A Phase 1, Randomized, Double Blinded, Placebo Controlled Study to Investigate the Safety, Tolerability, Pharmacokinetics, and Immunogenicity of Single and Multiple Ascending Doses of ARGX 119 in Healthy Participants

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Ethical review	Approved WMO
Status	Completed
Health condition type	Other condition
Study type	Interventional

Summary

ID

NL-OMON53520

Source
ToetsingOnline

Brief title
FIH/SAD/MAD study for ARGX-119

Condition

- Other condition
- Neuromuscular disorders

Synonym
debilitating muscle weakness

Health condition

reduced neuromuscular transmission and muscle weakness

Research involving
Human

Sponsors and support

Primary sponsor: argenx BV
Source(s) of monetary or material Support: pharmaceutical industry

Intervention

Keyword: ARGX-119, PK, Randomized, Safety

Outcome measures

Primary outcome

Assessment of adverse events, clinical laboratory tests, electrocardiograms,

and vital signs

Secondary outcome

Pharmacokinetic parameters of ARGX 119

Incidence and prevalence of antidrug antibodies against ARGX-119

Study description

Background summary

ARGX-119 is a new compound that may potentially be used for the treatment of muscle control diseases such as congenital myasthenic syndrome. This type of disease is caused by a defect in transmission of signals from nerve cells to muscles. This can result in fluctuating muscle weakness of the arms/legs, eyes or face and can be life threatening. Current treatments for muscle control diseases are focused on treating the symptoms of the disease. ARGX-119 is being developed to maintain and restore the signal transmission between nerve cells and muscles and to possibly counteract the effects of the muscle control diseases.

Study objective

In this study we will investigate how safe the new compound ARGX-119 is and how well it is tolerated when it is used by healthy subjects.

We also investigate how quickly and to what extent ARGX-119 is distributed and eliminated from the body. In addition, we look at the effect of ARGX-119 on the immune system. Furthermore, we will also look at the effect of specific markers in the blood. This part of the study is mandatory.
We also look at the effect of the genetic information on the body*s response to ARGX-119. This part of the study is not mandatory.
We compare the effects of ARGX-119 with the effects of a placebo.

ARGX-119 has not been administered to humans before. It has been extensively tested in the laboratory and on animals.

Study design

In Part A In total the volunteer will visit the research center 11 times:
• once for the screening.
• once for stay in the research center. For the study it is necessary that the volunteer stay in the research center for 1 period of 9 days (8 nights). arrival Day -1 and departure on Day 8 of the study.
• eight times for short visits. After the stay in the research center there will be 8 short visits to the research center. These short visits will take place on Days 15, 22, 29, 36, 50, 64, 92 and 120.
• once for the follow-up visit. This follow-up visit will take place on Day 150.

In Part B in total the volunteer will visit the research center 13 times:
• once for the screening.
• three times for stays in the research center. For the study it is necessary that the volunteer stay in the research center for 3 periods of 10, 3 and 9 days (9, 2 and 8 nights), respectively. Day 1 is the first day when you receive the study compound. Departure of the research center on Days 9, 16 and 29 of the study.
• eight times for short visits. After the stay in the research center there will be 8 short visits to the research center. These short visits will take place on Days 36, 43, 50, 57, 71, 99, 127 and 157.
• once for the follow-up visit. This follow-up visit will take place on Day 177.

Intervention

Part A
The compound is given once on Day 1
in Groups 1 to 9 as an intravenous infusion for 1 hour: doses between 0.005

mg/kg and 15.0 mg/kg ARGX-119 or placebo
and in group 10 as an injection under the skin of 5.0 mg/kg ARGX-119 or placebo

Part B
The compound is given once weekly on four occasions: Day 1, 8, 15 and 22
as an intravenous infusion for 1 hour
Group 1: 0.3 mg/kg ARGX-119
Group 2: 0.9 mg/kg ARGX-119
Group 3: 2.5 mg/kg ARGX-119
Group 4: 5 mg/kg ARGX-119

Study burden and risks

Blood draw
Drawing blood may be painful or cause some bruising. The use of the indwelling cannula can sometimes lead to inflammation, swelling, hardening of the vein, blood clotting, and bleeding in the environment of the puncture site. In some individuals, a blood draw can sometimes cause pallor, nausea, sweating, low heart rate, or drop in blood pressure with dizziness or fainting.

