# Multicenter, open\*label, phase II study in patients with monoclonal gammopathy of unknown significance (MGUS) and anti Myelin Associated Gycoproteine (MAG) Neuropathy and Zanubrutinib Treatment \* MAGNAZ trial

Published: 08-08-2022 Last updated: 05-04-2024

Main objective:To improve the functional neurological outcome of patients, as measured on the Raschbuilt Overall Disability Scale (RODS) for inflammatory neuropathies (iRODS) with Zanubrutinib in combination with standard treatment with Rituximab or...

Ethical review	Not approved
Status	Will not start
Health condition type	White blood cell disorders
Study type	Interventional

# Summary

### ID

NL-OMON52317

**Source** ToetsingOnline

Brief title Magnaz

### Condition

- White blood cell disorders
- Peripheral neuropathies

### Synonym

Neuropathy (nerve pain)

#### **Research involving**

Human

### **Sponsors and support**

**Primary sponsor:** Universitair Medisch Centrum Utrecht **Source(s) of monetary or material Support:** Ministerie van OC&W,BeiGene Switzerland GmbH,Dr. C.J. Vaillantfonds

### Intervention

**Keyword:** anti-MAG (myelin associated gycoproteine), IgM-related neuropathy, MGUS (monoclonal gammopathy of unknown significance), Zanubrutinib

### **Outcome measures**

#### **Primary outcome**

To improve the functional neurological outcome of patients, as measured on the

RaschbuiltOverall Disability Scale (RODS) for inflammatory neuropathies (iRODS)

withZanubrutinib in combination with Rituximab or biosimilar treatment.

#### Secondary outcome

Safety of combined treatment with Rituximab or biosimilar and Zanubrutinib

\* Changes in other neurological outcome parameters besides the iRODS, such as

ONLS

(Overall Neuropathy Limitations Scale), 10 meter walk test, ataxia score,

modified

INCAT (The Inflammatory Neuropathy Cause And Treatment) sensory sum score

(mISS), and grip strength (vigorimetry) 8,14\*17

\* Percentage of patients with >4 points difference measured with iRODS after 12

cycles

of therapy

\* Hematological response

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- \* Change of anti\*MAG titers during treatment and follow up
- \* Molecular profiling and relation with response and immunological parameters
- \* Relation between neurological and immunological outcome parameters
- \* Quality of life assessment (EQ\*5D\*5L) before (at baseline), during and after

### therapy

- \* Patients global impression of change (PGIC) during and after therapy
- \* Overall survival (OS)
- \* Progression free survival (PFS) (hematological)

# **Study description**

### **Background summary**

The trial will investigate whether adding Zanubrutinib to standard treatment (Rituximab or biosimilar)will improve the functional neurological outcome of patients with IgM related anti MAG neuropathies from baseline till after cycle 12.

### Study objective

Main objective:To improve the functional neurological outcome of patients, as measured on the Raschbuilt Overall Disability Scale (RODS) for inflammatory neuropathies (iRODS) with Zanubrutinib in combination with standard treatment with Rituximab or biosimilar.

Secondary objectives:

The main secondary endpoint is to assess the safety of Zanubrutinb treatment in IgM related PNP as measured by Common Terminology Criteria for Adverse Events (CTCAE), version 5.0.

- Changes in other neurological outcome parameters besides the iRODS, such as ONLS

(Overall Neuropathy Limitations Scale), 10 meter walk test, ataxia score, modified INCAT (The Inflammatory Neuropathy Cause And Treatment) sensory sum score

(mISS), and grip strength (vigorimetry)

- Percentage of patients with >4 points difference measured with iRODS after 12 cycles of therapy

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- Hematological and immunological response

- Molecular profiling and relation with response and hematological and immunological parameters

- Relation between neurological and hematological and immunological outcome parameters

- Quality of life assessment (EQ\*5D) before, during and after therapy
- Patients global impression of change (PGIC) during and after therapy
- Overall survival (OS)
- Progression free survival (PFS) (hematological)

#### Study design

Zanubrutinib is the study drug and will be used next to standard care. Standard care is 4 infusions IV of Rituximab or biosimilar infusion per week. Zanubrutinib will start on the same day as start Rituximab or biosimilar. Zanubrutinib will at least be given for 6 cycles. 1 cycle includes 28 days of orally Zanubrutinib capsules (4x80mg). Patients who achieve a hematological minimal response or better after 6 cycles continue with treatment. After 12 cycles, if a very good partial response or complete hematological response is reached, Zanubrutinib can be continued. Otherwise Zanubrutinib will be stopped after 12 cycles.

#### Intervention

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#### Study burden and risks

By participating in this study patients will receive a treatment they usually would not receive. IgM-related neuropathy is usually treated with 4 gifts of Rituximab or biosimilar. By lowering the toxic IgM M protein in the blood the effect on the neurons is diminished. Zanubrutinib targets the IgM M protein and thereby this treatment can possibly improve neuropathy complaints and with that improve quality of life of patients. There are no guarantees that treatment will result in direct benefits for the patient.

# Contacts

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# **Trial sites**

### Listed location countries

Netherlands

# **Eligibility criteria**

#### Age

Adults (18-64 years) Elderly (65 years and older)

### **Inclusion criteria**

Able to provide written informed consent and understand and comply with the requirements of the study
Demyelinating polyneuropathy defined by electrophysiological criteria according to EFNS/PNS
PDN guideline, 201019
Some functional impairment; defined as an iRODS \* 44 at baseline
Age \* 18 years
IgM MGUS, defined as the presence of an IgM M protein (detectable but < 30 g/L) AND elevated total IgM level in serum</li>
Presence of anti MAG antibodies \* 10.000 titer units, measured with the

Bühlmann ELISA

- ECOG performance score 0, 1, or 2

- Adequate hematological laboratory values defined as

hemoglobin \* 5.0 mmol/L neutrophils > 1.0  $\times$  10^9/L and platelets > 100  $\times$  10^9/L

- Adequate hepatic and renal function laboratory values defined as ASAT/ALAT

< 3  $\times$  ULN, bilirubin < 2.0  $\times$  ULN and creatinine clearance \* 30 ml/min

- No history of severe bleeding disorder such as hemophilia A, hemophilia B, von Willebrand

disease, or history of spontaneous bleeding requiring blood transfusion or other medical intervention

- Previous treatment with intravenous immunoglobulins is allowed if > 3 months before inclusion

- Previous treatment for PNP with Anti CD20 MoAb and/or cyclophosphamide is allowed only if

given > 6 months before inclusion

### **Exclusion criteria**

- Hematological malignancy e.g known Multiple Myeloma or confirmed Waldenstrom\*s Macroglobulinemia based on bone marrow analysis

- Any history of malignancy of any organ system (other than localized basal or squamous cell

carcinoma of the skin, superficial bladder cancer or carcinoma in situ of the cervix or breast),

treated or untreated within the last 3 years

- History of ischemic stroke within 180 days before first dose of Zanubrutinib.
- History of CNS hemorrhage.
- History of inherited or acquired hemorrhagic disorder
- Prior treatment with purine analogues (fludarabine or cladribine)
- Prior treatment with a BTK inhibitor
- Major surgery within 4 weeks of study treatment
- Participation in another interventional clinical trial
- Women with child\*bearing potential (WOCBP) not able or willing to prevent pregnancy and

lactating women as well. WOCBP will agree to use highly effective contraception for the duration of the trial treatment and for 120 days after treatment stop

- Other known concomitant causes of chronic (demyelinating) PNP, including Charcot Marie Tooth Disease, other hereditary neuropathies, diabetes mellitus, use of amiodarone, past or current dependence on alcohol, other lymphoma or malignant blood dyscrasias, previous Guillain\*Barré syndrome

- Currently active, clinically significant cardiovascular disease such as uncontrolled arrhythmia,

congestive heart failure, any Class 3 or 4 cardiac disease (congestive heart failure) as defined by

the New York Heart Association (NYHA) Functional Classification, or history of myocardial

infarction within 6 months of screening

- A history of clinically significant ECG abnormalities, or any of the

following ECG abnormalities

at screening:

o QTcF >450 msec (males)

o QTcF >460 msec (females)

o History of familial long QT syndrome or known family history of Torsades de Pointes

o Use of agents known to prolong the QT interval unless they can be permanently discontinued for the duration of the study

o second degree atrioventricular (AV) block Type II, or third\*degree AV block

\* Controlled atrial fibrillation is allowed

- Unable to swallow capsules or disease significantly affecting gastrointestinal function such as

malabsorption syndrome, resection of the stomach or small bowel, symptomatic inflammatory

bowel disease, or partial or complete bowel obstruction

- Uncontrolled active systemic infection or recent infection requiring parenteral anti\*microbial

therapy that was completed \* 14 days before the first dose of study drug.

Active tuberculosis

- Known infection with human immunodeficiency virus (HIV), or serologic status reflecting active

hepatitis B or hepatitis C infection as follows: Presence of hepatitis B surface antigen (HBsAg) or

anti\*hepatitis B core antibody (anti\*HBc). Patients with anti\*HBc, but absence of HBsAg, are

eligible if hepatitis B virus (HBV) DNA is undetectable and if they are willing to undergo monthly

monitoring for HBV reactivation

- Presence of hepatitis C virus (HCV) antibody. Patients with presence of HCV antibody are eligible if HCV ribonucleic acid (RNA) is ndetectable

- At time of study entry, taking any medications which are strong cytochrome P450, family 3,

subfamily A (CYP3A) inhibitors or strong CYP3A inducers

- Intolerance to previous Anti CD20 MoAb or other anti CD20 MoAb treatment

- History of intolerance to the active ingredients or other ingredients of Zanubrutinib

# Study design

### Design

Study phase:	2
Study type:	Interventional
Masking:	Open (masking not used)
Control:	Uncontrolled
Primary purpose:	Treatment

### Recruitment

NL	
Recruitment status:	Will not start
Enrollment:	40
Туре:	Anticipated

### Medical products/devices used

Product type:	Medicine
Brand name:	Zanubrutinib
Generic name:	Brukinsa

# **Ethics review**

Approved WMO Date:	08-08-2022
Application type:	First submission
Review commission:	METC NedMec
Not approved Date:	14-12-2022
Application type:	First submission
Review commission:	METC NedMec

# **Study registrations**

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

No registrations found.

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

No registrations found.

### In other registers

Register	ID
EudraCT	EUCTR2021-003066-12-NL
ССМО	NL78826.041.22