



## Clinical trial results: CANnabidiol for Behavioural Symptoms in Alzheimer's Disease Summary

EudraCT number	2019-002106-52
Trial protocol	GB
Global end of trial date	24 May 2022

### Results information

Result version number	v1 (current)
This version publication date	30 July 2023
First version publication date	30 July 2023
Summary attachment (see zip file)	Data report (Clinical Study Report CANBiS-AD Version 1_7.7.2023 FINAL.docx)

### Trial information

#### Trial identification

Sponsor protocol code	CANBiS-AD
-----------------------	-----------

#### Additional study identifiers

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

Notes:

### Sponsors

Sponsor organisation name	King's College London
Sponsor organisation address	The Strand, London, United Kingdom, WC2R 2LS
Public contact	Dr Latha Velayudhan, King's College London, +44 02078480508, latha.velayudhan@kcl.ac.uk
Scientific contact	Dr Latha Velayudhan, King's College London, +44 02078480508, latha.velayudhan@kcl.ac.uk
Sponsor organisation name	South London and Maudsley NHS Foundation Trust
Sponsor organisation address	Denmark Hill, London, United Kingdom, SE5 8AZ
Public contact	Dr Latha Velayudhan, King's College London, +44 02078480508, latha.velayudhan@kcl.ac.uk
Scientific contact	Dr Latha Velayudhan, King's College London, +44 02078480508, latha.velayudhan@kcl.ac.uk

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	04 July 2022
Is this the analysis of the primary completion data?	Yes
Primary completion date	24 May 2022
Global end of trial reached?	Yes
Global end of trial date	24 May 2022
Was the trial ended prematurely?	Yes

Notes:

## General information about the trial

Main objective of the trial:

(i)Acceptability: To investigate the acceptability of the randomisation procedure and delivery of the intervention (CBD or placebo in capsule form) to the AD patients and carers (recruitment rates).

(ii)Retention: To measure the study retention rate (follow-up rates).

(iii)Compliance: To assess compliance with treatment (adherence).

Protection of trial subjects:

Category of withdrawal I (Voluntary withdrawal) - As per the Declaration of Helsinki, all participants will have the right to withdraw from the study at any time without giving any reason without any prejudice to their future medical care and will be informed as such.

An independent Data Monitoring Committee (DMC) will be constituted to act in an advisory capacity to meet regularly (at approximately 6 monthly intervals) to review accumulating data and to monitor patient safety and outcome

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	20 May 2021
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	United Kingdom: 16
Worldwide total number of subjects	16
EEA total number of subjects	16

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)	1
From 65 to 84 years	15
85 years and over	0

## Subject disposition

### Recruitment

Recruitment details: -

### Pre-assignment

Screening details: -

### Pre-assignment period milestones

Number of subjects started	22 <sup>[1]</sup>
----------------------------	-------------------

Number of subjects completed	15
------------------------------	----

### Pre-assignment subject non-completion reasons

Reason: Number of subjects	Screen fail: 6
----------------------------	----------------

Reason: Number of subjects	Physician decision: 1
----------------------------	-----------------------

Notes:

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

Justification: 1 participant withdrew after randomisation but before any study procedures so was not included in the analysis.

### Period 1

Period 1 title	Overall Trial (overall period)
----------------	--------------------------------

Is this the baseline period?	Yes
------------------------------	-----

Allocation method	Randomised - controlled
-------------------	-------------------------

Blinding used	Double blind
---------------	--------------

Roles blinded	Subject, Investigator
---------------	-----------------------

### Arms

Are arms mutually exclusive?	Yes
------------------------------	-----

Arm title	CBD arm
-----------	---------

Arm description: -

Arm type	Experimental
----------	--------------

Investigational medicinal product name	cannabidiol
--	-------------

Investigational medicinal product code	
--	--

Other name	
------------	--

Pharmaceutical forms	Capsule, hard
----------------------	---------------

Routes of administration	Oral use
--------------------------	----------

Dosage and administration details:

Within the CBD arm, all patients will start on 200 mg/day and thereafter they will receive an increased dose of 400 mg/day from day 8 and 600mg/day from day 15. If a patient begins to experience intolerable side effects, the dose will be dropped to the last tolerated dose.

