Clinical trial results:
A Phase 4, Open-Label, Single-Arm, Multicenter Study to Describe the Safety of 13-Valent Pneumococcal Conjugate Vaccine in Children 6 to 17 Years of Age in India

Summary

EudraCT number	2019-000890-21
Trial protocol	Outside EU/EEA
Global end of trial date	17 April 2019

Results information

Result version number	v1 (current)
This version publication date	01 November 2019
First version publication date	01 November 2019

Trial information

Trial identification

Sponsor protocol code	B1851190

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT03777865
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Pfizer Inc.
Sponsor organisation address	235 E 42nd Street, New York, United States, NY 10017
Public contact	Pfizer ClinicalTrials.gov Call Center, Pfizer, Inc., 001 18007181021, ClinicalTrials.gov_Inquiries@pfizer.com
Scientific contact	Pfizer ClinicalTrials.gov Call Center, Pfizer Inc., 001 18007181021, ClinicalTrials.gov_Inquiries@pfizer.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	09 September 2019
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	17 April 2019
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

To describe the safety profile of 13-Valent Pneumococcal Conjugate (13vPnC) in pediatric subjects 6 to 17 years of age.

Protection of trial subjects:

The study was in compliance with the ethical principles derived from the Declaration of Helsinki and in compliance with all International Council for Harmonization (ICH) Good Clinical Practice (GCP) Guidelines. All the local regulatory requirements pertinent to safety of trial subjects were followed.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	14 December 2018
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	India: 100
Worldwide total number of subjects	100
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)	0
Children (2-11 years)	73
Adolescents (12-17 years)	27
Adults (18-64 years)	0
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details: -

Pre-assignment

Screening details:

The study was conducted in 1 country from 14 December 2018 to 17 April 2019. A total of 100 subjects were enrolled.

Period 1

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

Arms

Arm title	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine

Arm description:

Subjects received a single dose of 0.5 milliliter (mL) 13vPnC vaccine, intramuscularly on Day 1.

Arm type	Experimental
Investigational medicinal product name	13-valent Pneumococcal Conjugate Vaccine
Investigational medicinal product code	13vPnC
Other name	
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

Subjects received a single dose of 0.5 mL of 13vPnC vaccine as intramuscularly on Day 1.

Number of subjects in period 1	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine
Started	100
Completed	100

Baseline characteristics

Reporting groups	
Reporting group title	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine
Reporting group description:	
Subjects received a single dose of 0.5 milliliter (mL) 13vPnC vaccine, intramuscularly on Day 1.	

Reporting group values	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine	Total	
Number of subjects	100	100	
Age categorical Units: Subjects			
Age Continuous Units: years			
arithmetic mean	10.28		
standard deviation	± 2.985	-	
Sex: Female, Male Units: Subjects			
Female	47	47	
Male	53	53	
Race (NIH/OMB) Units: Subjects			
American Indian or Alaska Native	0	0	
Asian	100	100	
Native Hawaiian or Other Pacific Islander	0	0	
Black or African American	0	0	
White	0	0	
More than one race	0	0	
Unknown or Not Reported	0	0	
Ethnicity (NIH/OMB) Units: Subjects			
Hispanic or Latino	0	0	
Not Hispanic or Latino	100	100	
Unknown or Not Reported	0	0	

End points

End points reporting groups

Reporting group title	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine
Reporting group description:	
Subjects received a single dose of 0.5 milliliter (mL) 13vPnC vaccine, intramuscularly on Day 1.	

Primary: Percentage of Subjects Reporting Local Reactions by Severity Within 7 Days After Vaccination

End point title	Percentage of Subjects Reporting Local Reactions by Severity Within 7 Days After Vaccination[1]
End point description:	
Local reactions (redness, swelling and pain [tenderness]) at the 13vPnC injection site were monitored daily for 7 days after vaccination. Redness and swelling were measured and recorded in a measuring device units. 1 measuring device unit=0.5 centimeter (cm). Redness and swelling were graded as; any (any redness or swelling at the injection site), mild (1 to 4 measuring device units = 0.5 to 2.0 cm), moderate (5 to 14 measuring device units = 2.5 to 7.0 cm) and severe (greater than [>]14 measuring device units = >7.0 cm). Pain (tenderness) at injection site was categorized as; any: any pain at the injection site, mild: did not interfere with activity, moderate: interfered with activity and severe: prevented daily activity. The safety population included all subjects who received 1 dose of an investigational product. Here, "Number of Subjects Analyzed"(N)=subjects evaluable for this end point and "n"=subjects evaluable at specific rows.	
End point type	Primary
End point timeframe:	
Within 7 days after vaccination on Day 1 (up to Day 7)	

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: Only descriptive data was analyzed for this endpoint.

End point values	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine			
Subject group type	Reporting group			
Number of subjects analysed	92			
Units: percentage of subjects				
number (confidence interval 95%)				
Redness: Any (n= 74)	14.9 (7.7 to 25.0)			
Redness: Mild (n= 74)	14.9 (7.7 to 25.0)			
Redness: Moderate (n= 74)	0 (0.0 to 4.9)			
Redness: Severe (n= 74)	0 (0.0 to 4.9)			
Swelling: Any (n= 74)	17.6 (9.7 to 28.2)			
Swelling: Mild (n= 74)	17.6 (9.7 to 28.2)			
Swelling: Moderate (n= 74)	0 (0.0 to 4.9)			
Swelling: Severe (n= 74)	0 (0.0 to 4.9)			
Pain: Any (n= 91)	67.0 (56.4 to 76.5)			
Pain: Mild (n= 91)	45.1 (34.6 to 55.8)			

Pain: Moderate (n= 91)	19.8 (12.2 to 29.4)			
Pain: Severe (n= 91)	2.2 (0.3 to 7.7)			

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects Reporting Systemic Events by Severity Within 7 Days After Vaccination

End point title	Percentage of Subjects Reporting Systemic Events by Severity Within 7 Days After Vaccination[2]

End point description:

Systemic events included fever, fatigue(tiredness), headache, muscle pain, joint pain, vomiting and diarrhea. Fever: greater than or equal to (>=) 38.0 degrees Celsius (C), >=38.0 degrees C to <=38.4 degrees C, >=38.5 to <=38.9 degrees C, 39.0 to 40.0 degrees C, > 40.0 degrees C. Fatigue, headache, muscle pain and joint pain graded as any (any fatigue, headache, muscle pain, joint pain), mild(did not interfere with activity), moderate(some interference with activity) or severe(prevented daily routine activity). Vomiting was graded as any (any vomiting), mild (1-2 times in 24 hours [hrs.]), moderate(>2 times in 24 hrs.) or severe (required intravenous hydration). Diarrhea was graded as any(any diarrhea), mild (2-3 loose stools in 24 hrs.), moderate(4-5 loose stools in 24 hrs.) or severe(>=6 loose stools in 24 hrs.). The safety population=all subjects who received 1 dose of an investigational product. "N"=subjects evaluable for this end point; "n"=subjects evaluable at specific rows.

End point type	Primary

End point timeframe:

Within 7 days after vaccination on Day 1 (up to Day 7)

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: Only descriptive data was analyzed for this endpoint.

End point values	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine			
Subject group type	Reporting group			
Number of subjects analysed	83			
Units: percentage of subjects				
number (confidence interval 95%)				
Fever: >=38 degrees C (n=73)	4.1 (0.9 to 11.5)			
Fever: >=38 degrees C to <=38.4 degrees C (n= 73)	1.4 (0.0 to 7.4)			
Fever:>=38.5 degrees C to <=38.9 degrees C (n=73)	2.7 (0.3 to 9.5)			
Fever:>=39.0 degrees C to <=40.0 degrees C (n=73)	0 (0.0 to 4.9)			
Fever: >40.0 degrees C (n=73)	0 (0.0 to 4.9)			
Fatigue: Any (n= 77)	31.2 (21.1 to 42.7)			
Fatigue: Mild (n= 77)	22.1 (13.4 to 33.0)			
Fatigue: Moderate (n= 77)	6.5 (2.1 to 14.5)			
Fatigue: Severe (n= 77)	2.6 (0.3 to 9.1)			

Headache: Any (n= 76)	25.0 (15.8 to 36.3)			
Headache: Mild (n= 76)	15.8 (8.4 to 26.0)			
Headache: Moderate (n= 76)	6.6 (2.2 to 14.7)			
Headache: Severe (n= 76)	2.6 (0.3 to 9.2)			
Muscle pain: Any (n= 77)	27.3 (17.7 to 38.6)			
Muscle pain: Mild (n= 77)	20.8 (12.4 to 31.5)			
Muscle pain: Moderate (n= 77)	3.9 (0.8 to 11.0)			
Muscle pain: Severe (n= 77)	2.6 (0.3 to 9.1)			
Joint pain: Any (n= 77)	13.0 (6.4 to 22.6)			
Joint pain: Mild (n= 77)	3.9 (0.8 to 11.0)			
Joint pain: Moderate (n= 77)	7.8 (2.9 to 16.2)			
Joint pain: Severe (n= 77)	1.3 (0.0 to 7.0)			
Vomiting: Any (n= 73)	9.6 (3.9 to 18.8)			
Vomiting: Mild (n= 73)	8.2 (3.1 to 17.0)			
Vomiting: Moderate (n= 73)	1.4 (0.0 to 7.4)			
Vomiting: Severe (n= 73)	0 (0.0 to 4.9)			
Diarrhea: Any (n= 73)	4.1 (0.9 to 11.5)			
Diarrhea: Mild (n= 73)	2.7 (0.3 to 9.5)			
Diarrhea: Moderate (n= 73)	1.4 (0.0 to 7.4)			
Diarrhea: Severe (n= 73)	0 (0.0 to 4.9)			

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects With Treatment Emergent Adverse Events (AEs) and Serious adverse events (SAEs)

End point title	Percentage of Subjects With Treatment Emergent Adverse Events (AEs) and Serious adverse events (SAEs)[3]

End point description:

An AE was any untoward medical occurrence in a subject who received investigational product without regard to possibility of causal relationship. SAE was an AE resulting in any of the following outcomes or deemed significant for any other reason: death; initial or prolonged inpatient hospitalization; life-threatening experience (immediate risk of dying); persistent or significant disability/incapacity; congenital anomaly or that was considered to be an important medical event. Treatment-emergent were events between first dose of study drug and up to 1 month that were absent before treatment or that worsened relative to pretreatment state. AEs included both serious and non-serious AEs. The safety population included all subjects who received 1 dose of an investigational product. Here, "n"=subjects evaluable at specific rows.

End point type	Primary

End point timeframe:

up to 1 month after vaccination on Day 1

Notes:

[3] - 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: Only descriptive data was analyzed for this endpoint.

End point values	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine			
Subject group type	Reporting group			
Number of subjects analysed	100			
Units: percentage of subjects				
number (confidence interval 95%)				
AEs (n=100)	75.0 (65.3 to 83.1)			
SAEs (n=100)	1.0 (0.0 to 5.4)			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information

Timeframe for reporting adverse events:

up to 1 month after vaccination on Day 1

Adverse event reporting additional description:

Same event may appear as AE and SAE, what is presented are distinct events. Event may be categorized as serious in 1 subject and as nonserious in another subject or 1 subject may have experienced both serious and nonserious event during study.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	22.0

Reporting groups

Reporting group title	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine

Reporting group description:

Subjects received a single dose of 0.5 mL dose of 13vPnC vaccine, intramuscularly injection on Day 1.

Serious adverse events	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine		
Total subjects affected by serious adverse events			
subjects affected / exposed	1 / 100 (1.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		
Hepatobiliary disorders			
Hepatitis acute			
subjects affected / exposed	1 / 100 (1.00%)		
occurrences causally related to treatment / all	0 / 1		
deaths causally related to treatment / all	0 / 0		

Frequency threshold for reporting non-serious adverse events: 0 %

Non-serious adverse events	13-Valent Pneumococcal Conjugate (13vPnC) Vaccine		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	75 / 100 (75.00%)		
General disorders and administration site conditions			

Headache	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event.		
alternative assessment type: Systematic			
subjects affected / exposed[1]	19 / 76 (25.00%)		
occurrences (all)	19		
Fatigue	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event		
alternative assessment type: Systematic			
subjects affected / exposed[2]	24 / 77 (31.17%)		
occurrences (all)	24		
Diarrhoea	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event.		
alternative assessment type: Systematic			
subjects affected / exposed[3]	3 / 73 (4.11%)		
occurrences (all)	3		
Vomiting	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event		
alternative assessment type: Systematic			
subjects affected / exposed[4]	7 / 73 (9.59%)		
occurrences (all)	7		
Fever	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event.		
alternative assessment type: Systematic			
subjects affected / exposed[5]	3 / 73 (4.11%)		
occurrences (all)	3		
Muscle pain	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event.		
alternative assessment type: Systematic			
subjects affected / exposed[6]	21 / 77 (27.27%)		
occurrences (all)	21		
Joint pain	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event.		
alternative assessment type: Systematic			
subjects affected / exposed[7]	10 / 77 (12.99%)		
occurrences (all)	10		
Gastrointestinal disorders			
Diarrhoea			
subjects affected / exposed	1 / 100 (1.00%)		
occurrences (all)	1		
Skin and subcutaneous tissue disorders			

Pruritus			
subjects affected / exposed	1 / 100 (1.00%)		
occurrences (all)	1		
Redness	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event.		
alternative assessment type: Systematic			
subjects affected / exposed[8]	11 / 74 (14.86%)		
occurrences (all)	11		
Swelling	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event.		
alternative assessment type: Systematic			
subjects affected / exposed[9]	13 / 74 (17.57%)		
occurrences (all)	13		
Pain at the injection site	Additional description: Number of subjects exposed = number of subjects evaluable for the adverse event.		
alternative assessment type: Systematic			
subjects affected / exposed[10]	61 / 91 (67.03%)		
occurrences (all)	61		
Infections and infestations			
Rhinitis			
subjects affected / exposed	1 / 100 (1.00%)		
occurrences (all)	1		
Nasopharyngitis			
subjects affected / exposed	1 / 100 (1.00%)		
occurrences (all)	1		
Upper respiratory tract infection			
subjects affected / exposed	2 / 100 (2.00%)		
occurrences (all)	2		

Notes:

[1] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.

[2] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.

[3] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.

[4] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.

[5] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.
[6] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.
[7] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.
[8] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.
[9] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.
[10] - The number of subjects exposed to this adverse event is less than the total number of subjects exposed for the reporting group. These numbers are expected to be equal.
Justification: Here number of subjects exposed signifies subjects reporting yes for at least 1 day or no for all days.

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