# Immunogenicity of pneumococcal vaccine in liver transplant recipients

Submission date Recruitment status Prospectively registered 21/05/2008 No longer recruiting [ ] Protocol [ ] Statistical analysis plan Registration date Overall study status 21/05/2008 Completed [X] Results [ ] Individual participant data **Last Edited** Condition category 24/02/2009 Infections and Infestations

#### Plain English summary of protocol

Not provided at time of registration

# **Contact information**

## Type(s)

Scientific

#### Contact name

Dr Deepali Kumar

#### Contact details

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# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number NCT00152802

**Secondary identifying numbers** MCT-79196

# Study information

#### Scientific Title

Immunogenicity of pneumococcal vaccine in liver transplant recipients: a randomised, double-blind, placebo-controlled, safety/efficacy study, single centre trial

#### **Study objectives**

It is hypothesised that the conjugate vaccine priming will provide an enhanced response in these immunosuppressed individuals who may respond poorly to standard vaccination.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Research Ethics Board of the University Health Network (Toronto) approved on the 10th September 2004 (ref: 04-0450-123TGH)

#### Study design

Randomised, double-blind (study participant and investigator), placebo-controlled, safety /efficacy study, single centre trial

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

#### Study setting(s)

Hospital

#### Study type(s)

Prevention

#### Participant information sheet

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

Pneumococcal vaccination

#### **Interventions**

- 1. The conjugate vaccine used will be Prevnar™ (Wyeth vaccines) 0.5 mL, once, intramuscularly
- 2. The polysaccharide vaccine Pneumovax® (Merck-Frosst) 0.5 mL, once, intramuscularly (I.M.)

Duration of follow-up = 2 years for all treatment arms

Contact for public queries:
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#### Intervention Type

Drug

#### Phase

Not Applicable

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

Prevnar™, Pneumovax®

#### Primary outcome measure

Antibody titres to the seven serotypes contained in conjugate vaccine (4, 6B, 9V, 14, 19F, 23F), 16 weeks.

#### Secondary outcome measures

- 1. Functional antibody concentration: the titre of functional antibody against the seven pneumococcal serotypes contained in the conjugate vaccine will be determined. Opsonophagocytic assay will be measured at time 0 and 16 weeks.
- 2. Adverse reactions: any adverse effects attributed to conjugate or polysaccharide vaccines will be documented. These will include local reactions such as redness, swelling, tenderness and systemic reactions such as fever.
- 3. Invasive pneumococcal disease: any occurrence of documented pneumococcal disease in vaccinated patients will be recorded

#### Overall study start date

01/01/2005

#### Completion date

28/02/2008

# **Eligibility**

#### Key inclusion criteria

Male or female outpatients who fulfill the following criteria will be eligible for the study:

- 1. Liver transplant recipients greater than three months post-transplant
- 2. No prior pneumococcal vaccination within the last five years
- 3. Stable allograft function as evidenced by a alanine aminotransferase less than 10 times the upper limit of normal (umol/L) that is not worsening
- 4. Able to provide written informed consent and comply with study protocol
- 5. Aged greater than 16 years

#### Participant type(s)

**Patient** 

#### Age group

Adult

#### Sex

Both

#### Target number of participants

130

#### Key exclusion criteria

- 1. Unable to provide informed consent or comply with protocol
- 2. Prior pneumococcal vaccination within five years of enrolment
- 3. Splenectomy
- 4. Admitted to hospital for acute illness
- 5. Febrile illness in the past two weeks
- 6. Intravenous immunoglobulin in the last six months
- 7. Current episode of allograft rejection
- 8. Currently on full-dose anticoagulation as a contraindication to intramuscular injection

#### Date of first enrolment

01/01/2005

#### Date of final enrolment

28/02/2008

### Locations

#### Countries of recruitment

Canada

# Study participating centre University of Alberta Hospital

Edmonton, Alberta Canada T6G 2B7

# Sponsor information

#### Organisation

University Health Network (Canada)

#### Sponsor details

Toronto General Hospital 585 University Ave Toronto, Ontario Canada M5G 2N2

#### Sponsor type

Hospital/treatment centre

#### Website

http://www.uhn.ca/index.htm

#### **ROR**

https://ror.org/042xt5161

# Funder(s)

#### Funder type

Research organisation

#### **Funder Name**

Canadian Institutes of Health Research (CIHR) (Canada) - http://www.cihr-irsc.gc.ca (ref: MCT-79196)

# **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	01/10/2008		Yes	No