

# Clonazepam in ARID1B Evaluation (CARE study)

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- clonazepam administration has acute beneficial effects compared to placebo on neurocognitive tests.
- multiple-doses clonazepam has beneficial effects compared to placebo on behaviour and cognitive function in ARID1B patients as measured by the...

**Ethische beoordeling** Positief advies

**Status** Werving nog niet gestart

**Type aandoening** -

**Onderzoekstype** Interventie onderzoek

## Samenvatting

### ID

NL-OMON29120

### Bron

NTR

### Verkorte titel

CHDR1939

### Aandoening

ARID1B

## Ondersteuning

**Primaire sponsor:** CHDR

**Overige ondersteuning:** CHDR

## Onderzoeksproduct en/of interventie

## Uitkomstmatten

### Primaire uitkomstmatten

Pharmacokinetic endpoints

Part A: serum and saliva. Part B: saliva only.

- The maximum serum concentration, Cmax
- The time to reach maximum serum concentration, tmax
- The terminal disposition rate constant ( $\lambda z$ ) with the respective half-life,  $t^{1/2}$
- The area under the serum concentration-time curve from zero to infinity, AUC0-inf
- The area under the serum concentration-time curve from zero to t of the last measured concentration above the limit of quantification, AUC0-last
- Clearance, Cl
- Volume of distribution, Vz

#### Trial@home endpoints

- Physical activity
- Sleep (duration, %light sleep, amount of times woken up)
- Heart rate
- Daily symptom scores
- Tapping frequency, adaptive tracking, animal fluency (twice-weekly)

#### Pharmacodynamic endpoints

- NeuroCart
- o Adaptive Tracking
- o Animal fluency test
- o Body Sway
- o Saccadic Eye Movements
- o Smooth Pursuit Eye Movements
- o Tapping frequency
- Questionnaires
- o ABC questionnaire (parents, teacher)
- o Clinician's Global Impression of improvement (CGI-I)

#### Tolerability / safety endpoints

- Adverse events
- Vital signs measurements
- General physical examination findings

## Toelichting onderzoek

### Achtergrond van het onderzoek

Clonazepam is a registered and safe drug which is being used for the treatment of epilepsy. Preclinical experiments show that clonazepam rescues some of the preclinical phenotypes in ARID1B +/- mice. There is currently no treatment for ARID1B-related intellectual disability. The aim of this study is to assess the efficacy and safety of clonazepam in patients with ARID1B-related intellectual disability.

### Doel van het onderzoek

- clonazepam administration has acute beneficial effects compared to placebo on neurocognitive tests.
- multiple-doses clonazepam has beneficial effects compared to placebo on behaviour and cognitive function in ARID1B patients as measured by the ABC, and CGI-I scale.

## Onderzoeksopzet

-28 Days till EOS

## Onderzoeksproduct en/of interventie

Clonazepam and placebo

## Contactpersonen

### Publiek

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### Wetenschappelijk

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## Deelname eisen

### Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)

Part A, correlation blood-saliva PK.

- Healthy male or female volunteers aged 18-30 years
- Informed consent provided by volunteer

Part B: ARID1B patients.

- Informed consent provided by both parents, or the legal guardian prior to any study

mandated procedure.

- Known mutation in ARID1B
- Assent provided by the participant.
- Aged 6 years or older
- Able to perform at least 5 of the 6 NeuroCart® activities.

## **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

Part A, healthy volunteers

- Disorder that could interfere with saliva production.
- Known hypersensitivity to clonazepam, other benzodiazepines or other excipients of the study medication.
- Treatment with another investigational drug within 3 months prior to screening or more than 4 times a year.
- History or clinical evidence of any disease and/or existence of a surgical or medical condition which might interfere with the absorption, distribution, metabolism or excretion of the study drug.
- History of severe respiratory problems or severe liver- or renal insufficiency.
- Other medical or psychosocial history making the participant unsuitable for participation as determined by the treating paediatrician.
- History or clinical evidence of alcoholism within the 3-year period prior to screening (i.e. regular use of more than 21 units of alcohol/week).
- Clinically significant findings on physical examination.
- Medications with a strong influence on CYP3A4 metabolism
- Clinically meaningful blood loss (including blood donation), or a transfusion of any blood product within 12 weeks before screening.
- Subjects with a BMI > 30 and/or cardiovascular, respiratory or immune system disorders

Part B: ARID1B patients.

- Clear indication of not wanting to participate during the study
- Use of benzodiazepines or any other medication or drug with the potential to influence study related endpoints in the investigator's opinion (including e.g. CYP3A4-related drugs).
- Known hypersensitivity to clonazepam, other benzodiazepines or other excipients of the study medication.
- History of severe respiratory problems or severe liver- or renal insufficiency.
- Other medical or psychosocial history making the participant unsuitable for participation as determined by the treating paediatrician.

## **Onderzoeksopzet**

## Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Cross-over
Toewijzing:	Gerandomiseerd
Blinding:	Dubbelblind
Controle:	Placebo

## Deelname

Nederland	
Status:	Werving nog niet gestart
(Verwachte) startdatum:	01-04-2020
Aantal proefpersonen:	40
Type:	Verwachte startdatum

## Voornemen beschikbaar stellen Individuele Patiënten Data (IPD)

Wordt de data na het onderzoek gedeeld: Nee

## Toelichting

N.A.

## Ethische beoordeling

Positief advies	
Datum:	23-07-2020
Soort:	Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 52899  
Bron: ToetsingOnline  
Titel:

### Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

Register	ID
NTR-new	NL8792
CCMO	NL71395.056.19
OMON	NL-OMON52899

## Resultaten

### Samenvatting resultaten

N.A.