# Clinical aspects and molecular mechanisms in large granular lymphocyte (LGL) leukemia - IDeAL study

Published: 05-07-2018 Last updated: 28-09-2024

Overall objective of this IDeAL study is to unravel the biological heterogeneity of LGL leukemia and to correlate this with the clinical features. More specific objectives are: 1. Build a LGL leukemia registry (clinical features and lab data).2. Set...

| Ethical review        | Approved WMO           |
|-----------------------|------------------------|
| Status                | Recruiting             |
| Health condition type | Leukaemias             |
| Study type            | Observational invasive |

# Summary

### ID

NL-OMON55452

**Source** ToetsingOnline

#### **Brief title**

Research into clinical aspects and molecular mechanisms in LGL leukemia

### Condition

• Leukaemias

**Synonym** blood cancer, Large granular lymphocyte leukemia

### **Research involving**

Human

### **Sponsors and support**

**Primary sponsor:** Erasmus MC, Universitair Medisch Centrum Rotterdam **Source(s) of monetary or material Support:** Hoffmann-La Roche,Unrestricted research grant;Hoffman-La Roche (zie ook G2a)

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### Intervention

Keyword: LGL leukemia

#### **Outcome measures**

#### **Primary outcome**

Observational study without formal endpoints. At the end of this study, more

insights will be gained about the following parameters:

- fenotypical features
- clonal TCR repertoire at DNA / RNA and possibly functional level
- (epi)genetic and transcriptional patterns
- (auto)antibodies and cytokines

#### Secondary outcome

NA

# **Study description**

#### **Background summary**

LGL leukemia is a rare form of leukemia and is heterogeneous in course and clinical presentation. The etiology and pathophysiology is largely unknown; therefore better understanding of the mechanisms that cause survival of the LGL cells is necessary. Therefore we have the intention in this study to start a LGL registry to get more insight in the clinical characteristics and biological mechanisms of LGL leukemia, which will eventually lead to newer and better therapeutic options.

#### **Study objective**

Overall objective of this IDeAL study is to unravel the biological heterogeneity of LGL leukemia and to correlate this with the clinical features. More specific objectives are:

- 1. Build a LGL leukemia registry (clinical features and lab data).
- 2. Set up LGL leukemia biobank (blood cells, DNA / RNA, plasma).
- 3. Determine LGL leukemia fenotype compared to normal T-/NK- cells (and
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subtypes) in healthy elderly.

4. Determine the clonal TCR repertoire of T-LGL leukemia compared to the TCR repertoire in healthy elderly and evaluate the significance of TCR signaling.5. Determination of (epi)genetic and transcriptional changes that discriminate LGL leukemic cells from their normal counterparts.

6. Evaluation of biomarkers in cells and/of plasma in LGL leukemia.

#### Study design

Prospective observational study

#### Study burden and risks

There is a minimal extent of burden for the patients and risks are negligible. With this study we aim to get insight about the biological mechanisms of LGL leukemia, which will eventually lead to newer and better therapeutic options.

# Contacts

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Wytemaweg 80 Rotterdam 3015 CN NL **Scientific** Erasmus MC, Universitair Medisch Centrum Rotterdam

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# **Trial sites**

# **Listed location countries**

Netherlands

# **Eligibility criteria**

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

### **Inclusion criteria**

Patients with LGL leukemia / lymphoproliferation

# **Exclusion criteria**

No consent

# Study design

# Design

| Study type: Observational invasive |                         |
|------------------------------------|-------------------------|
| Masking:                           | Open (masking not used) |
| Control:                           | Uncontrolled            |
| Primary purpose:                   | Diagnostic              |

# Recruitment

| NL                        |            |
|---------------------------|------------|
| Recruitment status:       | Recruiting |
| Start date (anticipated): | 24-07-2019 |
| Enrollment:               | 150        |
| Туре:                     | Actual     |

# **Ethics review**

| Approved WMO       |  |
|--------------------|--|
| Date:              | 05-07-2018   |
| Application type:  | First submission   |
| Review commission: | METC Erasmus MC, Universitair Medisch Centrum Rotterdam<br>(Rotterdam) |

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| Approved WMO       |  |
|--------------------|--|
| Date:              | 17-05-2019   |
| Application type:  | Amendment  |
| Review commission: | METC Erasmus MC, Universitair Medisch Centrum Rotterdam<br>(Rotterdam) |
| Approved WMO       |  |
| Date:              | 30-08-2019   |
| Application type:  | Amendment  |
| Review commission: | METC Erasmus MC, Universitair Medisch Centrum Rotterdam<br>(Rotterdam) |
| Approved WMO       |  |
| Date:              | 11-05-2021   |
| Application type:  | Amendment  |
| Review commission: | METC Erasmus MC, Universitair Medisch Centrum Rotterdam<br>(Rotterdam) |

# **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 CCMO ID NL65165.078.18