the percentage of pre-existing and treated lesions in the anatomical area at Week 12. Percentage change from baseline in lesion complete response rate was reported. The analysis was performed on the ITT population which consisted of the entire population enrolled (i.e. treatment dispensed). | |
| End point type | Secondary |
| End point timeframe: Baseline, Week 12 | |

| | | | | |
|--------------------------------------|--|--|--|--|
| End point values | Methyl Aminolevulinat e Hydrochloride Cream | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 50 | | | |
| Units: Percent change | | | | |
| arithmetic mean (standard deviation) | 62.3 (± 32.2) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects with Complete Response Rate

| | |
|---|--|
| End point title | Percentage of Subjects with Complete Response Rate |
| End point description: Subject complete response rate was defined as the percentage of subjects with all treated lesions clear in the anatomical area at Week 12. Percentage of subjects with complete response rate at week 12 was reported. The analysis was performed on the ITT population which consisted of the entire population enrolled (i.e. treatment dispensed). | |

| | |
|----------------------|-----------|
| End point type | Secondary |
| End point timeframe: | |
| Week 12 | |

| | | | | |
|-------------------------------|--|--|--|--|
| End point values | Methyl Aminolevulinat e Hydrochloride Cream | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 50 | | | |
| Units: Percentage of subjects | | | | |
| number (not applicable) | 14 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects with Partially Clear Response Rate

| | |
|---|---|
| End point title | Percentage of Subjects with Partially Clear Response Rate |
| End point description: | |
| Subject partially clear was defined as the percentage of subjects with at least 75 percent (%) lesion complete response in the anatomical area at week 12. Percentage of subjects with partially clear response rate was reported. The analysis was performed on the ITT population which consisted of the entire population enrolled (i.e. treatment dispensed). | |
| End point type | Secondary |
| End point timeframe: | |
| Week 12 | |

| | | | | |
|-------------------------------|--|--|--|--|
| End point values | Methyl Aminolevulinat e Hydrochloride Cream | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 50 | | | |
| Units: Percentage of subjects | | | | |
| number (not applicable) | 42 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Number of New Actinic Keratosis (AK) Lesions in the Anatomical Area at

Week 12

| | |
|-----------------|--|
| End point title | Number of New Actinic Keratosis (AK) Lesions in the Anatomical Area at Week 12 |
|-----------------|--|

End point description:

Any AK lesion in the anatomical area identified at Week 12 but not at Baseline was defined as a new lesion. Number of new AK lesions in the anatomical area at Week 12 was reported. The analysis was performed on the ITT population which consisted of the entire population enrolled (i.e. treatment dispensed). Here, number of subjects analyzed refer to the number of subjects evaluable for this outcome at specified time point.

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

End point timeframe:

Week 12

| | | | | |
|-----------------------------|--|--|--|--|
| End point values | Methyl Aminolevulinat e Hydrochloride Cream | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 49 | | | |
| Units: Number of lesions | 24 | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Subject's Skin Aspect at Week 12

| | |
|-----------------|----------------------------------|
| End point title | Subject's Skin Aspect at Week 12 |
|-----------------|----------------------------------|

End point description:

For each AK lesion that had responded completely the investigator assessed the subject's skin aspect for the following signs or symptoms: scarring, atrophy, induration, redness or change in pigmentation. The clinical assessment of skin aspect was graded for each lesion on a 4-point scale, where 0 = poor and 3 = excellent. The analysis was performed on the ITT population which consisted of the entire population enrolled (i.e. treatment dispensed). Here, number of subjects analyzed refer to the number of subjects evaluable for this outcome at specified time point.

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

End point timeframe:

Week 12

| | | | | |
|--------------------------------------|--|--|--|--|
| End point values | Methyl Aminolevulinat e Hydrochloride Cream | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 43 | | | |
| Units: Score on scale | | | | |
| arithmetic mean (standard deviation) | 2.5 (± 0.6) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Subject's Self-Assessment of Maximal Pain After Daylight (DL) Exposure

| | |
|-----------------|--|
| End point title | Subject's Self-Assessment of Maximal Pain After Daylight (DL) Exposure |
|-----------------|--|

End point description:

After the treatment procedure and DL exposure was completed, the subject was assessed for the maximal pain felt during the duration of the light exposure. The pain sensation was assessed on an 11-point Numeric Rating Scale (NRS), where 0 = no pain at all and 10 = extreme pain. The analysis was performed on the safety population which consisted of the ITT population after exclusion of subjects who never used the treatment with certainty based on the monitoring report.

