# PhenotYpe Research for ALS ModIfyer Discovery.

No registrations found.

**Ethical review** Positive opinion

**Status** Pending

Health condition type -

**Study type** Observational non invasive

## **Summary**

#### ID

NL-OMON26294

Source

Nationaal Trial Register

**Brief title** 

**PYRAMID** 

#### **Health condition**

ALS, MND, amyotrophic lateral sclerosis

## **Sponsors and support**

**Primary sponsor:** University Medical Center Utrecht, the Netherlands

Vesalius Research Center, VIB, Leuven, Belgium

University Hospital Jena, Germany

Source(s) of monetary or material Support: National funding agencies in the

Netherlands, Belgium and Germany in the framework of E-Rare-2 Call for Proposals 2012

#### Intervention

#### **Outcome measures**

#### **Primary outcome**

1. Report on key molecular drivers in transcriptomic data related to disease progression (month 35);

- 2. Report on key molecular drivers in methylation data related to disease progression (month 35);
- 3. Report on key molecular drivers in proteomic data related to disease progression (month 35);
- 4. Report on longitudinal MRI and MUNIX changes related to disease progression (month 35).

#### **Secondary outcome**

- 1. Tender document for appropriate SMEs that describes most promising therapeutic targets, based on differential co-expression, co-methylation and co-translation reports;
- 2. Tender document for appropriate SMEs that describes most promising molecular disease progression markers based on those markers that best discriminate between fast and slow progressors.

# **Study description**

#### **Background summary**

Amyotrophic lateral sclerosis is a relentlessly progressive neurodegenerative disorder of motor neurons, leading to death of the patient on average only 36 months after disease onset. ALS is characterized by heterogeneity at the clinical and genetic level. Causative mechanisms of motor neuron degeneration are studied in several European studies, in particular Euro-MOTOR. Notwithstanding these efforts, ALS causative mechanisms remain only partially understood and therapeutic strategies based on these mechanistic insights are largely ineffective. The only drug available- Riluzole- extends the lifespan of ALS by 6 months, presumably by targeting disease modifying rather than disease causing targets. Therefore, we hypothesize that targeting disease modifying factors is important to accelerate the development of novel, alternative therapeutics, that will complement the search for causative mechanisms and therapies already covered in other projects. In this project, using unbiased genetic, proteomic, epigenetic and gene-expression techniques, we aim to identify modifiers of disease progression. We want to exploit the phenotypic heterogeneity of patients by comparing ALS patients with very fast disease progression to patients with slow disease progression. Using this original study design we aim to identify the factors that protect a subset of patients from an aggressive disease. Data collection and sample management will be done according to harmonized European ALS sampling and data management standards developed through the EU funded project SOPHIA. In addition, the detailed prospective clinical monitoring of patients will allow us reliably delineate the parameters that predict fast disease progression already in patients early in the disease. Insight into disease modifying factors will enhance our understanding of motor neuron degeneration and reveal potential therapeutic strategies.

#### Study objective

Focusing on disease-modifying rather than etiologic mechanisms may accelerate the development of novel therapies and complement current research initiatives on causative mechanisms and curative therapies.

#### Study design

Month 35.

#### Intervention

N/A

## **Contacts**

#### **Public**

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#### Scientific

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# **Eligibility criteria**

#### Inclusion criteria

All patients with ALS.

### **Exclusion criteria**

N/A

# Study design

## **Design**

Study type: Observational non invasive

Intervention model: Parallel

Allocation: Non controlled trial

Masking: Open (masking not used)

Control: N/A, unknown

#### Recruitment

NL

Recruitment status: Pending

Start date (anticipated): 01-06-2013

Enrollment: 600

Type: Anticipated

## **Ethics review**

Positive opinion

Date: 13-03-2013

Application type: First submission

# **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

NTR-new NL3704 NTR-old NTR3902

Other ZonMw: 40-42900-98-1008

ISRCTN wordt niet meer aangevraagd.

# **Study results**

## **Summary results**

N/A