Clinical trial results:
A Phase 4 study to evaluate the safety and immunogenicity of monovalent oral polio vaccine type 2 in healthy IPV-vaccinated children aged 1 to 5 years in Lithuania

Summary

EudraCT number	2015-003544-39
Trial protocol	LT
Global end of trial date	12 May 2016

Results information

Result version number	v1 (current)
This version publication date	18 December 2019
First version publication date	18 December 2019

Trial information

Trial identification

Sponsor protocol code	M3-ABMG

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT02582255
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Fighting Infectious Diseases in Emerging Countries (FIDEC)
Sponsor organisation address	2050 Coral Way, Suite 407, MIami, United States, 33145
Public contact	Clinic of Children Diseases, Vilnius University, Santariskiu Clinic, +37 052492414, vytautas.usonis@mf.vu.lt
Scientific contact	Clinic of Children Diseases, Vilnius University, Santariskiu Clinic, +37 052492414, vytautas.usonis@mf.vu.lt

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?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	12 April 2019
Is this the analysis of the primary completion data?	Yes
Primary completion date	12 May 2016
Global end of trial reached?	Yes
Global end of trial date	12 May 2016
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objectives of the study are to assess the safety (serious adverse events [SAEs] and severe adverse events [AEs] grade 3 according to CTCAE 4.03) and immunogenicity (seroprotection rate) of one dose of SABIN mOPV2 in healthy IPV-vaccinated children aged 1 to 5 years.

Protection of trial subjects:

A DSMB monitored the safety aspects of this trial.
The composition and functioning of the DSMB was documented in the DSMB charter, which was approved prior to the initiation of the study.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	19 October 2015
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Lithuania: 100
Worldwide total number of subjects	100
EEA total number of subjects	100

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)	40
Children (2-11 years)	60
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:

100 subjects enrolled - 50 subjects were enrolled in Group 1 (1 dose of mOPV2) and 50 subjects were enrolled in Group 2 (2 doses of mOPV2).

Pre-assignment

Screening details:

101 subjects were available for screening.

Period 1

Period 1 title	FPI-LPO (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Not blinded

Arms

Are arms mutually exclusive?	Yes
Arm title	Group 1

Arm description:

IPV-vaccinated children to receive 1 dose of SABIN mOPV2

Arm type	Experimental
Investigational medicinal product name	mOPV2
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral solution
Routes of administration	Oral use

Dosage and administration details:

All subjects were to receive mOPV2 at the same dose level. Half of the subjects (n=50, Group 1) were to receive a single dose, with the other half (n=50, Group 2) to receive a second dose, 28 days after the first dose.

Arm title	Group 2

Arm description:

IPV-vaccinated children to receive 2 doses of SABIN mOPV2, administered 28 days apart .

Arm type	Experimental
Investigational medicinal product name	mOPV2
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Oral solution
Routes of administration	Oral use

Dosage and administration details:

All subjects were to receive mOPV2 at the same dose level. Half of the subjects (n=50, Group 1) were to receive a single dose, with the other half (n=50, Group 2) to receive a second dose, 28 days after the first dose.

Number of subjects in period 1	Group 1	Group 2
Started	50	50
Completed	50	47
Not completed	0	3
Protocol deviation	-	3

Baseline characteristics

Reporting groups	
Reporting group title	Group 1
Reporting group description: IPV-vaccinated children to receive 1 dose of SABIN mOPV2	
Reporting group title	Group 2
Reporting group description: IPV-vaccinated children to receive 2 doses of SABIN mOPV2, administered 28 days apart .	

Reporting group values	Group 1	Group 2	Total
Number of subjects	50	50	100
Age categorical			
IPV vaccinated children aged 1 to 5 years			
Units: Subjects			
Infants and toddlers (28 days-23 months)	20	20	40
Children (2-11 years)	30	30	60
Gender categorical Units: Subjects			
Female	26	19	45
Male	24	31	55

End points

End points reporting groups	
Reporting group title	Group 1
Reporting group description:	
IPV-vaccinated children to receive 1 dose of SABIN mOPV2	
Reporting group title	Group 2
Reporting group description:	
IPV-vaccinated children to receive 2 doses of SABIN mOPV2, administered 28 days apart .	

Primary: SAEs and Severe AEs	
End point title	SAEs and Severe AEs
End point description:	
Incidence of SAEs and severe AEs grade 3 considered consistent with a causal association to study vaccine throughout the study period in children 1 to 5 years.	
End point type	Primary
End point timeframe:	
3 months	

End point values	Group 1	Group 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	50	47		
Units: Number of participants	0	0		

Statistical analyses

Statistical analysis title	Baseline safety
Comparison groups	Group 1 v Group 2
Number of subjects included in analysis	97
Analysis specification	Pre-specified
Analysis type	other
P-value	< 0.05
Method	Clopper-Pearson

Primary: Seroprotection Rate of Type 2 Polio Neutralizing Antibodies	
End point title	Seroprotection Rate of Type 2 Polio Neutralizing Antibodies
End point description:	
Seroprotection rate at type 2 polio neutralizing antibodies measured at D28 after the first dose of mOPV2.	
End point type	Primary

End point timeframe:

1 month

End point values	Group 1	Group 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	50	47		
Units: Number of participants	50	47		

Statistical analyses

Statistical analysis title	Baseline immunogenicity seroprotection rate
Comparison groups	Group 1 v Group 2
Number of subjects included in analysis	97
Analysis specification	Pre-specified
Analysis type	other
P-value	< 0.025
Method	Clopper-Pearson

Secondary: Seroprotection Rate for Type 2 Polio Neutralizing Antibodies

End point title	Seroprotection Rate for Type 2 Polio Neutralizing Antibodies

End point description:

Seroprotection rate for type 2 polio neutralizing antibodies measured at D 28 after the second dose of mOPV2.

