Clinical trial results:
Safety study of IMOVAX Polio in selected cities in China, an observational post marketing study

Summary

EudraCT number	2015-005185-34
Trial protocol	Outside EU/EEA
Global end of trial date	10 July 2011

Results information

Result version number	v1 (current)
This version publication date	16 April 2016
First version publication date	16 April 2016

Trial information

Trial identification

Sponsor protocol code	IPV29

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT01244464
WHO universal trial number (UTN)	U1111-1114-3719

Notes:

Sponsors

Sponsor organisation name	Sanofi Pasteur China
Sponsor organisation address	6th Floor, No. 112 Jianguo Road, Chao Yang District, Beijing, China, 100022
Public contact	Director, Clinical Development, Sanofi Pasteur China, 86 10 6568 5588 7386, jean-denis.shu@sanofipasteur.com
Scientific contact	Director, Clinical Development, Sanofi Pasteur China, 86 10 6568 5588 7386, jean-denis.shu@sanofipasteur.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	No
Does article 45 of REGULATION (EC) No 1901/2006 apply to this trial?	No
Does article 46 of REGULATION (EC) No 1901/2006 apply to this trial?	Yes

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	07 May 2012
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	10 July 2011
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

- To describe the safety profile within 28 days after each dose of IMOVAX Polio administered at 2, 3 and 4 months of age in population aged over 2 months old living in the study city, China.

Protection of trial subjects:

Only subjects that met all the study inclusion and none of the exclusion criteria were randomized and vaccinated in the study. Vaccinations were performed by qualified and trained study personnel. Subjects with allergy to any of the vaccine components were not vaccinated. After vaccination, subjects were also kept under clinical observation for 30 minutes to ensure their safety. Appropriate medical equipment was also available on site in case of any immediate allergic reactions.

Background therapy:

Not applicable

Evidence for comparator:

Not applicable

Actual start date of recruitment	15 November 2010
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	No

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	China: 800
Worldwide total number of subjects	800
EEA total number of subjects	0

Notes:

Subjects enrolled per age group

In utero	0
Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	800
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	0

From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

Study subjects were enrolled from 15 November 2010 to 7 March 2011 at 1 clinic center in China.

Pre-assignment

Screening details:

A total of 801 subjects were enrolled in the study; 800 subjects were vaccinated.

Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Not applicable
Blinding used	Not blinded

Blinding implementation details:

Not applicable

Arms

Arm title	IMOVAX Polio™

Arm description:

Infants at least 2 months of age received 3 doses of IMOVAX Polio™, 1 each at 2, 3, and 4 months of age.

Arm type	Experimental
Investigational medicinal product name	IMOVAX Polio™
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

0.5 mL, intramuscular into the anterolateral area of the thigh or upper arm, 1 injection each at 2, 3, and 4 months of age.

Number of subjects in period 1	IMOVAX Polio™
Started	800
Completed	772
Not completed	28
Consent withdrawn by subject	18
Adverse event, non-fatal	2
Lost to follow-up	7
Protocol deviation	1

Baseline characteristics

Reporting groups	
Reporting group title	IMOVAX Polio™
Reporting group description:	
Infants at least 2 months of age received 3 doses of IMOVAX Polio™, 1 each at 2, 3, and 4 months of age.	

Reporting group values	IMOVAX Polio™	Total	
Number of subjects	800	800	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	800	800	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	0	0	
From 65-84 years	0	0	
85 years and over	0	0	
Age continuous Units: days			
arithmetic mean	64.17		
standard deviation	± 7.61	-	
Gender categorical Units: Subjects			
Female	368	368	
Male	432	432	

End points

End points reporting groups

Reporting group title	IMOVAX Polio™

Reporting group description:

Infants at least 2 months of age received 3 doses of IMOVAX Polio™, 1 each at 2, 3, and 4 months of age.

Primary: Summary of Safety Endpoints After Any Vaccination Following A Three-Dose Primary Vaccination Series with Inactivated Poliomyelitis Vaccine (IMOVAX Polio™)

End point title	Summary of Safety Endpoints After Any Vaccination Following A Three-Dose Primary Vaccination Series with Inactivated Poliomyelitis Vaccine (IMOVAX Polio™)[1]

End point description:

The following safety endpoints were assessed using The China State Food and Drug Administration (SFDA) severity scale: Solicited adverse reaction (Solicited systemic reaction and Solicited Injection site reaction), Unsolicited adverse event/adverse drug reaction (AE/ADR) (Unsolicited Injection site reaction, Unsolicited systemic AE, Unsolicited systemic ADR), Immediate event (Immediate ADR), Serious adverse events, and AEs leading to early termination of the study. The rate is the percentage of subjects with at least 1 event reported after any vaccine dose of administration. The immediate event was defined as the event that presented in the 30 minutes following vaccination. Solicited reactions (Fever, Injection site Erythema, Injection site Swelling) were assessed by both the Sponsor and the SFDA severity scales.

End point type	Primary

End point timeframe:

Day 0 up to Day 28 days post-any vaccination

Notes:

[1] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: Descriptive analyses were performed based on the study group and the study vaccine administered for this outcome.

End point values	IMOVAX Polio™			
Subject group type	Reporting group			
Number of subjects analysed	800			
Units: Percentage of subjects				
number (not applicable)				
Solicited Adverse Reaction	47.63			
Solicited Systemic Reaction	46.38			
Solicited Injection Site Reaction	8.75			
Unsolicited Adverse Event/Adverse Drug Reaction	4.25			
Unsolicited Injection Site Reaction	0.12			
Unsolicited Systemic Adverse Event	4.25			
Unsolicited Systemic Adverse Drug Reaction	0.12			
Immediate Event	0			
Immediate Adverse Drug Reaction	0			
Serious Adverse Events	0.12			
AEs leading to early termination of the study	0.25			

Statistical analyses

No statistical analyses for this end point

Primary: Time of Onset and Number of Subjects with Solicited Injection-site and Systemic Reactions Following Each Primary Series Vaccination with Inactivated Poliomyelitis Vaccine (IMOVAX Polio™)

End point title	Time of Onset and Number of Subjects with Solicited Injection-site and Systemic Reactions Following Each Primary Series Vaccination with Inactivated Poliomyelitis Vaccine (IMOVAX Polio™)[2]

End point description:

Solicited injection site and systemic reactions were assessed using the The China State Food and Drug Administration (SFDA) severity scale. Solicited Injection site reactions: Tenderness, Erythema, and Swelling. Solicited systemic reactions: Fever, Vomiting, Crying abnormal, Somnolence, Anorexia, and Irritability. Fever, Injection site Erythema, Injection site Swelling were assessed by both the Sponsor and the SFDA severity scales.

End point type	Primary

End point timeframe:

Day 0 up to Day 3 post-each and any vaccination, Day 4 up to Day 7 post-each and any vaccination, and Day 0 up to Day 7 post-each and any vaccination

Notes:

[2] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: Descriptive analyses were performed based on the study group and the study vaccine administered for this outcome.

End point values	IMOVAX Polio™			
Subject group type	Reporting group			
Number of subjects analysed	800[3]			
Units: Number of subjects				
number (not applicable)				
Injection site Tenderness; Day 0-Day 3;Post-dose 1	29			
Injection site Tenderness; Day 0-Day 3;Post-dose 2	18			
Injection site Tenderness; Day 0-Day 3;Post-dose 3	16			
Any Injection site Tenderness; Day 0-Day 3	47			
Injection site Tenderness; Day 4-Day 7;Post-dose 1	0			
Injection site Tenderness; Day 4-Day 7;Post-dose 2	0			
Injection site Tenderness; Day 4-Day 7;Post-dose 3	0			
Any Injection site Tenderness; Day 4-Day 7	0			
Injection site Erythema; Day 0-Day 3; Post-dose 1	24			
Injection site Erythema; Day 0-Day 3; Post-dose 2	18			

Injection site Erythema; Day 0-Day 3; Post-dose 3	13			
Any Injection site Erythema; Day 0-Day 3	41			
Injection site Erythema; Day 4-Day 7; Post-dose 1	0			
Injection site Erythema; Day 4-Day 7; Post-dose 2	0			
Injection site Erythema; Day 4-Day 7; Post-dose 3	0			
Any Injection site Erythema; Day 4-Day 7	0			
Injection site Swelling; Day 0-Day 3; Post-dose 1	9			
Injection site Swelling; Day 0-Day 3; Post-dose 2	6			
Injection site Swelling; Day 0-Day 3; Post-dose 3	5			
Any Injection site Swelling; Day 0-Day 3	18			
Injection site Swelling; Day 4-Day 7; Post-dose 1	1			
Injection site Swelling; Day 4-Day 7; Post-dose 2	0			
Injection site Swelling; Day 4-Day 7; Post-dose 3	0			
Any Injection site Swelling; Day 4-Day 7	1			
Fever; Day 0-Day 3; Post-dose 1	55			
Fever; Day 0-Day 3; Post-dose 2	33			
Fever; Day 0-Day 3; Post-dose 3	11			
Any Fever; Day 0-Day 3	87			
Fever; Day 4-Day 7; Post-dose 1	6			
Fever; Day 4-Day 7; Post-dose 2	4			
Fever; Day 4-Day 7; Post-dose 3	3			
Any Fever; Day 4-Day 7	13			
Vomiting; Day 0-Day 3; Post-dose 1	62			
Vomiting; Day 0-Day 3; Post-dose 2	30			
Vomiting; Day 0-Day 3; Post-dose 3	16			
Any Vomiting; Day 0-Day 3	84			
Vomiting; Day 4-Day 7; Post-dose 1	5			
Vomiting; Day 4-Day 7; Post-dose 2	0			
Vomiting; Day 4-Day 7; Post-dose 3	1			
Any Vomiting; Day 4-Day 7	6			
Crying abnormal; Day 0-Day 3; Post-dose 1	146			
Crying abnormal; Day 0-Day 3; Post-dose 2	117			
Crying abnormal; Day 0-Day 3; Post-dose 3	70			
Any Crying abnormal; Day 0-Day 3	230			
Crying abnormal; Day 4-Day 7; Post-dose 1	7			
Crying abnormal; Day 4-Day 7; Post-dose 2	3			
Crying abnormal; Day 4-Day 7; Post-dose 3	2			
Any Crying abnormal; Day 4-Day 7	11			
Somnolence; Day 0-Day 3; Post-dose 1	108			
Somnolence; Day 0-Day 3; Post-dose 2	90			

Somnolence; Day 0-Day 3; Post-dose 3	40			
Any Somnolence; Day 0-Day 3	183			
Somnolence; Day 4-Day 7; Post-dose 1	13			
Somnolence; Day 4-Day 7; Post-dose 2	6			
Somnolence; Day 4-Day 7; Post-dose 3	0			
Any Somnolence; Day 4-Day 7	19			
Anorexia; Day 0-Day 3; Post-dose 1	95			
Anorexia; Day 0-Day 3; Post-dose 2	78			
Anorexia; Day 0-Day 3; Post-dose 3	50			
Any Anorexia; Day 0-Day 3	168			
Anorexia; Day 4-Day 7; Post-dose 1	7			
Anorexia; Day 4-Day 7; Post-dose 2	2			
Anorexia; Day 4-Day 7; Post-dose 3	2			
Any Anorexia; Day 4-Day 7	11			
Irritability; Day 0-Day 3; Post-dose 1	47			
Irritability; Day 0-Day 3; Post-dose 2	50			
Irritability; Day 0-Day 3; Post-dose 3	30			
Any Irritability; Day 0-Day 3	103			
Irritability; Day 4-Day 7; Post-dose 1	4			
Irritability; Day 4-Day 7; Post-dose 2	3			
Irritability; Day 4-Day 7; Post-dose 3	3			
Any Irritability; Day 4-Day 7	10			

Notes:

[3] - N=786 Post-dose 2; N=772 Post-dose 3

Statistical analyses

No statistical analyses for this end point

Primary: Number of Subjects with Unsolicited Adverse Events Occurring Up to 28 Days After Any Primary Series Vaccination with Inactivated Poliomyelitis Vaccine (IMOVAX Polio™)

End point title	Number of Subjects with Unsolicited Adverse Events Occurring Up to 28 Days After Any Primary Series Vaccination with Inactivated Poliomyelitis Vaccine (IMOVAX Polio™)[4]

End point description:

For the reporting of unsolicited AEs, if a subject had more than one event for a particular SOC/Preferred Term he/she was counted only once for that SOC/Preferred Term according to the most severe category.

End point type	Primary

End point timeframe:

Day 0 up to Day 28 post-any vaccination

Notes:

[4] - No statistical analyses have been specified for this primary end point. It is expected there is at least one statistical analysis for each primary end point.
Justification: Descriptive analyses were performed based on the study group and the study vaccine administered for this outcome.

End point values	IMOVAX Polio™			
Subject group type	Reporting group			
Number of subjects analysed	800			
Units: Number of subjects				
number (not applicable)				
Any, Upper respiratory tract infection	13			
Severe, Upper respiratory tract infection	0			
Any, Bronchitis	2			
Severe, Bronchitis	0			
Any, Nasopharyngitis	2			
Severe, Nasopharyngitis	0			
Any, Pneumonia	2			
Severe, Pneumonia	1			
Any, Bronchopneumonia	1			
Severe, Bronchopneumonia	0			
Any, Cough	1			
Severe, Cough	0			
Any, Respiratory tract infection	1			
Severe, Respiratory tract infection	0			
Any, Eczema	4			
Severe, Eczema	0			
Any, Rash	1			
Severe, Rash	0			
Any, Diarrhoea	4			
Severe, Diarrhoea	0			
Any, Trichiasis	1			
Severe, Trichiasis	0			
Any, Pyrexia	1			
Severe, Pyrexia	0			
Any, Hypersensitivity	1			
Severe, Hypersensitivity	0			
Any, Urinary tract infection	1			
Severe, Urinary tract infection	0			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events:	
Adverse event data were collected from Day 0 up to Day 28 post-any vaccination.	
Assessment type	Non-systematic

Dictionary used	
Dictionary name	MedDRA
Dictionary version	13.1

Reporting groups	
Reporting group title	IMOVAX Polio™
Reporting group description:	
Infants at least 2 months of age received 3 doses of IMOVAX Polio™, 1 each at 2, 3, and 4 months of age.	

Serious adverse events	IMOVAX Polio™		
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 800 (0.13%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Infections and infestations			
Pneumonia			
subjects affected / exposed	1 / 800 (0.13%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 5 %

Non-serious adverse events	IMOVAX Polio™		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	237 / 800 (29.63%)		
Nervous system disorders			
Any Somnolence			
alternative assessment type: Systematic			
subjects affected / exposed	195 / 800 (24.38%)		
occurrences (all)	195		
General disorders and administration site conditions			

Any Fever			
alternative assessment type: Systematic			
subjects affected / exposed	97 / 800 (12.13%)		
occurrences (all)	97		
Any Injection site Tenderness			
alternative assessment type: Systematic			
subjects affected / exposed	47 / 800 (5.88%)		
occurrences (all)	47		
Any Injection site Erythema			
alternative assessment type: Systematic			
subjects affected / exposed	41 / 800 (5.13%)		
occurrences (all)	41		
Gastrointestinal disorders			
Any Vomiting			
alternative assessment type: Systematic			
subjects affected / exposed	87 / 800 (10.88%)		
occurrences (all)	87		
Psychiatric disorders			
Any Crying abnormal			
alternative assessment type: Systematic			
subjects affected / exposed	237 / 800 (29.63%)		
occurrences (all)	237		
Any Irritability			
alternative assessment type: Systematic			
subjects affected / exposed	107 / 800 (13.38%)		
occurrences (all)	107		
Metabolism and nutrition disorders			
Any Anorexia			
alternative assessment type: Systematic			
subjects affected / exposed	175 / 800 (21.88%)		
occurrences (all)	175		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported