

# LymeProspect: longterm-effects of Lyme disease

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<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestopt
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Observationeel onderzoek, zonder invasieve metingen

## Samenvatting

### ID

NL-OMON27509

### Bron

NTR

### Verkorte titel

LymeProspect

### Aandoening

Borrelia burgdorferi;

Ziekte van Lyme;

Teken-overdraagbare aandoening;

Lyme disease;

Tick-borne disease.

## Ondersteuning

**Primaire sponsor:** RIVM

**Overige ondersteuning:** ZonMW

## Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

The main study endpoint is the severity of persisting symptoms in confirmed Lyme patients at follow-up, based upon validated symptom and disability questionnaires. The main study parameters are all microbiological, immunological, genetic, clinical, cognitive-behavioral, and epidemiological parameters measured during follow-up, which are associated with, or could predict development of, such persisting symptoms.

## Toelichting onderzoek

#### Achtergrond van het onderzoek

This is a prospective cohort study with a one-year follow-up, and a total duration of 4 years. We recruit two groups of patients: 1) Individuals  $\geq 18$  yrs old with a confirmed diagnosis of previously untreated early localized or disseminated Lyme borreliosis, and 2) Individuals  $\geq 18$  yrs old with an unconfirmed Lyme diagnosis in combination with existing persisting symptoms. Group 1 patients will be included before or just after start of treatment. Using questionnaires with norm scores from the population we will determine which patients develop persisting symptoms after treatment. At baseline and during follow up, we will take blood and skin samples, and record epidemiological, clinical and cognitive-behavioral characteristics.

By explaining the outcome of persisting of symptoms  $\pm$  in a prediction model by all possible measured explanatory determinants (e.g. an aberrant immune response, cognitive-behavioral factors, or persistence of infection), we can assess explanations and risk factors for the development of persisting symptoms for individual patients.

The outcomes of group 1 will be compared with group 2 to identify similar mechanisms behind the persisting symptoms.

Countries of recruitment: The Netherlands.

#### Doel van het onderzoek

Around 5-20% of Lyme borreliosis patients report persisting symptoms, such as musculoskeletal pain, neurocognitive symptoms and fatigue after treatment. It has been hypothesized that long-term persisting symptoms are related to microbiological factors (e.g. persistence of *Borrelia* infection or co-infection with other tick-borne pathogens), immunological factors (auto-inflammation or auto-immunity, e.g. due to genetic differences), clinical and/or epidemiological factors (e.g. late-start of treatment, severity of symptoms) or cognitive-behavioral factors. In the proposed study we will test all of these hypotheses, through a prospective follow-up of patients with early localized, early disseminated or late

disseminated Lyme borreliosis.

### **Onderzoeksopzet**

EM patients included through Tekenradar.nl:

T=0, 2 weeks, 6 weeks, 3 months, 6 months, 9 months, 12 months.

Confirmed Lyme patients included through the Clinical Lyme Centers:

T=0, 10 days, 6 weeks, 3 months, 6 months, 9 months, 12 months.

Unconfirmed Lyme patients included through the Clinical Lyme centers:

T=0, 3 months, 6 months, 9 months, 12 months.

### **Onderzoeksproduct en/of interventie**

none

## **Contactpersonen**

### **Publiek**

### **Wetenschappelijk**

## **Deelname eisen**

### **Belangrijkste voorwaarden om deel te mogen nemen (Inclusiecriteria)**

Inclusion criteria are partly dependent on the patient group and the route of inclusion.

All patients:

- are 18 yrs and older.

EM patients included through Tekenradar.nl:

- report an EM at Tekenradar.nl with a diameter larger than 5 cm and that has been present for less than 3 months;
- have a confirmed (typical or atypical) EM diagnosed by their GP;
- have not yet started treatment for the EM at the moment of inclusion;

Confirmed Lyme patients included through the Clinical Lyme Centers:

- have a confirmed diagnosis of early or late Lyme borreliosis;
- have not yet started treatment at the moment of inclusion, or, for disseminated Lyme borreliosis cases, at most 1 week before inclusion.

Unconfirmed Lyme patients included through the Clinical Lyme centers:

- symptoms that are present at the time of inclusion and have persisted for more than 6 months, such as myalgia and arthralgia, neuralgia, concentration disorders and cognitive disturbances, with or without fatigue.
- have a history of an unconfirmed suspicion for Lyme disease based on a positive result of a non-recommended diagnostic test OR onset of disease symptoms (as described above) that have started within one month after a documented tick bite;
- have a negative serological test for *Borrelia* spp.

## **Belangrijkste redenen om niet deel te kunnen nemen (Exclusiecriteria)**

Exclusion criteria are partly dependent on patient group and route of inclusion.

All patients:

- are unable to give informed consent or do not have a thorough command of the Dutch language.

EM patients included through Tekenradar.nl:

- started treatment for erythema migrans before inclusion.

Confirmed Lyme patients included through the Clinical Lyme Centers:

- started treatment for erythema migrans before inclusion, or for disseminated Lyme borreliosis more than one week before inclusion.

## Onderzoeksopzet

### Opzet

Type:	Observationeel onderzoek, zonder invasieve metingen
Onderzoeksmodel:	Parallel
Toewijzing:	Niet-gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	N.v.t. / onbekend

### Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	01-04-2015
Aantal proefpersonen:	2300
Type:	Werkelijke startdatum

## Ethische beoordeling

Positief advies	
Datum:	13-02-2015
Soort:	Eerste indiening

## Registraties

### Opgevolgd door onderstaande (mogelijk meer actuele) registratie

ID: 47035  
Bron: ToetsingOnline  
Titel:

## Andere (mogelijk minder actuele) registraties in dit register

Geen registraties gevonden.

## In overige registers

Register	ID
NTR-new	NL4744
NTR-old	NTR4998
CCMO	NL50227.094.14
OMON	NL-OMON47035

## Resultaten