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 (NTC03693833) 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	62.00	61.50	
inter-quartile range (Q1-Q3)	56.25 to 68.00	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 medicin 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