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

End point timeframe:

From signing of informed consent form (ICF) to end of study (Week 12)

| | | | | |
|--------------------------------------|--|--|--|--|
| End point values | Methyl Aminolevulinat e Hydrochloride Cream | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 50 | | | |
| Units: score on scale | | | | |
| arithmetic mean (standard deviation) | 1.0 (± 1.4) | | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Number of Subjects with Adverse Events (AEs)

| | |
|-----------------|--|
| End point title | Number of Subjects with Adverse Events (AEs) |
|-----------------|--|

End point description:

An AE was any untoward medical occurrence in a subject or clinical investigation subject administered a pharmaceutical product and which does not necessarily had a causal relationship with this treatment. An AE can therefore be any unfavorable and unintended sign (including an abnormal laboratory value), symptom, or disease temporally associated with the use of a medicinal (investigational) product, whether or not related to the medicinal (investigational) product. Number of subjects with adverse events were reported.

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

End point timeframe:

From signing of ICF to end of study (Week 12)

| | | | | |
|-----------------------------|---|--|--|--|
| End point values | Methyl Aminolevulinat e Hydrochloride Cream | | | |
| Subject group type | Reporting group | | | |
| Number of subjects analysed | 50 | | | |
| Units: Subjects | 28 | | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

From signing of ICF to end of study (Week 12)

| | |
|-----------------|----------------|
| Assessment type | Non-systematic |
|-----------------|----------------|

Dictionary used

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

| | |
|--------------------|----|
| Dictionary version | 19 |
|--------------------|----|

Reporting groups

| | |
|-----------------------|--|
| Reporting group title | Methyl Aminolevulinate Hydrochloride Cream |
|-----------------------|--|

Reporting group description:

Subjects applied methyl aminolevulinate hydrochloride cream (Luxerm) 160 milligrams per gram (mg/g) once topically with Daylight-Photodynamic Therapy (DL-PDT: after Luxerm application, subject went outdoor under direct daylight no later than 30 minutes) within 1 week of the Baseline visit (Day 0) on thin or non-hyperkeratotic and non-pigmented AK on the face and scalp.

| Serious adverse events | Methyl Aminolevulinate Hydrochloride Cream | | |
|---|--|--|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 0 / 50 (0.00%) | | |
| number of deaths (all causes) | 0 | | |
| number of deaths resulting from adverse events | 0 | | |

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

| Non-serious adverse events | Methyl Aminolevulinate Hydrochloride Cream | | |
|---|--|--|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 28 / 50 (56.00%) | | |
| Injury, poisoning and procedural complications | | | |
| Procedural pain | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 15 / 50 (30.00%) | | |
| occurrences (all) | 15 | | |
| Skin and subcutaneous tissue disorders | | | |

| | | | |
|--|------------------|--|--|
| Erythema | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 19 / 50 (38.00%) | | |
| occurrences (all) | 20 | | |
| Pruritus | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 50 (2.00%) | | |
| occurrences (all) | 1 | | |
| Skin burning sensation | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 8 / 50 (16.00%) | | |
| occurrences (all) | 8 | | |
| Skin discolouration | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 50 (2.00%) | | |
| occurrences (all) | 1 | | |
| Skin exfoliation | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 50 (2.00%) | | |
| occurrences (all) | 1 | | |
| Skin irritation | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 50 (2.00%) | | |
| occurrences (all) | 1 | | |
| Skin tightness | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 50 (2.00%) | | |
| occurrences (all) | 1 | | |
| Skin warm | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 50 (2.00%) | | |
| occurrences (all) | 1 | | |
| Infections and infestations | | | |

| | | | |
|--|----------------|--|--|
| Rhinitis | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 50 (2.00%) | | |
| occurrences (all) | 1 | | |
| Wound infection | | | |
| alternative assessment type: Systematic | | | |
| subjects affected / exposed | 1 / 50 (2.00%) | | |
| occurrences (all) | 1 | | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported