

# Does booster influenza vaccination improve vaccination efficacy in patients with quiescent systemic lupus erythematosus?

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SLE patients show a decreased humoral immune response to influenza vaccination, as compared to healthy controls. Furthermore the use of immunosuppressives is of influence on vaccination immunogenicity, it has been demonstrated that the use of drugs...

<b>Ethische beoordeling</b>	Positief advies
<b>Status</b>	Werving gestopt
<b>Type aandoening</b>	-
<b>Onderzoekstype</b>	Interventie onderzoek

## Samenvatting

### ID

NL-OMON20800

### Bron

Nationaal Trial Register

### Verkorte titel

N/A

### Aandoening

1. Systemic lupus erythematosus (SLE);
2. influenza vaccination;
3. booster;
4. antibody response.

### Ondersteuning

**Primaire sponsor:** University Medical Center Groningen (UMCG)  
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**Overige ondersteuning:** Solvay Pharmaceuticals GMBH  
Weesp, the Netherlands

## Onderzoeksproduct en/of interventie

### Uitkomstmaten

#### Primaire uitkomstmaten

Seroprotection rate (the percentage of SLE patients with a titre equal to or greater than 40 against all three vaccine strains) in SLE patients after two influenza vaccinations as compared to a single vaccination.

## Toelichting onderzoek

#### Achtergrond van het onderzoek

Systemic lupus erythematosus (SLE) is an autoimmune disease, patients are often treated with immunosuppressive drugs to control disease activity. This causes patients to be susceptible for infections, like influenza. Former research showed influenza vaccination to be safe in SLE, however fewer patients reached protective titres as compared to healthy controls. It is desirable to increase this seroprotection rate. A second, booster vaccination, administered 4 weeks after the first vaccination is a possible approach to achieve a higher seroprotection rate.

In this study, it will be assessed whether a second, booster, influenza vaccination leads to a higher seroprotection rate in SLE patients, as compared to a single vaccination.

#### Doel van het onderzoek

SLE patients show a decreased humoral immune response to influenza vaccination, as compared to healthy controls. Furthermore the use of immunosuppressives is of influence on vaccination immunogenicity, it has been demonstrated that the use of drugs like corticosteroids, azathioprine, and cyclosporin hampers the humoral immune response, reflected by a decreased antibody response after vaccination.

In liver transplant recipients a decreased humoral immune response to influenza vaccination was found as well. A second, booster, influenza vaccination improved the humoral immune response.

In this study we will investigate whether a second, booster, influenza vaccination improves the immune response in SLE patients with quiescent disease. Patients with different immunosuppressive regimes will be vaccinated and disease activity and antibody response will be monitored thereafter.

### **Onderzoeksopzet**

1. inclusion, t = 0;
2. t = 4 weeks;
3. t = 8 weeks (only for SLE patients).

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

Influenza vaccination, followed by a second influenza vaccination in SLE patients after 4 weeks.

## **Contactpersonen**

### **Publiek**

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### **Wetenschappelijk**

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## Deelname eisen

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

Patients:

1. patients have to fulfil international disease criteria of SLE;
2. quiescent disease, defined as SLEDAI  $\leq 5$ ;
3. informed consent;

Healthy controls:

1. informed consent.

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

Patients:

1. active disease, defined as SLEDAI  $> 5$ ;
2. use of prednisone  $> 30$  mg/day;
3. pregnancy;
4. malignancy;
5. no informed consent.

Healthy controls:

1. use of immunosuppressives;
2. malignancy;
3. pregnancy;
4. no informed consent.

## Onderzoeksopzet

### Opzet

Type:	Interventie onderzoek
Onderzoeksmodel:	Parallel
Toewijzing:	Niet-gerandomiseerd
Blinding:	Open / niet geblindeerd
Controle:	Actieve controle groep

### Deelname

Nederland	
Status:	Werving gestopt
(Verwachte) startdatum:	27-09-2007
Aantal proefpersonen:	82
Type:	Werkelijke startdatum

## Ethische beoordeling

Positief advies	
Datum:	19-11-2007
Soort:	Eerste indiening

## Registraties

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

Geen registraties gevonden.

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

Geen registraties gevonden.

## **In overige registers**

### **Register ID**

NTR-new NL1112

NTR-old NTR1147

Ander register Medical Ethics Committee University Medical Center Groningen : 2007/172

ISRCTN ISRCTN wordt niet meer aangevraagd

## **Resultaten**

### **Samenvatting resultaten**

N/A