In total, we will take about 212 mL in Part A and 282 mL in Part B of blood from you from screening to follow-up. This amount does not cause any problems in adults. To compare: a blood donation involves 500 mL of blood being taken each time at once.

Heart tracing
To make a heart tracing, electrodes will be placed on the arms, chest and legs. To monitor the electrical activity of the heart over a longer period, electrodes will be placed on the chest and abdomen. Prolonged use of these electrodes can cause skin irritation.

Coronavirus test
Samples for the coronavirus test will be taken from the back of your nose and throat using swabs. Taking the samples only takes a few seconds, but can cause discomfort and can give an unpleasant feeling. Taking a sample from the back of the throat may cause the volunteer to gag. When the sample is taken from the back of the nose, the volunteer may experience a stinging sensation and the eyes may become watery.

Contacts

Public
argenx BV

Industriepark Zwijnaarde 7
Zwijnaarde (Ghent) 9052
BE
Scientific
argenx BV

Industriepark Zwijnaarde 7
Zwijnaarde (Ghent) 9052
BE

Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)

Inclusion criteria

Participants are eligible to be included in the study only if all of the following criteria apply
1. Has reached the age of consent at the time of signing the informed consent form but is <=65 years of age
2. Is capable of providing signed informed consent and understands and is capable of complying with protocol requirements
3. Is a healthy, defined as having no clinically meaningful abnormalities identified in any of the following assessments before the first IMP administration on day 1: medical history, physical examination, standard 12-lead ECG, vital sign measurements, and clinical laboratory tests
4. Is either male or a female of nonchildbearing potential.
5. Has negative serum pregnancy tests at both screening and on day -1 (female participants)

further criteria apply

Exclusion criteria

Participants will be excluded from the study if any of the following criteria apply:
1. Has a known hypersensitivity to any of the components of the IMP, or has a history of a significant allergic reaction to any drug that is considered exclusionary by the investigator
2. Has been given an investigational product within 3 months or 5 half-lives (whichever is longer) before their first IMP administration if known
3. Has a positive serum test at screening for an active infection with any of the following conditions:
a. HBV that is indicative of an acute or chronic infection, unless associated with a negative HBsAg or negative HBV DNA test
b. HCV based on HCV antibody assay unless a negative RNA test is available
c. HIV based on test results
4. Has a positive COVID-19 test result on day -1, if performed. COVID-19 testing will be
performed if considered necessary by the PI or required locally.
5. Has a history of any medical or psychiatric condition that, in the opinion of the investigator, is clinically meaningful, may confound the result of the study, or may pose additional risks to the participant while taking part in the study

further criteria apply

Study design

Design

Study type:	Interventional
Intervention model:	Other
Allocation:	Randomized controlled trial
Masking:	Double blinded (masking used)
Control:	Placebo
Primary purpose:	Treatment

Recruitment

NL
Recruitment status: Completed

Start date (anticipated):	03-02-2023
Enrollment:	116
Type:	Actual

Ethics review

Approved WMO Date:	09-01-2023
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	27-01-2023
Application type:	First submission
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	26-09-2023
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	05-12-2023
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)
Approved WMO Date:	21-12-2023
Application type:	Amendment
Review commission:	BEBO: Stichting Beoordeling Ethiek Bio-Medisch Onderzoek (Assen)

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	EUCTR2022-002529-90-NL
CCMO	NL83299.056.22

Study results

Date completed: 08-08-2024

Results posted: 23-01-2025

First publication
09-01-2025