# Comparative evaluation of Immunogenicity of monovalent type 1 Oral Poliovirus Vaccine (mOPV1) and monovalent type 3 Oral Poliovirus Vaccine (mOPV3) versus trivalent Oral Poliovirus Vaccine (tOPV): a randomised doubleblind controlled trial in South Africa

Submission date	<b>Recruitment status</b> No longer recruiting	[X] Prospectively registered		
15/11/2007		☐ Protocol		
Registration date	Overall study status	Statistical analysis plan		
15/11/2007	Completed	[X] Results		
Last Edited	Condition category	Individual participant data		
21/02/2012	Infections and Infestations			

# Plain English summary of protocol

Not provided at time of registration

# **Contact information**

# Type(s)

Scientific

#### Contact name

Dr Roland Sutter

#### Contact details

World Health Organization Avenue Appia 20 Geneva-27 Switzerland CH-1211 +41 (0)22 791 4682 sutterr@who.int

# Additional identifiers

EudraCT/CTIS number

#### **IRAS** number

#### ClinicalTrials.gov number

# Secondary identifying numbers

RPC236

# Study information

#### Scientific Title

#### **Study objectives**

The study aims to demonstrate the superiority of one dose of monovalent type 1 Oral Poliovirus Vaccine (mOPV1) or monovalent type 3 Oral Poliovirus Vaccine (mOPV3) compared to trivalent Oral Poliovirus Vaccine (tOPV) in inducing seroconversion.

#### Ethics approval required

Old ethics approval format

#### Ethics approval(s)

Ethics approval received from:

- 1. World Health Organization (WHO) Ethics Review Committee (ERC) on the 24th October 2007 (ref: RPC236)
- 2. University of Cape Town's Research Ethics Committee on the 2nd October 2007 (ref: 355/2007)

Regulatory authority approval from the Medicines Control Council South Africa is still in progress.

#### Study design

Interventional randomised double blind controlled trial for 3 arms of vaccine produced by GSK but randomised and unblinded for the mOPV1 vaccine produced by Panacea Biotec Ltd.

#### Primary study design

Interventional

#### Secondary study design

Randomised controlled trial

# Study setting(s)

Not specified

#### Study type(s)

Treatment

#### Participant information sheet

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

**Poliomyelitis** 

#### **Interventions**

Control group:

2 drops (approximately 0.1 ml) standard dose of tOPV manufactured by GlaxoSmithKline (GSK) at birth.

#### Intervention groups:

- 1. 2 drops (approximately 0.1 ml) of mOPV1 manufactured by GSK at birth
- 2. 2 drops (approximately 0.1 ml) of mOPV1 manufactured by Panacea at birth
- 3. 2 drops (approximately 0.1 ml) of mOPV3 manufactured by GSK at birth

Blood collection at birth (cord blood or blood from newborn) and at 30 days.

#### Principal Investigator:

Professor Gregory D. Hussey Institute of Infectious Disease and Molecular Medicine University of Cape Town Anzio Road, Observatory 7925 Cape Town South Africa

Tel: +27 (0)21 406 6738 Fax: +27 (0)21 406 6081

Email: Gregory.Hussey@uct.ac.za

#### **Intervention Type**

Drug

#### Phase

Not Specified

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

Monovalent type 1 Oral Poliovirus Vaccine (mOPV1), monovalent type 3 Oral Poliovirus Vaccine (mOPV3), trivalent Oral Poliovirus Vaccine (tOPV)

#### Primary outcome measure

Seroconversion 30 days after a single dose of tOPV, mOPV1, or mOPV3. Measurements on humoral immunity (specific primary endpoints) as as follows:

- 1. One dose of mOPV1 induces significantly higher levels of seroconversion against poliovirus type 1 than one dose of tOPV
- 2. One dose of mOPV3 induces significantly higher levels of seroconversion against poliovirus type 3 than one dose of tOPV

#### Secondary outcome measures

No secondary outcome measures

#### Overall study start date

15/11/2007

#### Completion date

15/11/2009

# Eligibility

#### Key inclusion criteria

- 1. Healthy infants (birth weight greater than or equal to 2.5 kg and Apgar score greater than or equal to 9 at 5 minutes) born at study sites
- 2. Residing less than or equal to 50 km from study sites
- 3. Family is not planning on travel during the study period (birth to 1 month)

#### Participant type(s)

Patient

#### Age group

Neonate

#### Sex

Both

#### Target number of participants

800

#### Key exclusion criteria

- 1. High risk newborns
- 2. Other newborns requiring hospitalisation
- 3. Birthweight less than 2.5 kg
- 4. Apgar score less than 9 at 5 minutes
- 5. Infants residing more than 50 km from study sites
- 6. Infants whose families are planning to be absent during one month study period
- 7. A diagnosis or suspicion of B cell immunodeficiency in participant or immediate family

The study will not collect information on acquired immunodefiency disease or Human Immunodeficiency Virus (HIV) status of mother or study subject.

#### Date of first enrolment

15/11/2007

#### Date of final enrolment

15/11/2009

# Locations

#### Countries of recruitment

South Africa

**Switzerland** 

# Study participating centre World Health Organization

Geneva-27

# Sponsor information

#### Organisation

World Health Organization (WHO) (Switzerland)

#### Sponsor details

Avenue Appia 20 Geneva-27 Switzerland CH-1211 +41 (0)22 791 4682 sutterr@who.int

#### Sponsor type

Research organisation

#### Website

http://www.who.int/en/

#### **ROR**

https://ror.org/01f80g185

# Funder(s)

#### Funder type

Research organisation

#### **Funder Name**

World Health Organization (WHO) (Switzerland)

#### Alternative Name(s)

, , Всемирная организация здравоохранения, Organisation mondiale de la Santé, Organización Mundial de la Salud, WHO, , BO3, OMS

#### **Funding Body Type**

Private sector organisation

#### Funding Body Subtype

International organizations

#### Location

#### Funder Name

Gates Foundation (USA)

#### Funder Name

International Financing Facility for Immunisations (IFFIm) (UK)

# **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	15/01/2012		Yes	No