



Clinical trial results:

An Exploratory Study to Assess the 24-hour Intraocular Pressure (IOP) Lowering Characteristics, Duration of Action and Safety of DE-126 ophthalmic solution 0.002% versus Latanoprost ophthalmic solution 0.005% in Subjects with Primary Open Angle Glaucoma or Ocular Hypertension

Summary

| | |
|--------------------------|-----------------|
| EudraCT number | 2020-004836-93 |
| Trial protocol | DE AT GR |
| Global end of trial date | 09 January 2023 |

Results information

| | |
|--------------------------------|------------------|
| Result version number | v1 (current) |
| This version publication date | 30 December 2023 |
| First version publication date | 30 December 2023 |

Trial information

Trial identification

| | |
|-----------------------|----------|
| Sponsor protocol code | 012603SA |
|-----------------------|----------|

Additional study identifiers

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

Notes:

Sponsors

| | |
|------------------------------|--|
| Sponsor organisation name | Santen S.A.S. |
| Sponsor organisation address | 1 Rue Pierre Fontaine, Genavenir IV, Evry cedex, France, F-91058 |
| Public contact | Responsible Physician, Santen Oy, +358 405012416, auli.ropo@santen.com |
| Scientific contact | Responsible Physician, Santen Oy, +358 405012416, auli.ropo@santen.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 | 30 March 2023 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 09 January 2023 |
| Global end of trial reached? | Yes |
| Global end of trial date | 09 January 2023 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

To compare the 24h IOP lowering characteristics of DE-126 ophthalmic solution 0.002% with latanoprost ophthalmic solution 0.005%, both given once daily in the evening for 3 months+1d.

Protection of trial subjects:

The Informed Consent Form was written in compliance with US Title 21 CFR Part 50, ICH guidelines, and other national regulations as appropriate. Site-specific versions are on file with Santen, Inc. and are available upon request.

Background therapy: -

Evidence for comparator: -

| | |
|---|--------------|
| Actual start date of recruitment | 30 June 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 | Austria: 5 |
| Country: Number of subjects enrolled | Germany: 8 |
| Country: Number of subjects enrolled | Greece: 20 |
| Worldwide total number of subjects | 33 |
| EEA total number of subjects | 33 |

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) | 16 |
| From 65 to 84 years | 17 |

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

A total of 47 subjects were enrolled into the study (signed informed consent) of whom 33 were randomized. 14 subjects were considered screen failure. 1 subject in the DE-126 group had a fatal outcome following complications related to COVID-19.

Period 1

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

Arms

| | |
|------------------------------|--------|
| Are arms mutually exclusive? | Yes |
| Arm title | DE-126 |

Arm description:

0.002% DE-126

Aqueous solution containing 0.02 mg/mL DE-126, and water for injections.

| | |
|--|--------------------------------------|
| Arm type | Experimental |
| Investigational medicinal product name | PF DE-126 ophthalmic solution 0.002% |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Eye drops |
| Routes of administration | Ophthalmic use |

Dosage and administration details:

DE-126 0.002%, dosed once daily in the evening, was identified as the optimal dose among the 4 concentrations evaluated in both US and Japanese subjects with POAG or OHT, with respect to IOP lowering and safety profile.

| | |
|------------------|-------------|
| Arm title | Latanoprost |
|------------------|-------------|

Arm description:

0.005% Latanoprost

Aqueous solution containing the active ingredient, latanoprost 0.05 mg/mL, water for injections.

| | |
|--|---|
| Arm type | Active comparator |
| Investigational medicinal product name | Latanoprost ophthalmic solution 0.005% (Xalatan®) |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Eye drops |
| Routes of administration | Ophthalmic use |

Dosage and administration details:

For latanoprost, the study dosing regimen was consistent with the current Xalatan labeling recommendation.

Notes:

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

Justification: The study was a single-masked study with investigators involved in the conduct of the study masked from the study treatment.

| Number of subjects in period 1 | DE-126 | Latanoprost |
|---------------------------------------|--------|-------------|
| Started | 17 | 16 |
| Completed | 16 | 16 |
| Not completed | 1 | 0 |
| Adverse event, serious fatal | 1 | - |

Baseline characteristics

Reporting groups

| | |
|--|-------------|
| Reporting group title | DE-126 |
| Reporting group description: | |
| 0.002% DE-126 Aqueous solution containing 0.02 mg/mL DE-126, and water for injections. | |
| Reporting group title | Latanoprost |
| Reporting group description: | |
| 0.005% Latanoprost Aqueous solution containing the active ingredient, latanoprost 0.05 mg/mL, water for injections. | |

| Reporting group values | DE-126 | Latanoprost | Total |
|---|---------|-------------|-------|
| Number of subjects | 17 | 16 | 33 |
| 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) | 0 | 0 | 0 |
| Adults (18-64 years) | 7 | 9 | 16 |
| From 65-84 years | 10 | 7 | 17 |
| 85 years and over | 0 | 0 | 0 |
| Age continuous | | | |
| Units: years | | | |
| arithmetic mean | 62.6 | 64.6 | - |
| standard deviation | ± 13.16 | ± 8.17 | - |
| Gender categorical | | | |
| Units: Subjects | | | |
| Female | 7 | 11 | 18 |
| Male | 10 | 5 | 15 |
| Race | | | |
| Units: Subjects | | | |
| White | 17 | 16 | 33 |
| Black or African American | 0 | 0 | 0 |
| Asian | 0 | 0 | 0 |
| American Indian or Alaska Native | 0 | 0 | 0 |
| Native Hawaiian or Other Pacific Islander | 0 | 0 | 0 |
| Not Reported | 0 | 0 | 0 |
| Unknown | 0 | 0 | 0 |
| Multiple | 0 | 0 | 0 |
| Ethnicity | | | |
| Units: Subjects | | | |
| Hispanic or Latino | 0 | 0 | 0 |
| Not Hispanic or Latino | 17 | 16 | 33 |

| | | | |
|---------|---|---|---|
| Unknown | 0 | 0 | 0 |
|---------|---|---|---|

End points

End points reporting groups

| | |
|------------------------------|--|
| Reporting group title | DE-126 |
| Reporting group description: | 0.002% DE-126 Aqueous solution containing 0.02 mg/mL DE-126, and water for injections. |
| Reporting group title | Latanoprost |
| Reporting group description: | 0.005% Latanoprost Aqueous solution containing the active ingredient, latanoprost 0.05 mg/mL, water for injections. |

Primary: 24-hour mean IOP at Month 3

| | |
|------------------------|--|
| End point title | 24-hour mean IOP at Month 3 |
| End point description: | 24hr mean IOP at Month 3 |
| End point type | Primary |
| End point timeframe: | The primary efficacy endpoint evaluated the study eye 24-hour mean IOP at Month 3, measured at 4h (24:00), 8h (04:00), 12h (08:00), 16h (12:00), 20h (16:00), and 24h (20:00) after the last dose given the previous night at 20:00. |

| End point values | DE-126 | Latanoprost | | |
|----------------------------------|----------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 16 | 16 | | |
| Units: mmHg | | | | |
| arithmetic mean (standard error) | 17.31 (\pm 0.783) | 18.19 (\pm 0.604) | | |

Statistical analyses

| | |
|---|--------------------------------|
| Statistical analysis title | Mean 24-Hour IOP at Month 3 |
| Statistical analysis description: | DE-126 v Latanoprost |
| Comparison groups | DE-126 v Latanoprost |
| Number of subjects included in analysis | 32 |
| Analysis specification | Pre-specified |
| Analysis type | other ^[1] |
| Parameter estimate | Mean difference (final values) |
| Point estimate | 0 |

| | |
|---------------------|---------|
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -2.89 |
| upper limit | 1.14 |

Notes:

[1] - This is an exploratory study, and no hypothesis testing was performed.

Secondary: Mean 24-Hour IOP at Week 6

| | |
|---|----------------------------|
| End point title | Mean 24-Hour IOP at Week 6 |
| End point description: 24-hour mean IOP at Week 6. | |
| End point type | Secondary |
| End point timeframe: The study eye 24-hour mean IOP at Week 6, measured at 4h (24:00), 8h (04:00), 12h (08:00), 16h (12:00), 20h (16:00), and 24h (20:00) after the last dose given the previous night at 20:00 was summarized for the analysis of the first secondary endpoint. | |

| End point values | DE-126 | Latanoprost | | |
|----------------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 17 | 16 | | |
| Units: mmHg | | | | |
| arithmetic mean (standard error) | 17.38 (± 0.763) | 18.53 (± 0.769) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Diurnal IOP at Week 6

| | |
|--|----------------------------|
| End point title | Mean Diurnal IOP at Week 6 |
| End point description: | |
| End point type | Secondary |
| End point timeframe: Mean diurnal IOP reflected IOP measurement values for the 08:00, 12:00, 16:00 and 20:00 hour timepoints. | |

| End point values | DE-126 | Latanoprost | | |
|----------------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 17 | 16 | | |
| Units: mmHg | | | | |
| arithmetic mean (standard error) | | | | |
| Mean diurnal IOP | 17.28 (± 0.774) | 18.40 (± 0.771) | | |