End point type	Secondary

End point timeframe:

3 months

End point values	Group 1	Group 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	50	47		
Units: Number of participants	50	47		

Statistical analyses

Statistical analysis title	Baseline immunogenicity seroprotection rate
Comparison groups	Group 2 v Group 1

Number of subjects included in analysis	97
Analysis specification	Pre-specified
Analysis type	other
P-value	< 0.025
Method	Clopper-Pearson

Secondary: Incidence of Any Serious Adverse Events (SAEs), Any Solicited AEs, Any Unsolicited AEs, and Any Important Medical Events (IMEs).

End point title	Incidence of Any Serious Adverse Events (SAEs), Any Solicited AEs, Any Unsolicited AEs, and Any Important Medical Events (IMEs).

End point description:

Incidence, severity and relationship) of any serious adverse events (SAEs), any solicited AEs, any unsolicited AEs, and any Important Medical Events (IMEs) with the exception of severe related AEs. (primary objective), as well as any laboratory deviations of one or two doses of SABIN mOPV2 in healthy IPV-vaccinated children aged 1 to 5 years.

End point type	Secondary

End point timeframe:

3 months

End point values	Group 1	Group 2		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	50	47		
Units: Number of participants	6	12		

Statistical analyses

Statistical analysis title	Baseline safety
Comparison groups	Group 1 v Group 2
Number of subjects included in analysis	97
Analysis specification	Pre-specified
Analysis type	other
P-value	< 0.05
Method	Clopper-Pearson

Adverse events

Adverse events information	
Timeframe for reporting adverse events: 3 months	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	10.0
Reporting groups	
Reporting group title	Group 1
Reporting group description: IPV-vaccinated children receiving 1 dose of SABIN mOPV2.	
Reporting group title	Group 2
Reporting group description: IPV-vaccinated children receiving 2 doses of SABIN mOPV2	

Serious adverse events	Group 1	Group 2	
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	
Respiratory, thoracic and mediastinal disorders			
Bronchitis			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

Frequency threshold for reporting non-serious adverse events: 2 %

Non-serious adverse events	Group 1	Group 2	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	6 / 50 (12.00%)	12 / 50 (24.00%)	
Investigations			
Platelet count increased			
subjects affected / exposed	0 / 50 (0.00%)	2 / 50 (4.00%)	
occurrences (all)	0	2	
General disorders and administration site conditions			

Abnormal crying			
subjects affected / exposed	1 / 50 (2.00%)	0 / 50 (0.00%)	
occurrences (all)	1	0	
Appetite lost			
subjects affected / exposed	1 / 50 (2.00%)	0 / 50 (0.00%)	
occurrences (all)	1	0	
Irritability			
subjects affected / exposed	1 / 50 (2.00%)	1 / 50 (2.00%)	
occurrences (all)	1	1	
Gastrointestinal disorders			
Vomiting			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences (all)	0	1	
Fever			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences (all)	0	1	
Respiratory, thoracic and mediastinal disorders			
Tonsillar hypertrophy			
subjects affected / exposed	0 / 50 (0.00%)	2 / 50 (4.00%)	
occurrences (all)	0	2	
Infections and infestations			
Bronchitis			
subjects affected / exposed	1 / 50 (2.00%)	2 / 50 (4.00%)	
occurrences (all)	1	3	
Conjuctivitis			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences (all)	0	1	
Gastroenteritis Norovirus			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences (all)	0	1	
Nasopharyngitis			
subjects affected / exposed	1 / 50 (2.00%)	1 / 50 (2.00%)	
occurrences (all)	1	1	
Pharyngitis			
subjects affected / exposed	0 / 50 (0.00%)	2 / 50 (4.00%)	
occurrences (all)	0	2	

Pharyngotonsillitis			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences (all)	0	1	
Respiratory tract infection			
subjects affected / exposed	1 / 50 (2.00%)	0 / 50 (0.00%)	
occurrences (all)	2	0	
Scarlet fever			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences (all)	0	1	
Sinusitis			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences (all)	0	1	
Upper respiratory tract infection			
subjects affected / exposed	1 / 50 (2.00%)	2 / 50 (4.00%)	
occurrences (all)	2	3	
Metabolism and nutrition disorders			
Dehydration			
subjects affected / exposed	0 / 50 (0.00%)	1 / 50 (2.00%)	
occurrences (all)	0	1	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
14 October 2015	Clarification of: • Primary and secondary objectives • Study endpoints • Clinical laboratory samples • TV and PP populations • IME reporting

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

Limitations of the trial such as small numbers of subjects analysed or technical problems leading to unreliable data.

None

Notes: