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A phase III randomised, open label clinical trial evaluating the immunogenicity of a 10-valent pneumococcal conjugate vaccine booster compared to the standard 13-valent pneumococcal conjugate vaccine booster given at 12 months of age to healthy children who have received the 13-valent pneumococcal conjugate vaccine at 2 and 4 months of age

Submission date 29/06/2012	<b>Recruitment status</b> No longer recruiting	<ul> <li>Prospectively registered</li> <li>Protocol</li> </ul>
<b>Registration date</b> 29/06/2012	<b>Overall study status</b> Completed	<ul> <li>Statistical analysis plan</li> <li>[X] Results</li> </ul>
Last Edited 13/03/2018	<b>Condition category</b> Infections and Infestations	Individual participant data

### Plain English summary of protocol

Not provided at time of registration

# **Contact information**

**Type(s)** Scientific

**Contact name** Mrs Faye Alexander

### Contact details

Department of Paediatrics Headley Way Headington Oxford United Kingdom OX3 9DU +44 1865 857420 faye.alexander@paediatrics.ox.ac.uk

# Additional identifiers

**EudraCT/CTIS number** 2011-005102-30

**IRAS number** 

ClinicalTrials.gov number NCT01443416

Secondary identifying numbers 12221

# Study information

### Scientific Title

A phase III randomised, open label clinical trial evaluating the immunogenicity of a 10-valent pneumococcal conjugate vaccine booster compared to the standard 13-valent pneumococcal conjugate vaccine booster given at 12 months of age to healthy children who have received the 13-valent pneumococcal conjugate vaccine at 2 and 4 months of age

### **Study objectives**

This is a study to evaluate an alternative booster for pneumococcal conjugate vaccination (PCV) for children at 12 months of age. Currently in the UK, a vaccine called Prevenar 13 (PCV-13), which contains 13 pneumococcal types attached to a molecule (carrier protein) called CRM197, is given to children at 2, 4 and 12 months of age. There is some evidence that a vaccine called Synflorix (PHiD-CV) may be at least as good as the currently used vaccine when given at 12 months of age. Although PHiDCV contains only 10 pneumococcal types, there is evidence that it generates crossreactive antibodies against two of the three additional types included in PCV-13 which might be enough to protect children against these disease types. Furthermore, previous studies have shown that PHiD-CV confers protection against a common otitis media pathogen in children called nontypeable H. influenzae (NTHi) by attachment to a carrier protein called Protein D, which is derived from NTHi. In addition, the use of a carrier protein, which is not closely related to an antigen included in any coadministered or previously administered routine vaccine minimises the risk of interference related to it.

More details can be found at http://public.ukcrn.org.uk/Search/StudyDetail.aspx?StudyID=12221

### Ethics approval required

Old ethics approval format

Ethics approval(s) 11/SC/0473; First MREC approval date 22/12/2011

**Study design** Randomised; Interventional; Design type: Treatment

**Primary study design** Interventional

### Secondary study design

Randomised controlled trial

**Study setting(s)** GP practice

**Study type(s)** Treatment

Participant information sheet

Health condition(s) or problem(s) studied Streptococcus pneumoniae vaccination

#### Interventions

Blood sampling: Study nurse/doctor at the participants' home.

Diary cards: Participants will be asked to record any local/general reactions to vaccine for 4 days after vaccination. In addition any medically significant adverse events occuring between the study visits are to be recorded. All concomitant medication used during this period will also be recorded.

Health assessment: Study nurse/doctor at the participants' home.

Routine vaccines: MMR-Hib-MenC

Study vaccine and comparator, Study nurse/doctor at the participants' home

Taking oral temperature, Prior to receive the vaccine, oral temperature will be recorded at the CCVTM clinic rooms

Study Entry : Single Randomisation only

Intervention Type Biological/Vaccine

**Phase** Phase III

**Primary outcome measure** Not provided at time of registration

**Secondary outcome measures** Not provided at time of registration

Overall study start date 05/04/2012

**Completion date** 31/10/2012

# Eligibility

### Key inclusion criteria

1. Aged 12 months (2 weeks to +6 weeks) at time of enrolment

2. Have received two doses of PCV13 at less than 6 months of age with a gap of at least 6 weeks between the two vaccinations

3. Have received all primary vaccines according to the UK routine immunisation schedule 4. Available for entire study period and whose parent/legal guardian can be reached by telephone

5. Healthy children as determined by medical history and physical examination, done by a study nurse (and/or study doctor if required, depending on the medical history of the participant and physical assessment), and judgment of the investigator

6. Parent/legal guardian must be able to complete all relevant study procedures during study participation

### Participant type(s)

Patient

### Age group

Child

### Lower age limit

12 Months

### Upper age limit

12 Months

### Sex

Both

### Target number of participants

Planned Sample Size: 168; UK Sample Size: 168

### Key exclusion criteria

1. Previous receipt of pneumococcal vaccine other than the 13 valent pneumococcal conjugate vaccine (Prevenar 13®, Pfizer)

2. Receipt of the routine 12month immunisations (PCV13 (3rd dose), combined Haemophilus influenzae type b and serogroup C meningococcal glycoconjugate vaccine (HibMenC) or measles, mumps and rubella vaccine (MMR)

3. A previous anaphylactic reaction to any vaccine or vaccinerelated component

4. Contraindication to vaccination with pneumococcal conjugate vaccine

5. Bleeding diathesis or condition associated with prolonged bleeding time that would contraindicate intramuscular injection

- 6. Known or suspected immune deficiency or suppression
- 7. History of cultureproven invasive disease caused by S. pneumoniae
- 8. Major known congenital malformation or serious chronic disorder

9. Significant neurologic disorder or history of seizures including febrile seizure, or significant stable or evolving disorders such as cerebral palsy, encephalopathy, hydrocephalus, or other significant disorder

10. Receipt of blood products or gammaglobulin (including hepatitis B immunoglobulin and

monoclonal antibodies; e.g., Synagis B)

11. Parents who plan to move out of the geographical area where the study would be conducted

Date of first enrolment 05/04/2012

Date of final enrolment 31/10/2012

## Locations

**Countries of recruitment** England

United Kingdom

**Study participating centre Department of Paediatrics, Headley Way , Headington** Oxford United Kingdom OX3 9DU

## Sponsor information

**Organisation** University of Oxford (UK)

**Sponsor details** Research Services Clinical Trials and Research Governance Headley Way Headington Oxford England United Kingdom OX3 9DU

**Sponsor type** University/education

### ROR

https://ror.org/052gg0110

# Funder(s)

Funder type Industry

**Funder Name** GlaxoSmithKline

**Alternative Name(s)** GlaxoSmithKline plc., GSK plc., GSK

**Funding Body Type** Government organisation

**Funding Body Subtype** For-profit companies (industry)

**Location** United Kingdom

# **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	01/07/2016		Yes	No
HRA research summary			28/06/2023	No	No