# Primary Cerebral Lymphoma at UMCU and St Antonius

Published: 27-01-2021 Last updated: 08-04-2024

Conducting research into the role of CSF and blood parameters of patients with CNS lymphoma, focused on improving the diagnostics, identification of biomarkers ('liquid biopsy'), and evaluation of therapy effect.

**Ethical review** Approved WMO **Status** Recruiting

Health condition type Lymphomas non-Hodgkin's B-cell

**Study type** Observational invasive

# **Summary**

#### ID

**NL-OMON54051** 

#### Source

**ToetsingOnline** 

**Brief title** PRICELUS

#### **Condition**

- Lymphomas non-Hodgkin's B-cell
- Nervous system neoplasms malignant and unspecified NEC

#### Synonym

brain lymphoma, Primary Central Nervous System Lymphoma (PCNSL)

#### Research involving

Human

## **Sponsors and support**

**Primary sponsor:** Sint Antonius Ziekenhuis

Source(s) of monetary or material Support: Stichting Annie van Koeverden

#### Intervention

**Keyword:** Cerebrospinal Fluid, Liquid biopsy, Lymphoma, Primary Central nervous system lymphoma

#### **Outcome measures**

#### **Primary outcome**

Detect specific biomarkers in CSF and/or blood from patients clinically suspected of primary central nervous system lymphoma. Thereby improving the diagnosis of CNS lymphoma in a majority of patients and reducing the need for tissue confirmation through stereotactic biopsy.

#### **Secondary outcome**

Possible secondary objectives:

- determine the relationship between the prognosis of CNS lymphoma and specific biomarkers,
- determine the relationship between specific biomarkers and therapy response.

# **Study description**

#### **Background summary**

The current role of CSF diagnostics for CNS lymphoma is acknowledged, but limited to routine cytomorphology and flow cytometry, which can demonstrate lymphoma only in a minority of patients (<25%). Recent research indicates that new CSF markers play a role in diagnosing CNS lymphoma, which has the potential to diagnose CNS lymphoma by CSF investigation, omitting a brain biopsy. Our meta-analysis showed, however, that none of the available CSF markers are sufficiently well investigated to rely upon when making clinical decisions. Whether the evaluation of markers in the blood has additional diagnostic value, has even been investigated to a lesser extent. Moreover, little is known about the role of new CSF markers in the follow-up and therapy evaluation of patients with known CNS lymphoma.

#### Study objective

Conducting research into the role of CSF and blood parameters of patients with CNS lymphoma, focused on improving the diagnostics, identification of biomarkers ('liquid biopsy'), and evaluation of therapy effect.

#### Study design

A retrospective and prospective cohort study.

#### Study burden and risks

Regarding the prospective cohort, there is no extra burden due to participation in this study except for a limited amount of patients for whom the venipuncture is not clinically indicated. For all patients, lumbar puncture is clinically indicated. The amount of CSF additionally drawn is approx. 10 ml and the amount of blood additionally drawn is approx. 67 ml. The risk of participation in this trial is therefore negligible. Patients also have no personal benefit, as the investigation of new biomarkers does not immediately influence current standard clinical care.

Regarding the retrospective cohort, there is no extra burden due to the fact that only CSF is analysed, which had already been drawn from the patients as part of clinical care.

### **Contacts**

#### **Public**

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## **Trial sites**

#### **Listed location countries**

**Netherlands** 

# **Eligibility criteria**

#### Age

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

#### Inclusion criteria

- 1. Suspected or confirmed primary central nervous system lymphoma
- 2. Age > 18 years
- 3. Patients who have a clinical indication for a diagnostic lumbar puncture

#### **Exclusion criteria**

- 1) If contra-indications for lumbar puncture are present:
- skin infection
- coagulopathy
- signs or symptoms of increased intracranial pressure
- midline shift or obliteration of basal cisterns on neuro-imaging
- 2) If a patient is unwilling to give written 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): 10-02-2021

Enrollment: 150

Type: Actual

## **Ethics review**

Approved WMO

Date: 27-01-2021

Application type: First submission

Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

Approved WMO

Date: 08-10-2021

Application type: Amendment

Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

Approved WMO

Date: 24-03-2023

Application type: Amendment

Review commission: MEC-U: Medical Research Ethics Committees United

(Nieuwegein)

# **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

CCMO NL75887.100.20