GWAS and HLA subtyping in autoimmune encephalitis

Published: 10-11-2020 Last updated: 09-04-2024

Primary objectives:1. To determine the gene frequencies of HLA-A, B, C, DR and DQ in patients with autoimmune encephalitis and compare this to the general Dutch population. 2. To determine genetic risk factors for the development of autoimmune...

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

Summary

ID

NL-OMON49804

Source ToetsingOnline

Brief title GWAS and HLA in autoimmune encephalitis

Condition

- Autoimmune disorders
- Central nervous system infections and inflammations

Synonym

autoimmune encephalitis, Brain inflammation

Research involving

Human

Sponsors and support

Primary sponsor: Erasmus MC, Universitair Medisch Centrum Rotterdam **Source(s) of monetary or material Support:** Unrestricted vergoedingen voor onderwijs van Maarten Titulaer aan vakgenoten;het gaat om minimale logistieke kosten in het Erasmus MC. Het grootste gedeelte van de kosten wordt gedragen door de HLA afdeling van het LUMC

1 - GWAS and HLA subtyping in autoimmune encephalitis 13-05-2025

en door het GENERATE consortium in Duitsland.

Intervention

Keyword: Autoimmune encephalitis, GWAS, HLA

Outcome measures

Primary outcome

1. Identification of a HLA allele or allelic combination associated in patients

with autoimmune encephalitis.

2. Determination of genetic risk factors for the development of autoimmune

encephalitis using Genome-Wide Association Studies (GWAS).

Secondary outcome

Study description

Background summary

Autoantibodies can cause severe encephalitis. A known genetic marker for autoimmune diseases is HLA. Specific HLA types are found for certain types of autoimmune encephalitis. Other genetic factors contributing to autoimmune encephalitis are unknown. Due to the scarcity of the disease and the relatively recent discovery of autoimmune encephalitis, the number of patients are small. International collaboration will lead to cohorts of sufficient size, including validation cohorts. This allows us to investigate which pathophysiological mechanisms and immunological pathways are relevant for autoimmune encephalitis.

Study objective

Primary objectives:

 To determine the gene frequencies of HLA-A, B, C, DR and DQ in patients with autoimmune encephalitis and compare this to the general Dutch population.
To determine genetic risk factors for the development of autoimmune encephalitis using GWAS.

Secondary objectives:

1. To determine the gene frequencies of HLA-A, B, C, DR and DQ in patients with autoimmune encephalitis and compare this to the general population within an international consortium.

2. To determine specific patient characteristics or disease characteristics associated with a common HLA subtype within autoimmune encephalitis, per antibody.

Study design

Case-control study.

Study burden and risks

One venepuncture will be performed, preferably in extension of a planned venepuncture. The venepuncture has negligible risks and burden. There is no direct benefit for the patient.

Contacts

Public

Erasmus MC, Universitair Medisch Centrum Rotterdam

Doctor Molewaterplein 40 Rotterdam 3015 GD

NI

Scientific

Erasmus MC, Universitair Medisch Centrum Rotterdam

Doctor Molewaterplein 40 Rotterdam 3015 GD NL

Trial sites

Listed location countries

Netherlands

Eligibility criteria

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

Inclusion criteria

- Age of 18 years and older.

- Diagnosis of autoimmune encephalitis (neuronal antibodies proven in serum or CSF).

Exclusion criteria

- Patient and/or legal representative is withholding informed consent.
- Patient objects after initial informed consent.

Study design

Design

| Study type: | Observational invasive |
|---------------------|---------------------------------|
| Intervention model: | Other |
| Allocation: | Non-randomized controlled trial |
| Masking: | Open (masking not used) |
| Control: | Active |
| Primary purpose: | Basic science |

Recruitment

| NL | |
|---------------------------|------------|
| Recruitment status: | Recruiting |
| Start date (anticipated): | 19-11-2020 |
| Enrollment: | 300 |
| Type: | Actual |

Ethics review

| Approved WMO | |
|--------------------|--|
| Date: | 10-11-2020 |
| Application type: | First submission |
| Review commission: | METC Erasmus MC, Universitair Medisch Centrum Rotterdam (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** NL74462.078.20