# Characterization of hepatic lymphocytes in patients with viral hepatitis and other liver diseases.

Published: 12-01-2012 Last updated: 01-05-2024

To study phenotypic and functional characteristics of hepatic lymphocytes in patients with viral hepatitis or other liver related diseases.

| Ethical review        | Approved WMO                        |
|-----------------------|-------------------------------------|
| Status                | Recruiting                          |
| Health condition type | Hepatic and hepatobiliary disorders |
| Study type            | Observational invasive              |

# Summary

### ID

NL-OMON47692

**Source** ToetsingOnline

**Brief title** Characterization of hepatic lymphocytes

# Condition

- Hepatic and hepatobiliary disorders
- Viral infectious disorders

**Synonym** chronic hepatitis B, chronic hepatitis C, viral liverdisease

### **Research involving**

Human

# **Sponsors and support**

**Primary sponsor:** Academisch Medisch Centrum **Source(s) of monetary or material Support:** AMC

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### Intervention

Keyword: immunology, liver lymphocytes, viral hepatitis

#### **Outcome measures**

#### **Primary outcome**

To phenotypically and functionally analyze liver and peripheral T cells in

patients with viral hepatitis and other liver diseases in order to get more

insight in immune system in the liver. Patients with viral hepatitis will be

compared with patients with a non-viral liver related disease.

#### Secondary outcome

# **Study description**

#### **Background summary**

The mechanism of developing chronic hepatitis B and chronic hepatitis C, rather than clearing acute infection, is not fully understood but is likely multifactorial. Both chronic hepatitis B and C infection are associated with impairment of the innate and adaptive immune responses and are associated with narrow and weak T cell responses. The function of T cells in viral hepatitis has largely been obtained by studying low numbers of peripheral blood T cells. However, as hepatitis C and hepatitis B are hepatotrophic viruses, virus-specific T cells accumulate in the human liver. Due to different homeostatic circumstances and antigen environment in the target organ, residing T cells may have altered functional characteristics and phenotype. As such little is known about general and virus-specific immune responses in the liver.

The aim of this study is to investigate the T cell immune system in the liver which could provide insights into mechanisms of failure of viral control and/or the development liver damage.

#### **Study objective**

To study phenotypic and functional characteristics of hepatic lymphocytes in

patients with viral hepatitis or other liver related diseases.

#### Study design

This is an interventional study with a once-only intervention of blood collection performed in patients that undergo a liverresection or transplantation. Of the resected specimen 5-15 gram of liver tissue, redundant for pathological/histological investigation, will be used for analysis.

#### Intervention

Patients that are included in the study will donate 5 tubes of 9 ml blood once only 1-2 weeks before surgery.

#### Study burden and risks

Potential physical discomfort associated with participation are the burden of in total 69 ml of blood samples that will be taken once-only. These samples will be taken when the patient is admitted to hospital and awaiting surgery. The liverspecimen used for this study will by no means alter or influence surgery procedures or outcome. Only tissue redundant for pathologic examination will be used (this tissue had to be removed as part of the surgery).

# Contacts

Public Academisch Medisch Centrum

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# **Trial sites**

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# **Listed location countries**

Netherlands

# **Eligibility criteria**

Age

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

### **Inclusion criteria**

Patients between 18-65 year old that undergo a liverresection.

# **Exclusion criteria**

Unwillingness to donate blood Co-infection with HIV (if known)

(a HIV test is not required for participation in the study)

# Study design

### Design

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

### Recruitment

| NL                        |            |
|---------------------------|------------|
| Recruitment status:       | Recruiting |
| Start date (anticipated): | 02-01-2012 |
| Enrollment:               | 40         |
| Туре:                     | Actual     |

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# **Ethics review**

| Approved WMO       |                    |
|--------------------|--------------------|
| Date:              | 12-01-2012         |
| Application type:  | First submission   |
| Review commission: | METC Amsterdam UMC |
| Approved WMO       |                    |
| Date:              | 29-10-2013         |
| Application type:  | Amendment          |
| Review commission: | METC Amsterdam UMC |
| Approved WMO       |                    |
| Date:              | 27-02-2019         |
| Application type:  | Amendment          |
| Review commission: | METC Amsterdam UMC |

# **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** NL38694.018.11