

Immunogenicity and adjuvant effect of the whole cell Pertussis component of the Dutch combined Diphtheria, Tetanus, Pertussis, Poliomyelitis - Haemophilus influenzae type b vaccine in infants compared to the old whole cell P vaccine and a new acellular P vaccine component

Submission date 02/05/2007	Recruitment status No longer recruiting	☐ Prospectively registered
Registration date 02/05/2007	Overall study status Completed	☐ Protocol
Last Edited 23/09/2021	Condition category Infections and Infestations	☐ Statistical analysis plan
		☐ Results
		☐ Individual participant data
		☐ Record updated in last year

Plain English summary of protocol

Not provided at time of registration

Contact information

Type(s)

Scientific

Contact name

Dr G. Berbers

Contact details

National Institute for Public Health and the Environment (RIVM)

P.O. Box 1

Bilthoven

Netherlands

3720 BA

+31 (0)30 274 2496

guy.berbers@rivm.nl

Additional identifiers

Protocol serial number

LTR134

Study information

Scientific Title

Immunogenicity and adjuvant effect of the whole cell Pertussis component of the Dutch combined Diphtheria, Tetanus, Pertussis, Poliomyelitis - Haemophilus influenzae type b vaccine in infants compared to the old whole cell P vaccine and a new acellular P vaccine component

Acronym

aKwK trial

Study objectives

To compare the immunogenicity of the whole cell (DTwP) versus the acellular (DTaP) pertussis component of the Diphtheria, Tetanus, Pertussis, Poliomyelitis - Haemophilus influenzae type b (DTP IPV-Hib) vaccine as measured by the antibody titres at 11 months before the fourth vaccination and at 12 months.

Ethics approval required

Old ethics approval format

Ethics approval(s)

Approval received from the CCMO (Central Committee on Research inv. Human Subjects) on the 18th October 2004 (ref: P04.1099C)

Study design

Interventional, non-randomised, non-controlled, parallel group trial

Primary study design

Interventional

Study type(s)

Prevention

Health condition(s) or problem(s) studied

Pertussis, whooping cough

Interventions

Four groups of 75 children aged 11 months:

1. DTwP IPV-Hib primary series and booster (11 months) (n = 32)
2. DTwP IPV-Hib primary series and DTaP IPV-Hib booster (Infanrix) (n = 79)
3. DTaP IPV-Hib (Infanrix) primary series and booster (n = 95)
4. DTaP IPV-Hib (Pediace) primary series and booster with (n = 75) and without (n = 75) pneumococcal vaccination (Prevenar)

Intervention Type

Drug

Phase

Not Specified

Drug/device/biological/vaccine name(s)

Diphtheria, Tetanus, Pertussis, Poliomyelitis - Haemophilus influenzae type b (DTP IPV-Hib) vaccine

Primary outcome(s)

To compare the immunogenicity of the whole cell versus the acellular pertussis component of the DTP IPV-Hib vaccine as measured by the antibody titres at 11 months before the fourth vaccination and at 12 months. The antibody titres are determined by a twofold serial dilution Enzyme Linked Immunosorbent Assay (ELISA).

Key secondary outcome(s)

Antibody titres for all vaccine components are measured at 11 months before vaccination and at four to eight weeks after the fourth DTP IPV-Hib vaccination. This will also allow to investigate:

1. The effect of the changes in the production process of the Pertussis whole cell component compared to the old whole cell component (data on file)
2. The adjuvant effect of the whole cell versus two different acellular Pertussis components in the DTP IPV-Hib vaccine as used in The Netherlands
3. The immunogenicity and the adjuvant effect of the two different acellular Pertussis components in the DTP IPV-Hib vaccines (Infanrix versus Pediacel) with or without pneumococcal vaccination (Prevenar)

Completion date

01/08/2007

Eligibility

Key inclusion criteria

1. Infants in good general health eligible for the fourth DTP IPV-Hib vaccination

Participant type(s)

Patient

Healthy volunteers allowed

No

Age group

Child

Sex

Not Specified

Key exclusion criteria

1. Severe acute illness or fever (greater than 38.5°C) within two days before vaccination
2. Present evidence of serious disease(s) demanding medical treatment that might interfere with the results of the study
3. Known or suspected allergy to any of the vaccine components
4. Known or suspected immune disorder
5. History of any neurological disorder, including epilepsy

6. Previous administration of plasma products (including immunoglobulins)
7. Previous vaccination with any other vaccine than those used in the National Immunisation Programme

Date of first enrolment

03/11/2004

Date of final enrolment

01/08/2007

Locations

Countries of recruitment

Netherlands

Study participating centre

National Institute for Public Health and the Environment (RIVM)

Bilthoven

Netherlands

3720 BA

Sponsor information

Organisation

National Institute of Public Health and Environmental Protection (RIVM) (The Netherlands)

ROR

<https://ror.org/01cesdt21>

Funder(s)

Funder type

Government

Funder Name

The Netherlands Ministry of Health, Welfare and Sport (The Netherlands)

Results and Publications

Individual participant data (IPD) sharing plan

IPD sharing plan summary
Not provided at time of registration