

# 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

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

## Plain English summary of protocol

Not provided at time of registration

## Contact information

### Type(s)

Scientific

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## Additional identifiers

**EudraCT/CTIS number**

**IRAS number**

**ClinicalTrials.gov number**

**Secondary identifying numbers**

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

### **Secondary study design**

Single-centre

### **Study setting(s)**

Not specified

### **Study type(s)**

Prevention

### **Participant information sheet**

### **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 (Pediaxel) 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 measure**

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).

## **Secondary outcome measures**

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 Pediaxel) with or without pneumococcal vaccination (Prevenar)

## **Overall study start date**

03/11/2004

## **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

**Age group**

Child

**Sex**

Not Specified

**Target number of participants**

400

**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)

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**Sponsor information****Organisation**

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**Sponsor type**  
Government

**Website**  
<http://www.rivm.nl/en/>

**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**

**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