



Clinical trial results:

The NordCAN study: Cannabis treatment in hand osteoarthritis and psoriatic arthritis. A randomized, double-blind placebo controlled study

Summary

| | |
|--------------------------|----------------|
| EudraCT number | 2017-003574-13 |
| Trial protocol | DK |
| Global end of trial date | 01 June 2021 |

Results information

| | |
|--------------------------------|-----------------|
| Result version number | v1 (current) |
| This version publication date | 22 October 2022 |
| First version publication date | 22 October 2022 |

Trial information

Trial identification

| | |
|-----------------------|--------|
| Sponsor protocol code | 020683 |
|-----------------------|--------|

Additional study identifiers

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

Notes:

Sponsors

| | |
|------------------------------|--|
| Sponsor organisation name | Dept. of rheumatology Aalborg |
| Sponsor organisation address | Reberbansgade 15, Aalborg, Denmark, |
| Public contact | Jonathan Vela MD., Dept. of rheumatology Aalborg, +45 97664018, j.vela@rn.dk |
| Scientific contact | Jonathan Vela MD., Dept. of rheumatology Aalborg, +45 97664018, j.vela@rn.dk |

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 | 01 June 2021 |
| Is this the analysis of the primary completion data? | Yes |
| Primary completion date | 01 June 2021 |
| Global end of trial reached? | Yes |
| Global end of trial date | 01 June 2021 |
| Was the trial ended prematurely? | No |

Notes:

General information about the trial

Main objective of the trial:

To assess the effect of cannabidiol (CBD) on pain in patients with nodal non-erosive hand osteoarthritis (Hand-OA) and psoriatic arthritis (PsA) after 12 weeks

Protection of trial subjects:

The trial was approved by the Danish Human Ethics Committee (N-20170074), the Danish Medicines Agency (2017091784), and the Danish Data Protection Agency (2017-245). The NordCAN project was registered on ClinicalTrials.gov (NCT03693833) and in the European Clinical Trials database (2017-003574-13). The trial was continually monitored by the Good Clinical Practice (GCP) unit of Aalborg University Hospital, externally audited by the Danish Medicine Agency, and was conducted in accordance with the Declaration of Helsinki, GCP, and Danish regulatory requirements.

Background therapy: -

Evidence for comparator: -

| | |
|---|-----------------|
| Actual start date of recruitment | 01 January 2018 |
| 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 | Denmark: 136 |
| Worldwide total number of subjects | 136 |
| EEA total number of subjects | 136 |

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) | 84 |
| From 65 to 84 years | 52 |

| | |
|-------------------|---|
| 85 years and over | 0 |
|-------------------|---|

Subject disposition

Recruitment

Recruitment details:

Patients with PsA or Hand-OA were included between November 2018 and September 2020. at the Rheu- matological Research Unit at the Department of Rheumatology, Aalborg University Hospital, Denmark

Pre-assignment

Screening details:

152 patients screened. 13 excluded (3 due to inadequate pain intensity, 7 declined to participate, 3 did not fill diagnostic criteria).

Period 1

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

Blinding implementation details:

Medicine and placebo was identical and randomisation was performed off site.

Randomisation was broken after analysis and only then did participants and staff learn what medications the patients received.

Arms

| | |
|--|--------------|
| Are arms mutually exclusive? | Yes |
| Arm title | Cannabidiol |
| Arm description: - | |
| Arm type | Experimental |
| Investigational medicinal product name | Cannabidiol |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Patients initially received either oral CBD 10 mg or a placebo tablet once daily with the dose increased to 10 mg twice daily after 2 weeks. Patients were contacted by the investigator after 4 weeks, and those not experiencing a pain reduction of more than 20 mm on the VAS had their dose increased to 10 mg thrice daily until the end of treatment period.

| | |
|--|----------|
| Arm title | Placebo |
| Arm description: - | |
| Arm type | Placebo |
| Investigational medicinal product name | Placebo |
| Investigational medicinal product code | |
| Other name | |
| Pharmaceutical forms | Tablet |
| Routes of administration | Oral use |

Dosage and administration details:

Se CBD regimen

| Number of subjects in period 1 | Cannabidiol | Placebo |
|---------------------------------------|-------------|---------|
| Started | 70 | 66 |
| Completed | 68 | 61 |
| Not completed | 2 | 5 |
| Consent withdrawn by subject | - | 2 |
| Misdiagnosed | - | 1 |
| Lost to follow-up | 2 | - |
| Protocol deviation | - | 2 |

Baseline characteristics

Reporting groups

| | |
|--------------------------------|-------------|
| Reporting group title | Cannabidiol |
| Reporting group description: - | |
| Reporting group title | Placebo |
| Reporting group description: - | |

| Reporting group values | Cannabidiol | Placebo | Total |
|------------------------------------|-------------|---------|-------|
| Number of subjects | 70 | 66 | 136 |
| Age categorical Units: Subjects | | | |

| | | | |
|--|-------------------------|-------------------------|----|
| Age continuous Units: years median inter-quartile range (Q1-Q3) | 62.00 56.25 to 68.00 | 61.50 53.00 to 70.75 | - |
| Gender categorical Units: Subjects | | | |
| Female | 42 | 46 | 88 |
| Male | 28 | 20 | 48 |

End points

End points reporting groups

| | |
|--------------------------------|-------------|
| Reporting group title | Cannabidiol |
| Reporting group description: - | |
| Reporting group title | Placebo |
| Reporting group description: - | |

Primary: VAS pain

| | |
|------------------------|----------|
| End point title | VAS pain |
| End point description: | |
| End point type | Primary |
| End point timeframe: | |
| 12 weeks | |

| End point values | Cannabidiol | Placebo | | |
|----------------------------------|----------------------|----------------------|--|--|
| Subject group type | Reporting group | Reporting group | | |
| Number of subjects analysed | 70 | 66 | | |
| Units: millimetre | | | | |
| number (confidence interval 95%) | 11.68 (5.33 to 18.0) | 11.45 (5.01 to 18.5) | | |

Statistical analyses

| | |
|---|--------------------------------------|
| Statistical analysis title | Mean difference in pain at study end |
| Comparison groups | Cannabidiol v Placebo |
| Number of subjects included in analysis | 136 |
| Analysis specification | Pre-specified |
| Analysis type | |
| P-value | = 0.96 |
| Method | t-test, 2-sided |
| Parameter estimate | Mean difference (final values) |
| Point estimate | 0.23 |
| Confidence interval | |
| level | 95 % |
| sides | 2-sided |
| lower limit | -9.41 |
| upper limit | 9.9 |
| Variability estimate | Standard deviation |

Adverse events

Adverse events information

Timeframe for reporting adverse events:

12 weeks

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

Dictionary used

| | |
|-----------------|------|
| Dictionary name | None |
|-----------------|------|

| | |
|--------------------|---|
| Dictionary version | 1 |
|--------------------|---|

Reporting groups

| | |
|-----------------------|-------------|
| Reporting group title | Cannabidiol |
|-----------------------|-------------|

Reporting group description: -

| | |
|-----------------------|---------|
| Reporting group title | Placebo |
|-----------------------|---------|

Reporting group description: -

| Serious adverse events | Cannabidiol | Placebo | |
|---|--|----------------|--|
| Total subjects affected by serious adverse events | | | |
| subjects affected / exposed | 2 / 70 (2.86%) | 2 / 66 (3.03%) | |
| number of deaths (all causes) | 0 | 0 | |
| number of deaths resulting from adverse events | 0 | 0 | |
| Neoplasms benign, malignant and unspecified (incl cysts and polyps) | | | |
| Ductal carcinoma | | | |
| subjects affected / exposed | 1 / 70 (1.43%) | 0 / 66 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Malignant hypertension | Additional description: Patient had a measure of high blood pressure and was sent to the D. Normalised in the ED without requiring further intervention. | | |
| subjects affected / exposed | 0 / 70 (0.00%) | 1 / 66 (1.52%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Vascular disorders | | | |
| Lipothymia | Additional description: Patient had a fainting spell and was brought to the AE. No cause for the fainting spell was found | | |
| subjects affected / exposed | 1 / 70 (1.43%) | 0 / 66 (0.00%) | |
| occurrences causally related to treatment / all | 0 / 1 | 0 / 0 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |
| Musculoskeletal and connective tissue disorders | | | |
| Shoulder fracture | Additional description: Shoulder fracture due to fall | | |

| | | | |
|---|----------------|----------------|--|
| subjects affected / exposed | 0 / 70 (0.00%) | 1 / 66 (1.52%) | |
| occurrences causally related to treatment / all | 0 / 0 | 0 / 1 | |
| deaths causally related to treatment / all | 0 / 0 | 0 / 0 | |

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

| Non-serious adverse events | Cannabidiol | Placebo | |
|---|------------------|------------------|--|
| Total subjects affected by non-serious adverse events | | | |
| subjects affected / exposed | 30 / 70 (42.86%) | 26 / 66 (39.39%) | |
| Cardiac disorders | | | |
| Cardiovascular | | | |
| subjects affected / exposed | 3 / 70 (4.29%) | 4 / 66 (6.06%) | |
| occurrences (all) | 4 | 4 | |
| Gastrointestinal disorders | | | |
| Lower GI | | | |
| subjects affected / exposed | 2 / 70 (2.86%) | 6 / 66 (9.09%) | |
| occurrences (all) | 2 | 9 | |
| Upper GI | | | |
| subjects affected / exposed | 5 / 70 (7.14%) | 9 / 66 (13.64%) | |
| occurrences (all) | 6 | 10 | |
| Respiratory, thoracic and mediastinal disorders | | | |
| Ear nose and throat | | | |
| subjects affected / exposed | 5 / 70 (7.14%) | 0 / 66 (0.00%) | |
| occurrences (all) | 8 | 0 | |
| Airways | | | |
| subjects affected / exposed | 6 / 70 (8.57%) | 5 / 66 (7.58%) | |
| occurrences (all) | 7 | 6 | |
| Skin and subcutaneous tissue disorders | | | |
| Dermal | | | |
| subjects affected / exposed | 2 / 70 (2.86%) | 0 / 66 (0.00%) | |
| occurrences (all) | 3 | 0 | |
| Psychiatric disorders | | | |
| Mood | | | |
| subjects affected / exposed | 3 / 70 (4.29%) | 3 / 66 (4.55%) | |
| occurrences (all) | 4 | 3 | |
| Renal and urinary disorders | | | |

| | | | |
|--|----------------------|-----------------------|--|
| Urogenital subjects affected / exposed occurrences (all) | 0 / 70 (0.00%) 0 | 4 / 66 (6.06%) 5 | |
| Musculoskeletal and connective tissue disorders Musculoskeletal subjects affected / exposed occurrences (all) | 6 / 70 (8.57%) 11 | 7 / 66 (10.61%) 11 | |

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? Yes

| Date | Interruption | Restart date |
|------------------|--|---------------|
| 14 November 2019 | Firm that helps with secondary analysis of the trial medicine failed a GMP inspection. | 02 March 2020 |
| 10 March 2020 | COVID-19 | 17 June 2020 |

Notes:

Limitations and caveats

None reported

Online references

<http://www.ncbi.nlm.nih.gov/pubmed/34510141>