

# Comparative evaluation of immunogenicity and reactogenicity of monovalent type 2 and 3 oral poliovirus vaccines (mOPV 2 and mOPV3) versus trivalent oral poliovirus vaccine (tOPV), and bivalent oral poliovirus vaccine (bOPV) versus monovalent types 1 and 3 oral poliovirus vaccines, respectively: a randomised double-blind trial

**Submission date**

26/11/2008

**Recruitment status**

No longer recruiting

☐ Prospectively registered

☐ Protocol

**Registration date**

26/11/2008

**Overall study status**

Completed

☐ Statistical analysis plan

☒ Results

**Last Edited**

23/08/2011

**Condition category**

Infections and Infestations

☐ Individual participant data

**Plain English summary of protocol**

Not provided at time of registration

## Contact information

**Type(s)**

Scientific

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# Additional identifiers

Protocol serial number

RPC273

## Study information

Scientific Title

### Study objectives

To determine if one or two doses of mOPV2 or mOPV3 induces significantly higher levels of seroconversion against poliovirus types 2 or 3, respectively, than does one or two doses of tOPV to these Sabin strains and to determine if one or two doses of bOPV induces similar seroconversion to types 1 and 3, respectively, compared to one or two doses of mOPV1 or mOPV3. Additionally, at one site (Indore), to determine if one or two doses of mOPV2 or mOPV3 significantly reduces excretion of poliovirus types 2 or 3, respectively than does one or two doses of tOPV and to determine if one or two doses of bOPV significantly reduces excretion of poliovirus type 1 and type 3 than does one or two doses of tOPV.

### Ethics approval required

Old ethics approval format

### Ethics approval(s)

1. MGM Medical College gave approval on the 7th June 2008 (ref: PBL/CR/0042008/CT)
2. The Drug Controller General of India gave approval on the 11th June 2008 (ref: PBL/CR/0042008/CT)

### Study design

Randomised double-blind clinical trial

### Primary study design

Interventional

### Study type(s)

Treatment

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

Poliomyelitis

### Interventions

1. Control: standard trivalent oral poliovirus vaccine (tOPV) - one or two doses
2. Intervention group one: monovalent type 1 oral poliovirus vaccine (mOPV1) - one or two doses
3. Intervention group two: monovalent type 2 oral poliovirus vaccine (mOPV2) - one or two doses
4. Intervention group three: monovalent type 3 oral poliovirus vaccine (mOPV3) - one or two doses
5. Intervention group four: bivalent type 1 and 3 oral poliovirus vaccine (bOPV) - one or two doses

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**Intervention Type**

Drug

**Phase**

Not Specified

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

Oral poliovirus vaccines

**Primary outcome(s)**

Seroconversion 30 days after a single dose of mOPV2 or mOPV3 compared to tOPV or seroconversion following a single dose of bOPV compared to mOPV1.

**Key secondary outcome(s)**

1. Seroconversion of two doses of mOPV2 or mOPV3 compared to tOPV
2. Seroconversion of one or two doses of bOPV compared to mOPV1 or mOPV3
3. Prevalence of excretion of poliovirus serotypes 1, 2, and 3 at 7, 30, 37, and 60 days (at Indore site only)

**Completion date**

13/10/2008

**Eligibility****Key inclusion criteria**

1. Healthy newborns (either sex) (greater than or equal to 2.50 kg birth weight, apgar score at 5 min greater than or equal to 9) at the study sites (large maternity hospitals)
2. Residing within a relatively short and easily accessible distance (less than 30 km)
3. Not planning to travel away during entire the study period (birth - 2 months)

**Participant type(s)**

Patient

**Healthy volunteers allowed**

No

**Age group**

Neonate

**Sex**

All

### **Key exclusion criteria**

1. Newborns requiring hospitalisation
2. Birth weight below 2.50 kg
3. Apgar score at 5 min less than 9
4. Residence greater than 30 km from study site
5. Families expecting to be absent during the 60-day study period
6. A diagnosis or suspicion of immunodeficiency disorder (either in the participant or in a member of the immediate family) will render the newborn ineligible for the study

### **Date of first enrolment**

13/08/2008

### **Date of final enrolment**

13/10/2008

## **Locations**

### **Countries of recruitment**

India

Switzerland

### **Study participating centre**

**World Health Organization**

Geneva

Switzerland

CH-1211

## **Sponsor information**

### **Organisation**

Panacea Biotech Limited (India)

### **ROR**

<https://ror.org/01ew11x49>

## **Funder(s)**

### **Funder type**

Industry

**Funder Name**

Panacea Biotech Limited (India)

**Funder Name**

World Health Organization (WHO) (Switzerland)

**Alternative Name(s)**

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

**Funding Body Type**

Government organisation

**Funding Body Subtype**

International organizations

**Location**

Switzerland

## Results and Publications

**Individual participant data (IPD) sharing plan****IPD sharing plan summary****Study outputs**

Output type	Details	Date created	Date added	Peer reviewed?	Patient-facing?
<a href="#">Results article</a>	results	13/11/2010		Yes	No
<a href="#">Participant information sheet</a>	Participant information sheet	11/11/2025	11/11/2025	No	Yes