# Safety of an aerosol attenuated measles vaccine in healthy subjects with Omron's nebuliser, Aerogen's clinical nebuliser and Trudell's nebuliser

Submission date	Recruitment status	<ul><li>Prospectively registered</li></ul>
08/05/2006	No longer recruiting	☐ Protocol
Registration date	Overall study status	Statistical analysis plan
12/05/2006	Completed	Results
Last Edited	Condition category	Individual participant data
10/09/2007	Infections and Infestations	Record updated in last year

# Plain English summary of protocol

Not provided at time of registration

# Contact information

# Type(s)

Scientific

#### Contact name

Dr Ana-Maria Henao Restrepo

#### Contact details

Initiative for Vaccine Research World Health Organization 20 Avenue Appia Geneva-27 Switzerland CH-1211

# Additional identifiers

**EudraCT/CTIS** number

**IRAS** number

ClinicalTrials.gov number

Secondary identifying numbers

# Study information

#### Scientific Title

# Study objectives

Respiratory administration of live measles vaccine closely mimics the natural route of measles infection. It is already established that current measles vaccines are more effective or equivalent in inducing antibody production when delivered by nebulisation compared to when delivered parenterally. Maternal antibody interference might be avoided or mucosal immunity might be enhanced. No increase in adverse side effects of respiratory administration has been noted compared to current injection practice. Aerosol delivery devices are available or being developed and could be used by lay people with limited training. Administration of the current measles vaccine via the respiratory route should now be comprehensively studied to achieve licensure for international use.

# Ethics approval required

Old ethics approval format

# Ethics approval(s)

Approved by the:

- 1. Research Ethics Review Committee (ERC) of the World Health Organization on the 4th April 2006
- 2. Health Ministry Screening Committee (HMSC) of the Ministry of Health (India) on the 17th January 2006

# Study design

Multicentre, open, non-controlled, sequential by age group, parallel trial.

# Primary study design

Interventional

# Secondary study design

Non randomised controlled trial

# Study setting(s)

Not specified

# Study type(s)

Prevention

# Participant information sheet

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

Measles infection

#### Interventions

Attenuated measles aerosol vaccine administrated via the following devices:

- 1. Omron's nebuliser
- 2. Aerogen's clinical nebuliser
- 3. Trudell's nebuliser

## Intervention Type

Drug

#### Phase

Not Specified

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

Measles vaccine

# Primary outcome measure

Evaluation of the safety of aerosol administration of live Edmonston Zagreb attenuated measles vaccine given to healthy volunteers.

## Secondary outcome measures

Evaluation of the serum plaque reduction neutralisation titres before and after aerosol administration of live attenuated measles vaccine given to healthy volunteers.

# Overall study start date

10/05/2006

# Completion date

31/12/2007

# **Eligibility**

#### Key inclusion criteria

- 1. Male subject, 18 to 35 years old for first group
- 2. Male or female at the age of 1 to 17 years for second and third group
- 3. Residence in the study area
- 4. Measles immune, as determined by Plaque Reduction Neutralisation (PRN) titre greater than 120 mIU/ml
- 5. Healthy on the day of the visit as supported by physical examination and laboratory evaluation on preset parameters
- 6. Signed informed consent (subject and/or parent/guardian/legal representative)
- 7. Expressed interest and availability to fulfil the study requirements
- 8. Non pregnant as certified by pregnancy test and agreement to avoid pregnancy for at least 30 days after vaccination (women of childbearing age)
- 9. Willing not to receive any experimental drug or vaccine within 90 days after study vaccination

# Participant type(s)

Patient

#### Age group

**Not Specified** 

#### Sex

Both

# Target number of participants

60 subjects for 3 sequential age groups; 20 participants in each

# Key exclusion criteria

- 1. Human Immunodeficiency Virus (HIV) positive (serology test)
- 2. Pregnant (based on positive pregnancy test)
- 3. Immunodeficiency or suppression (disease or iatrogenic induced), seizure disorder and progressive neurological disorder
- 4. Enrolled in any experimental drug or vaccine study within 30 days prior to vaccination
- 5. Known hypersensitivity to any component of the study vaccine
- 6. History of thrombocytopenia or immune thrombocytopenia purpura
- 7. Significant psychiatric or medical illness, including pulmonary disease (such as asthma requiring medication)
- 8. Severe malnutrition, as indicated by current guidelines by Indian Academic of Paediatrics
- 9. Axillary temperature greater than 38.3°C or other acute illness on the day of scheduled vaccination
- 10. Household contact who has a medical history suggestive of disease or drug induced immunodeficiency or suppression (e.g. ongoing treatment with an immunosuppressive agent, chronic diarrhoea for greater than one month, fever for greater than one month, chronic cough for greater than one month, generalised dermatitis or lymphadenopathy, gastrointestinal candidiasis)
- 11. Receipt of any licensed vaccine within 30 days prior to vaccination

#### Date of first enrolment

10/05/2006

#### Date of final enrolment

31/12/2007

# Locations

#### Countries of recruitment

India

Switzerland

Study participating centre Initiative for Vaccine Research

Geneva-27 Switzerland CH-1211

# Sponsor information

## Organisation

World Health Organization (WHO) (Switzerland)

# Sponsor details

Initiative for Vaccine Research 20 Avenue Appia Geneva-27 Switzerland CH-1211

## Sponsor type

Research organisation

#### Website

http://www.who.int/vaccine\_research/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

Switzerland

# **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