# Local anti-inflammatory treatment in the prevention of long-term airway morbidity following hospitalisation for respiratory syncytial virus (RSV) infection: clinical effectiveness and immunological correlates

| Submission date               | Recruitment status                       | <ul><li>Prospectively registered</li></ul> |  |
|-------------------------------|--|--|--|
| 02/09/2005                    | No longer recruiting                     | <pre>Protocol</pre>                        |  |
| Registration date             | Overall study status                     | Statistical analysis plan                  |  |
| 14/09/2005                    | Completed                                | [X] Results                                |  |
| <b>Last Edited</b> 03/09/2014 | <b>Condition category</b><br>Respiratory | [] Individual participant data             |  |

# Plain English summary of protocol

Not provided at time of registration

#### Study website

http://www.rsv.umcutrecht.nl

# Contact information

# Type(s)

Scientific

#### Contact name

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#### Contact details

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# Additional identifiers

#### **EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

3.2.03.22

# Study information

#### Scientific Title

Local anti-inflammatory treatment in the prevention of long-term airway morbidity following hospitalisation for respiratory syncytial virus (RSV) infection: clinical effectiveness and immunological correlates - a randomised controlled trial

## Study objectives

Inhaled corticosteroids during the first three months following admission for respiratory syncytial virus (RSV) lower respiratory tract infection (LRTI) prevent the occurrence and severity of long-term airway morbidity.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Ethics Review Committee of University Medical Center Utrecht, 17/05/2005, ref: 04-056

# Study design

Randomised controlled trial

# Primary study design

Interventional

# Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

#### Study type(s)

Treatment

#### Participant information sheet

Not available in web format, please use the contact details below to request a patient information sheet

# Health condition(s) or problem(s) studied

Respiratory syncytial virus lower respiratory tract infection (RSV LRTI)

#### **Interventions**

- 1. Intervention starts within 24 hours following positive immunofluorescence for RSV infection
- 2. Hydrofluoroalkane (HFA)-based beclomethasone dipropionate (Qvar, 3M) or placebo
- 3. 200 µg twice daily during three months

#### Subgroup-analyses

- 1. Analyses of children with wheezing during primary infection versus those not wheezing
- 2. Analyses of children with a qualitative good inhalation technique versus those without a good technique
- 3. Analyses of children with different pharmacogenetic polymorphisms (NR3C1: rs6191; NR3C1: SNPNR3C1; JUN: rs11688; FOS: rs7101; NFKB2: rs7897947; VDR: rs10735810; VDR: rs1544410; VDR: rs731236; IL13: rs20541; IL13: rs1800925; CRHR1: rs242941) (this information was added to this record as of the 12th June 2007)
- 4. Analyses of children with mechanical ventilation versus those without mechanical ventilation

#### **Intervention Type**

Drug

#### Phase

Not Applicable

### Drug/device/biological/vaccine name(s)

Corticosteroids

#### Primary outcome measure

Wheezing according to log registration from 3 until 15 months after hospitalisation for RSV LRTI

## Secondary outcome measures

- 1. Wheezing according to log registration from hospitalisation until 15 months after hospitalisation
- 2. Coughing during follow up
- 3. Use of inhaled steroids (other than the intervention medication)
- 4. Use of bronchodilators
- 5. Days of hospitalisation
- 6. Respiratory Distress Assessment Instrument (RDAI) scores during hospitalisation
- 7. Local cytokine profiles (nasal aspirates) during the first three episodes of respiratory tract infections
- 8. Quality of life
- 9. Lung function (interrupter resistance measurement, RINT)
- 10. Physician-diagnosed asthma at the age of 6 years

#### Overall study start date

01/10/2004

#### Completion date

01/10/2013

# **Eligibility**

#### Key inclusion criteria

- 1. Infants under 13 months of age
- 2. Hospital admission for RSV LRTI
- 3. Positive immunofluorescence for RSV infection of epithelial cells in nasopharyngeal aspirates

# Participant type(s)

**Patient** 

#### Age group

Child

#### Upper age limit

13 Months

#### Sex

Both

# Target number of participants

250

#### Key exclusion criteria

- 1. Previous use of steroids
- 2. History of cardiac or pulmonary disease
- 3. Wheezing illness prior to RSV LRTI

#### Date of first enrolment

01/10/2004

#### Date of final enrolment

01/10/2013

# Locations

#### Countries of recruitment

Netherlands

# Study participating centre Department of Pediatrics

Utrecht Netherlands 3508 AB

# Sponsor information

## Organisation

## **Dutch Asthma Foundation (Netherlands)**

## Sponsor details

Speelkamp 28 P.O. Box 5 Leusden Netherlands 3830 AA

#### Sponsor type

Charity

#### Website

http://www.astmafonds.nl

#### ROR

https://ror.org/00ddgbf74

# Funder(s)

#### Funder type

Charity

#### Funder Name

Dutch Asthma Foundation (Netherlands)

# **Results and Publications**

# Publication and dissemination plan

Not provided at time of registration

Intention to publish date

Individual participant data (IPD) sharing plan

# IPD sharing plan summary

Not provided at time of registration

# **Study outputs**

| Output type     | Details | Date created | Date added | Peer reviewed? | Patient-facing? |
|-----------------|---------|--------------|------------|----------------|-----------------|
| Results article | results | 31/03/2009   |            | Yes            | No              |
| Results article | results | 01/01/2014   |            | Yes            | No              |