A Long-term Follow-up Study to Evaluate the Safety and Efficacy of Retinal Gene Therapy in Subjects with Choroideremia Treated Previously with Adeno-Associated Viral Vector Encoding Rab Escort Protein-1 (AAV2-REP1) and in Subjects with X-Linked Retinitis Pigmentosa Previously Treated with Adeno-Associated Viral Vector Encoding RPGR (AAV8-RPGR) in an Antecedent Study

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Ethical review	Approved WMO
Status	Completed
Health condition type	Retina, choroid and vitreous haemorrhages and vascular disorders
Study type	Observational invasive

Summary

ID

NL-OMON54647

Source
ToetsingOnline

Brief title
SOLSTICE Study

Condition

- Retina, choroid and vitreous haemorrhages and vascular disorders

Synonym
choroideremia (CHM), retinal degeneration

Research involving
Human

Sponsors and support

Primary sponsor: NightstaRx Ltd
Source(s) of monetary or material Support: Sponsor of the study: NightstaRx

Intervention

Keyword: AAV2-REP1, Antecedent Study, Choroideremia, Retinal Gene Therapy

Outcome measures

Primary outcome

The primary endpoint of this study is safety of AAV2-REP1 and AAV8-RPGR, which will be evaluated through adverse event (AE) reporting and full ophthalmic examinations.

Secondary outcome

• Change from Baseline in best-corrected visual acuity (BCVA) as measured by the Early

Treatment of Diabetic Retinopathy Study (ETDRS) chart

• Proportion of participants with no decrease from Baseline in BCVA or a decrease from

Baseline in BCVA of < 5 ETDRS letters (in CHM participants only)

• Proportion of participants with an increase from Baseline in BCVA of >= 10 ETDRS

letters (in CHM participants only)

• Proportion of participants with an increase from Baseline in BCVA of >= 15

ETDRS

letters (in CHM participants only)

• Available assessments of fundus autofluorescence at each visit

• Available assessments of fundus photography at each visit

• Available assessments of spectral-domain optical coherence tomography

(SD-OCT) at

each visit

• Available assessments of microperimetry at each visit

• Change from Baseline in the 25-Item Visual Function Questionnaire (VFQ-25)

• Change from Baseline in visual field (in AAV8-RPGR-treated participants only)

• Proportion of participants with an increase from Baseline in low-luminance

visual acuity

(LLVA) of >= 10 ETDRS letters (in AAV8-RPGR-treated participants only)

• Proportion of participants with an increase from Baseline in LLVA of >= 15

ETDRS letters

(in AAV8-RPGR-treated participants only)

Datasets from the 2 disease populations will be analyzed separately.

Study description

Background summary

Choroideremia (CHM) is a rare, untreatable retinal degeneration that begins in childhood with loss of night vision and gradually progresses to blindness by

middle age. X-linked retinitis pigmentosa (XLRP) is a degenerative X-linked, rare disease, primarily of males. The disease presents with the onset of night blindness by the tenth year, with progressive loss of peripheral vision leading to legal or total blindness from approximately
40 years of age.

Currently there are no approved treatments for CHM or XLRP.
AAV2-REP1 is being developed as a potential gene therapy for the treatment of CHM. In addition, AAV8-RPGR is being developed as a potential gene therapy for the treatment of XLRP

The aim of the present study is to evaluate the long-term safety and efficacy of AAV2-REP1 and AAV8-RPGR up to 5 years post-treatment.

Study objective

The objective of the study is to evaluate the long-term safety and efficacy of a sub-retinal injection of:
• AAV2-REP1 in subjects with CHM who have been previously treated with AAV2-REP1 and who have exited an antecedent study; these treated subjects will be compared with untreated control subjects who have exited the STAR study.
• AAV8-RPGR in subjects with X-linked retinitis pigmentosa (XLRP) who have been previously treated with AAV8-RPGR and who have exited an antecedent study.

Study design

This is a multi-center, interventional, follow-up study for participants who have previously received a sub-retinal injection of AAV2-REP1 for the treatment of CHM or a sub-retinal injection of AAV8-RPGR for the treatment of XLRP. To allow for more meaningful comparisons of safety and efficacy when investigating treatment of AAV2-REP1, untreated subjects who served as controls in the antecedent STAR study (NSR-REP-01), will also be enrolled in SOLSTICE.

At study entry, the number of months from treatment (or Day 0 in the antecedent STAR study, in the case of control participants) will be defined.

For any timepoints that have been missed following completion of the antecedent study and prior to entry into SOLSTICE, data will be recorded retrospectively from the subject*s medical records under the closest visit within 6 months.

For participants who received treatment in an antecedent study, this study will consist of up to 9 visits over a maximum 48-month study period, to provide 60 months of post-treatment follow up for each treated subject, including time spent in the prior study.
For untreated control subjects from the antecedent STAR study, this study will consist of up to 5 visits over a maximum 24-month study period, to provide 36

months of follow-up, including time spent in the prior study.

Study burden and risks

This long-term follow-up study only collects information and has no further treatment. Only standard eye exams will be done. Therefore, participation in this study has almost no additional risks associated.

Contacts

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Trial sites

Listed location countries

Netherlands

Eligibility criteria

Age
Adults (18-64 years)

Inclusion criteria

Inclusion Criteria - Participants are eligible for study participation if they meet all of the following inclusion criteria:
CHM Participants:

a. Are willing and able to give informed consent for participation in the study
b. Have participated in and exited from an interventional study that investigated the safety and efficacy of a sub-retinal injection of AAV2-REP1 for CHM
XLRP Participants:
a. Are willing and able to give informed consent for participation in the study
b. Have received a sub-retinal injection of AAV8-RPGR for XLRP and have exited an antecedent study

Exclusion criteria

Participants are not eligible for study participation if they meet the following exclusion criterion.
a. In the opinion of the investigator and/or the Sponsor, it is not in the participant's best interest to participate in the study.

Study design

Design

Study phase:	3
Study type:	Observational invasive
Intervention model:	Other
Allocation:	Non-randomized controlled trial
Masking:	Open (masking not used)

Primary purpose: Treatment

Recruitment

NL

Recruitment status:	Completed
Start date (anticipated):	10-01-2022
Enrollment:	8
Type:	Actual

Ethics review

Approved WMO

Date:	09-04-2021
Application type:	First submission
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	29-07-2021
Application type:	First submission
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	15-09-2021
Application type:	Amendment
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Approved WMO Date:	15-10-2021
Application type:	Amendment
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Approved WMO Date:	29-11-2021
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	07-02-2022
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	15-02-2022
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	06-04-2022
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den

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Approved WMO Date:	28-07-2022
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	02-08-2022
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	25-07-2023
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)
Approved WMO Date:	11-08-2023
Application type:	Amendment
Review commission:	CCMO: Centrale Commissie Mensgebonden Onderzoek (Den Haag)

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	EUCTR2017-003104-42-NL

Register	ID
ClinicalTrials.gov	NCT03584165
CCMO	NL69445.000.21