Statistical analyses

No statistical analyses for this end point

Secondary: Mean Diurnal IOP at Month 3

| | |
|-----------------|-----------------------------|
| End point title | Mean Diurnal IOP at Month 3 |
|-----------------|-----------------------------|

End point description:

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

End point timeframe:

Mean diurnal IOP reflected IOP measurement values for the 08:00, 12:00, 16:00 and 20:00 hour timepoints.

| End point values | DE-126 | Latanoprost | | |
|----------------------------------|-----------------|-----------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 16 | 16 | | |
| Units: mmHg | | | | |
| arithmetic mean (standard error) | | | | |
| Mean diurnal IOP | 17.55 (± 0.737) | 18.06 (± 0.598) | | |

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Adverse events in this study were collected irrespective of their relationship to the clinical study, following informed consent and until subject withdrawal or study exit.

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

Dictionary used

| | |
|--------------------|--------|
| Dictionary name | MedDRA |
| Dictionary version | 23.1 |

Reporting groups

| | |
|-----------------------|---------------|
| Reporting group title | 0.002% DE-126 |
|-----------------------|---------------|

Reporting group description: -

| | |
|-----------------------|--------------------|
| Reporting group title | 0.005% Latanoprost |
|-----------------------|--------------------|

Reporting group description: -

| Serious adverse events | 0.002% DE-126 | 0.005% Latanoprost | |
|---|-----------------|--------------------|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 2 / 17 (11.76%) | 0 / 16 (0.00%) | |
| number of deaths (all causes) | 1 | 0 | |
| number of deaths resulting from adverse events | 0 | 0 | |
| Musculoskeletal and connective tissue disorders | | | |
| Osteoarthritis | | | |
| subjects affected / exposed | 1 / 17 (5.88%) | 0 / 16 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Infections and infestations | | | |
| COVID-19 pneumonia | | | |
| subjects affected / exposed | 1 / 17 (5.88%) | 0 / 16 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 1 | 0 / 0 | |

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

| Non-serious adverse events | 0.002% DE-126 | 0.005% Latanoprost | |
|---|------------------|--------------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 10 / 17 (58.82%) | 11 / 16 (68.75%) | |

| | | | |
|---|---|--|--|
| Injury, poisoning and procedural complications Corneal abrasion subjects affected / exposed occurrences (all) | 1 / 17 (5.88%) 1 | 0 / 16 (0.00%) 0 | |
| General disorders and administration site conditions Instillation site pain subjects affected / exposed occurrences (all) | 2 / 17 (11.76%) 2 | 2 / 16 (12.50%) 2 | |
| Immune system disorders Seasonal allergy subjects affected / exposed occurrences (all) | 0 / 17 (0.00%) 0 | 1 / 16 (6.25%) 1 | |
| Eye disorders Abnormal sensation in eye subjects affected / exposed occurrences (all) Ocular hyperaemia subjects affected / exposed occurrences (all) Eye pruritus subjects affected / exposed occurrences (all) Eye pain subjects affected / exposed occurrences (all) Foreign body sensation in eyes subjects affected / exposed occurrences (all) Eyelid oedema subjects affected / exposed occurrences (all) Vision blurred subjects affected / exposed occurrences (all) Visual impairment | 2 / 17 (11.76%) 2 3 / 17 (17.65%) 3 0 / 17 (0.00%) 0 1 / 17 (5.88%) 1 2 / 17 (11.76%) 1 0 / 17 (0.00%) 0 0 / 17 (0.00%) 0 0 | 2 / 16 (12.50%) 2 1 / 16 (6.25%) 1 3 / 16 (18.75%) 3 1 / 16 (6.25%) 1 0 / 16 (0.00%) 1 1 / 16 (6.25%) 1 1 / 16 (6.25%) 1 1 | |

| | | | |
|-----------------------------|----------------|----------------|--|
| subjects affected / exposed | 0 / 17 (0.00%) | 1 / 16 (6.25%) | |
| occurrences (all) | 0 | 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