# **Bumetanide for the Autism Spectrum Clinical Effectiveness Trial**

No registrations found.

**Ethical review** Positive opinion

**Status** Pending

Health condition type -

**Study type** Interventional

## **Summary**

#### ID

NL-OMON20585

Source

Nationaal Trial Register

**Brief title** 

**BASCET** 

**Health condition** 

Autism Spectrum Disorders (ASDs); Epilepsy

## **Sponsors and support**

**Primary sponsor:** University Medical Center Utrecht

**Source(s) of monetary or material Support:** Dutch Brain Foundation

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

- Aberrant Behavior Checklist (ABC) Irritability Subscale

#### **Secondary outcome**

- World Health Organization Quality of life (WHOQOL-BREF)
  - 1 Bumetanide for the Autism Spectrum Clinical Effectiveness Trial 15-06-2025

- EQ5D-5L; EQ5D-Youth
- BRIEF
- Productivity Cost Questionnaire (iPCQ)
- Trimbos/iMTA questionnaire for Costs associated with Psychiatric Illness (TiC-P)
- ABC sub scales
- Repetitive Behavior Scale (RBS-V)
- Social Responsiveness Scale (SRS)
- Sensory Profile (SP-NL)
- SP School Sompanion (SP-SC)

Epilepsy related variables (if applicable)

- Seizure frequency
- Number of occasions rescue medication is necessary

## **Study description**

#### **Background summary**

This is a multicenter, double-blind, randomized, placebo-controlled trial testing the effectiveness of three months bumetanide treatment in 172 children aged 5 to 15 years with ASD, with or without epilepsy. The primary endpoint is change in the ABC-I scale at Day 91. Usual care + bumetanide will be compared with usual care + placebo. Participants will be included in Groningen and Utrecht (the Netherlands).

#### Study objective

To confirm that twelve weeks of add-on treatment with bumetanide will improve daily life functioning and reduce behavioral symptoms related to hyperexcitability in children and adolescents with autism spectrum disorder and/or epilepsy.

#### Study design

Pre-treatment and screening (D-30 to Day0)

- o Screening for eligibility
- o Baseline measurements (all primary and secondary outcomes, except iPCQ and TiC-P)

Treatment (D0 to D91)

- o Blood analysis at D4, D7, D14, D28, D56
- o End of treatment outcome measurements D91 (all primary and secondary outcomes) Washout (D91 to D119)
- o End of washout outcome measurements D119 (all primary and secondary outcomes, except iPCQ and TiC-P)

#### Intervention

The investigational product (IP) consists of bumetanide 0.5 mg tablets or placebo, which will be provided as an add-on treatment, supplementary to the regular use of AEDs or other (allowed) comedications. Dose reductions to manage side effects will be allowed at any time. Due to the expected chance of frequent mild to moderate hypokalemia, all subjects will receive standard potassium supplementation during the 91 days of treatment. The treatment period will be followed by a wash-out period to evaluate return of symptomatology and reversibility of treatment effect.

Placebo product will be administered as comparator of the Bumetanide in exact similar tablets. The qualitative and quantitative composition in excipients of the Placebo product is comparable to that of Bumetanide 0.5 mg tablets.

## **Contacts**

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## **Eligibility criteria**

#### Inclusion criteria

- 1. Males and females aged 5-15 years
- 2. Above ASD cut-off scores on the Social Responsiveness Scale and either a clinical ASD diagnosis based on DSM-5 (or DSM-IV) or an epilepsy diagnosis
- 3. Written informed consent

#### **Exclusion criteria**

- 1. Total IQ<55
- 2. Presence of a severe medical or genetic disorder other than related to ASD or epilepsy
- 3. Serious, unstable illnesses
- 4. Renal insufficiency, congenital or acquired renal disease with decreased concentration capacity and liver insufficiency
- 5. Behavioral treatment:
- 6. Treatment with psychoactive medications, including antipsychotics and AEDs, except methylphenidate, is allowed;
- 7. Treatment with NSAIDS, aminoglycosides, digitals, antihypertensive agents, indomethacin, probenecid, acetazolamide, Lithium, other diuretics, drugs known to have a nephrotoxic potential;
- 8. Documented history of hypersensitivity reaction to sulfonamide derivatives
- 9. Body weight <17 kg

## Study design

### Design

Study type: Interventional

Intervention model: Parallel

Allocation: Randomized controlled trial

Masking: Double blinded (masking used)

Control: Placebo

#### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-03-2017

Enrollment: 172

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 13-01-2017

Application type: First submission

## **Study registrations**

## Followed up by the following (possibly more current) registration

ID: 45411

Bron: ToetsingOnline

Titel:

## Other (possibly less up-to-date) registrations in this register

No registrations found.

## In other registers

Register ID

NTR-new NL6178 NTR-old NTR6325

CCMO NL58621.041.16 OMON NL-OMON45411

## **Study results**