Arm title	placebo
-----------	---------

Arm description: -

Arm type	Placebo
----------	---------

Investigational medicinal product name	placebo
--	---------

Investigational medicinal product code	
--	--

Other name	
------------	--

Pharmaceutical forms	Capsule, hard
----------------------	---------------

Routes of administration	Oral use
--------------------------	----------

Dosage and administration details:

Placebo arm patients will receive identical number of capsules over the study period.

Number of subjects in period 1 <sup>[2]</sup>	CBD arm	placebo
Started	8	7
Completed	8	7

---

Notes:

[2] - 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: 1 participant withdrew after randomisation but before any study procedures so was not included in the analysis.

## Baseline characteristics

### Reporting groups

Reporting group title

Overall Trial

Reporting group description: -

Reporting group values	Overall Trial	Total	
Number of subjects	15	15	
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)		0	
Adults (18-64 years)		0	
From 65-84 years		0	
85 years and over		0	
Age continuous			
Units: years			
arithmetic mean	77.91		
standard deviation	± 0.08	-	
Gender categorical			
Units: Subjects			
Female	1	1	
Male	14	14	

## End points

### End points reporting groups

Reporting group title	CBD arm
Reporting group description: -	
Reporting group title	placebo
Reporting group description: -	

### Primary: Overall adherence

End point title	Overall adherence <sup>[1]</sup>
End point description:	

End point type	Primary
End point timeframe:	
Randomisation to week 6	

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: No statistical analysis

End point values	CBD arm	placebo		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	8	7		
Units: Retention Rate	8	7		

### Statistical analyses

No statistical analyses for this end point

## Adverse events

### Adverse events information

Timeframe for reporting adverse events:

From Screening to day 71

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

### Dictionary used

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

Dictionary version	26
--------------------	----

### Reporting groups

Reporting group title	CBD arm
-----------------------	---------

Reporting group description: -

Reporting group title	placebo
-----------------------	---------

Reporting group description: -

Serious adverse events	CBD arm	placebo	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 8 (0.00%)	1 / 7 (14.29%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	
Injury, poisoning and procedural complications			
Fall			
subjects affected / exposed	0 / 8 (0.00%)	1 / 7 (14.29%)	
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: 1 %

Non-serious adverse events	CBD arm	placebo	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	6 / 8 (75.00%)	1 / 7 (14.29%)	
Investigations			
liver enzymes raised			
subjects affected / exposed	1 / 8 (12.50%)	0 / 7 (0.00%)	
occurrences (all)	2	0	
Nervous system disorders			
Dizziness			



subjects affected / exposed occurrences (all)	2 / 8 (25.00%) 5	0 / 7 (0.00%) 0	
Gastrointestinal disorders Nausea subjects affected / exposed occurrences (all)	1 / 8 (12.50%) 1	1 / 7 (14.29%) 1	
Psychiatric disorders Depression subjects affected / exposed occurrences (all)  Somnolence subjects affected / exposed occurrences (all)	1 / 8 (12.50%) 1  1 / 8 (12.50%) 2	0 / 7 (0.00%) 0  0 / 7 (0.00%) 0	

## More information

### Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
01 April 2020	Protocol v3.0 submitted in response to REC comments
28 September 2021	IMPD updated to extend capsule shelf life

Notes:

### Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
01 December 2021	The study had a brief pause in recruitment for about 8 weeks (Dec 2021 to Jan 2022) due to delays in approval and re-labelling and shipment of IMP supply. The overall delay in study start meant tight limitations for recruitment and IMP expiry (30th April 2022). This meant the final recruitment date for the study was 18th March 2022 to ensure that the patient recruited on that date completed the trial by the 30th of April 2022	31 January 2022

Notes:

### Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

We faced a number of challenges due to multiple waves of the COVID-19 pandemic and risk to potential trial participants, who were already vulnerable to covid because of their age and co-morbid health conditions.

Notes: