Clinical trial results:
Study of ChimeriVax™ Tetravalent Dengue Vaccine in Healthy Peruvian Children Aged 2 to 11 Years

Summary

EudraCT number	2014-001711-40
Trial protocol	Outside EU/EEA
Global end of trial date	16 August 2010

Results information

Result version number	v1 (current)
This version publication date	08 February 2016
First version publication date	02 August 2015

Trial information

Trial identification

Sponsor protocol code	CYD24

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT00788151
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	Sanofi Pasteur SA
Sponsor organisation address	2, avenue Pont Pasteur, Lyon Cedex 07, France, 69367
Public contact	Director, Clinical Development, Sanofi Pasteur SA, 33 04 37 65 60 60, eric.plennevaux@sanofipasteur.com
Scientific contact	Director, Clinical Development, Sanofi Pasteur SA, 33 04 37 65 60 60, eric.plennevaux@sanofipasteur.com

Notes:

Paediatric regulatory details

Is trial part of an agreed paediatric investigation plan (PIP)	Yes
EMA paediatric investigation plan number(s)	EMEA-001201-PIP01-11
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	28 January 2011
Is this the analysis of the primary completion data?	No

Global end of trial reached?	Yes
Global end of trial date	16 August 2010
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

Humoral immune response to dengue before and after each vaccination with dengue vaccine in children previously vaccinated with yellow fever (YF) vaccine
Safety and reactogenicity
Viremia after the first and second vaccinations in a subset

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	26 September 2008
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	Peru: 300
Worldwide total number of subjects	300
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)	300
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 26 September 2008 to 16 August 2010 at 1 clinical site in Peru.

Pre-assignment

Screening details:

A total of 300 subjects who met all of the inclusion criteria and none of the exclusion criteria were enrolled and randomized; however, only 298 subjects received at least one vaccination.

Period 1

Period 1 title	Overall trial (overall period)
Is this the baseline period?	Yes
Allocation method	Randomised - controlled
Blinding used	Double blind
Roles blinded	Subject, Investigator, Monitor, Assessor

Blinding implementation details:

The observer-blind design was implemented. The person who performed vaccinations knew which product was administered while neither the subject nor the Investigator in charge of safety evaluation knew which product was injected. To maintain the blind and minimize any potential bias, the control group used the same route and schedule as the study vaccine.

Arms

Are arms mutually exclusive?	Yes
Arm title	Dengue vaccine group

Arm description:

Subjects received 3 injections of the CYD Dengue vaccine, 1 injection each at 0, 6, and 12 months.

Arm type	Experimental
Investigational medicinal product name	CYD Dengue vaccine
Investigational medicinal product code	323
Other name	
Pharmaceutical forms	Powder and solvent for suspension for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

0.5 mL, subcutaneous, 3 injections. One each at 0, 6, and 12 months.

Arm title	Control group

Arm description:

Subjects received a placebo as first and second injections at 0 and 6 months, respectively, and pneumococcal polysaccharide vaccine (Pneumo23) as third injection at 12 months.

Arm type	Placebo
Investigational medicinal product name	Placebo (NaCl containing human serum albumin)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection
Routes of administration	Subcutaneous use

Dosage and administration details:

0.5 mL, subcutaneous, 1 injection each as first and second vaccinations at 0 and 6 months.

Investigational medicinal product name	Pneumo23 (pneumococcal polysaccharide vaccine)
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Solution for injection in pre-filled syringe
Routes of administration	Subcutaneous use

Dosage and administration details:

0.5 mL, subcutaneous, 1 injection as third vaccination at 12 months.

Number of subjects in period 1[1]	Dengue vaccine group	Control group
Started	199	99
Completed	186	90
Not completed	13	9
Consent withdrawn by subject	13	6
Adverse event, non-fatal	-	2
Protocol deviation	-	1

Notes:

[1] - The number of subjects reported to be in the baseline period are not the same as the worldwide number enrolled in the trial. It is expected that these numbers will be the same.

Justification: The number reported in the baseline period were based on the total number of subjects who received the first vaccine. Two subjects (1 in each group) did not receive any vaccine.

Baseline characteristics

Reporting groups	
Reporting group title	Dengue vaccine group
Reporting group description:	
Subjects received 3 injections of the CYD Dengue vaccine, 1 injection each at 0, 6, and 12 months.	
Reporting group title	Control group
Reporting group description:	
Subjects received a placebo as first and second injections at 0 and 6 months, respectively, and pneumococcal polysaccharide vaccine (Pneumo23) as third injection at 12 months.	

Reporting group values	Dengue vaccine group	Control group	Total
Number of subjects	199	99	298
Age categorical Units: Subjects			
In utero	0	0	0
Preterm newborn infants (gestational age < 37 wks)	0	0	0
Newborns (0-27 days)	0	0	0
Infants and toddlers (28 days-23 months)	0	0	0
Children (2-11 years)	199	99	298
Adolescents (12-17 years)	0	0	0
Adults (18-64 years)	0	0	0
From 65-84 years	0	0	0
85 years and over	0	0	0
Age continuous Units: years			
arithmetic mean	6.4	6.4	
standard deviation	± 2.8	± 2.9	-
Gender categorical Units: Subjects			
Female	98	53	151
Male	101	46	147
Study subgroups by age			
Study subjects were also categorized into 2 children subgroups based on their age.			
Units: Subjects			
2 to 5 years	100	50	150
6 to 11 years	99	49	148

End points

End points reporting groups

Reporting group title	Dengue vaccine group
Reporting group description:	
Subjects received 3 injections of the CYD Dengue vaccine, 1 injection each at 0, 6, and 12 months.	
Reporting group title	Control group
Reporting group description:	
Subjects received a placebo as first and second injections at 0 and 6 months, respectively, and pneumococcal polysaccharide vaccine (Pneumo23) as third injection at 12 months.	

Primary: Percentage of All Subjects Reporting Solicited Injection-site and Systemic Reactions Following Each Injection with CYD Dengue Tetravalent Vaccine

End point title	Percentage of All Subjects Reporting Solicited Injection-site and Systemic Reactions Following Each Injection with CYD Dengue Tetravalent Vaccine[1]
End point description:	
Solicited injection site reactions: Pain, Erythema, and Swelling. Solicited systemic reactions: Fever, Headache, Malaise, Myalgia, and Asthenia. Grade 3 Solicited injection site reactions: Pain, Incapacitating, unable to perform usual activities; Erythema and Swelling, ≥5 cm. Grade 3 Solicited systemic reactions: Fever, >39°C; Headache, Malaise, Myalgia, and Asthenia, Prevents daily activities.	
End point type	Primary
End point timeframe:	
Day 0 up to Day 14 post-each 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 groups and the study vaccine administered for this outcome.

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Percentage of subjects				
number (not applicable)				
Inj. site Pain; Post-Inj. 1 (All ages)	20.6	17.2		
Grade 3 Inj. site Pain; Post-Inj. 1 (All ages)	0	0		
Inj. site Erythema; Post-Inj. 1 (All ages)	7.5	4		
Grade 3 Inj. site Erythema; Post-Inj. 1 (All ages)	0	0		
Inj. site Swelling; Post-Inj. 1 (All ages)	5.5	5.1		
Grade 3 Inj. site Swelling; Post-Inj. 1 (All ages)	0	0		
Inj. site Pain; Post-Inj. 2 (All ages)	19.7	17.4		
Grade 3 Inj. site Pain; Post-Inj. 2 (All ages)	0	1.1		
Inj. site Erythema; Post-Inj. 2 (All ages)	4.3	1.1		
Grade 3 Inj. site Erythema; Post-Inj. 2 (All ages)	0	0		
Inj. site Swelling; Post-Inj. 2 (All ages)	2.1	0		

Grade 3 Inj. site Swelling; Post-Inj. 2 (All ages)	0	0		
Inj. site Pain; Post-Inj. 3 (All ages)	17.7	32.2		
Grade 3 Inj. site Pain; Post-Inj. 3 (All ages)	0.5	2.2		
Inj. site Erythema; Post-Inj. 3 (All ages)	4.3	11.1		
Grade 3 Inj. site Erythema; Post-Inj. 3 (All ages)	0	3.3		
Inj. site Swelling; Post-Inj. 3 (All ages)	3.2	8.9		
Grade 3 Inj. site Swelling; Post-Inj. 3 (All ages)	0	3.3		
Fever; Post-Inj. 1 (All ages)	31.3	10.1		
Grade 3 Fever; Post-Inj. 1 (All ages)	3.5	0		
Headache; Post-Inj. 1 (All ages)	35.7	16.2		
Grade 3 Headache; Post-Inj. 1 (All ages)	0.5	0		
Malaise; Post-Inj. 1 (All ages)	33.7	23.2		
Grade 3 Malaise; Post-Inj. 1 (All ages)	0.5	0		
Myalgia; Post-Inj. 1 (All ages)	19.1	13.1		
Grade 3 Myalgia; Post-Inj. 1 (All ages)	0	0		
Asthenia; Post-Inj. 1 (All ages)	13.6	13.1		
Grade 3 Asthenia; Post-Inj. 1 (All ages)	0.5	0		
Fever; Post-Inj. 2 (All ages)	19.7	16.3		
Grade 3 Fever; Post-Inj. 2 (All ages)	0.5	0		
Headache; Post-Inj. 2 (All ages)	22.3	19.6		
Grade 3 Headache; Post-Inj. 2 (All ages)	0.5	1.1		
Malaise; Post-Inj. 2 (All ages)	18.1	16.3		
Grade 3 Malaise; Post-Inj. 2 (All ages)	0.5	2.2		
Myalgia; Post-Inj. 2 (All ages)	14.9	10.9		
Grade 3 Myalgia; Post-Inj. 2 (All ages)	1.1	0		
Asthenia; Post-Inj. 2 (All ages)	11.2	7.6		
Grade 3 Asthenia; Post-Inj. 2 (All ages)	0.5	1.1		
Fever; Post-Inj. 3 (All ages)	18.4	22.5		
Grade 3 Fever; Post-Inj. 3 (All ages)	0	3.4		
Headache; Post-Inj. 3 (All ages)	18.8	27.8		
Grade 3 Headache; Post-Inj. 3 (All ages)	0	3.3		
Malaise; Post-Inj. 3 (All ages)	16.7	23.3		
Grade 3 Malaise; Post-Inj. 3 (All ages)	0	2.2		
Myalgia; Post-Inj. 3 (All ages)	13.4	26.7		
Grade 3 Myalgia; Post-Inj. 3 (All ages)	0	2.2		
Asthenia; Post-Inj. 3 (All ages)	10.2	16.7		
Grade 3 Asthenia; Post-Inj. 3 (All ages)	0	1.1		

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects Aged 2 to 5 Years Reporting Solicited Injection-site and Systemic Reactions Following Each Injection with CYD Dengue Tetravalent Vaccine

End point title	Percentage of Subjects Aged 2 to 5 Years Reporting Solicited Injection-site and Systemic Reactions Following Each Injection with CYD Dengue Tetravalent Vaccine[2]

End point description:

Solicited injection site reactions: Pain, Erythema, and Swelling. Solicited systemic reactions: Fever, Headache, Malaise, Myalgia, and Asthenia. Grade 3 Solicited injection site reactions: Pain, Incapacitating, unable to perform usual activities; Erythema and Swelling, ≥5 cm. Grade 3 Solicited systemic reactions: Fever, >39°C; Headache, Malaise, Myalgia, and Asthenia, Prevents daily activities.

End point type	Primary

End point timeframe:

Day 0 up to Day 14 post-each 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 groups and the study vaccine administered for this outcome.

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	100	50		
Units: Percentage of subjects				
number (not applicable)				
Inj. site Pain; Post-Inj. 1 (2-5 years)	19	16		
Grade 3 Inj. site Pain; Post-Inj. 1 (2-5 years)	0	0		
Inj. site Erythema; Post-Inj. 1 (2-5 years)	11	6		
Grade 3 Inj. site Erythema;Post-Inj. 1 (2-5 years)	0	0		
Inj. site Swelling; Post-Inj. 1 (2-5 years)	6	8		
Grade 3 Inj. site Swelling;Post-Inj. 1 (2-5 years)	0	0		
Inj. site Pain; Post-Inj. 2 (2-5 years)	17.4	15.6		
Grade 3 Inj. site Pain; Post-Inj. 2 (2-5 years)	0	2.2		
Inj. site Erythema; Post-Inj. 2 (2-5 years)	4.3	0		
Grade 3 Inj. site Erythema;Post-Inj. 2 (2-5 years)	0	0		
Inj. site Swelling; Post-Inj. 2 (2-5 years)	2.2	0		
Grade 3 Inj. site Swelling;Post-Inj. 2 (2-5 years)	0	0		
Inj. site Pain; Post-Inj. 3 (2-5 years)	14.4	23.3		
Grade 3 Inj. site Pain; Post-Inj. 3 (2-5 years)	0	4.7		
Inj. site Erythema; Post-Inj. 3 (2-5 years)	3.3	9.3		
Grade 3 Inj. site Erythema;Post-Inj. 3 (2-5 years)	0	2.3		
Inj. site Swelling; Post-Inj. 3 (2-5 years)	3.3	7		
Grade 3 Inj. site Swelling;Post-Inj. 3 (2-5 years)	0	2.3		
Fever; Post-Inj. 1 (2-5 years)	36.4	16		
Grade 3 Fever; Post-Inj. 1 (2-5 years)	4	0		
Headache; Post-Inj. 1 (2-5 years)	23	8		

Grade 3 Headache; Post-Inj. 1 (2-5 years)	1	0		
Malaise; Post-Inj. 1 (2-5 years)	33	26		
Grade 3 Malaise; Post-Inj. 1 (2-5 years)	1	0		
Myalgia; Post-Inj. 1 (2-5 years)	12	10		
Grade 3 Myalgia; Post-Inj. 1 (2-5 years)	0	0		
Asthenia; Post-Inj. 1 (2-5 years)	13	12		
Grade 3 Asthenia; Post-Inj. 1 (2-5 years)	1	0		
Fever; Post-Inj. 2 (2-5 years)	23.9	17.8		
Grade 3 Fever; Post-Inj. 2 (2-5 years)	0	0		
Headache; Post-Inj. 2 (2-5 years)	14.1	6.7		
Grade 3 Headache; Post-Inj. 2 (2-5 years)	0	0		
Malaise; Post-Inj. 2 (2-5 years)	15.2	13.3		
Grade 3 Malaise; Post-Inj. 2 (2-5 years)	1.1	2.2		
Myalgia; Post-Inj. 2 (2-5 years)	9.8	6.7		
Grade 3 Myalgia; Post-Inj. 2 (2-5 years)	1.1	0		
Asthenia; Post-Inj. 2 (2-5 years)	9.8	8.9		
Grade 3 Asthenia; Post-Inj. 2 (2-5 years)	1.1	2.2		
Fever; Post-Inj. 3 (2-5 years)	16.9	26.2		
Grade 3 Fever; Post-Inj. 3 (2-5 years)	0	7.1		
Headache; Post-Inj. 3 (2-5 years)	6.7	18.6		
Grade 3 Headache; Post-Inj. 3 (2-5 years)	0	2.3		
Malaise; Post-Inj. 3 (2-5 years)	6.7	23.3		
Grade 3 Malaise; Post-Inj. 3 (2-5 years)	0	2.3		
Myalgia; Post-Inj. 3 (2-5 years)	6.7	20.9		
Grade 3 Myalgia; Post-Inj. 3 (2-5 years)	0	2.3		
Asthenia; Post-Inj. 3 (2-5 years)	4.4	23.3		
Grade 3 Asthenia; Post-Inj. 3 (2-5 years)	0	2.3		

Statistical analyses

No statistical analyses for this end point

Primary: Percentage of Subjects Aged 6 to 11 Years Reporting Solicited Injection-site and Systemic Reactions Following Each Injection with CYD Dengue Tetravalent Vaccine

End point title	Percentage of Subjects Aged 6 to 11 Years Reporting Solicited Injection-site and Systemic Reactions Following Each Injection with CYD Dengue Tetravalent Vaccine[3]

End point description:

Solicited injection site reactions: Pain, Erythema, and Swelling. Solicited systemic reactions: Fever, Headache, Malaise, Myalgia, and Asthenia. Grade 3 Solicited injection site reactions: Pain, Incapacitating, unable to perform usual activities; Erythema and Swelling, ≥5 cm. Grade 3 Solicited systemic reactions: Fever, >39°C; Headache, Malaise, Myalgia, and Asthenia, Prevents daily activities.

End point type	Primary

End point timeframe:

Day 0 up to Day 14 post-each vaccination

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: Descriptive analyses were performed based on the study groups and the study vaccine administered for this outcome.

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	99	49		
Units: Percentage of subjects				
number (not applicable)				
Inj. site Pain; Post-Inj. 1 (6-11 years)	22.2	18.4		
Gr 3 Inj. site Pain; Post-Inj. 1 (6-11 years)	0	0		
Inj. site Erythema; Post-Inj. 1 (6-11 years)	4	2		
Gr 3 Inj. site Erythema; Post-Inj. 1 (6-11 years)	0	0		
Inj. site Swelling; Post-Inj. 1 (6-11 years)	5.1	2		
Gr 3 Inj. site Swelling; Post-Inj. 1 (6-11 years)	0	0		
Inj. site Pain; Post-Inj. 2 (6-11 years)	21.9	19.1		
Gr 3 Inj. site Pain; Post-Inj. 2 (6-11 years)	0	0		
Inj. site Erythema; Post-Inj. 2 (6-11 years)	4.2	2.1		
Gr 3 Inj. site Erythema; Post-Inj. 2 (6-11 years)	0	0		
Inj. site Swelling; Post-Inj. 2 (6-11 years)	2.1	0		
Gr 3 Inj. site Swelling; Post-Inj. 2 (6-11 years)	0	0		
Inj. site Pain; Post-Inj. 3 (6-11 years)	20.8	40.4		
Gr 3 Inj. site Pain; Post-Inj. 3 (6-11 years)	1	0		
Inj. site Erythema; Post-Inj. 3 (6-11 years)	5.2	12.8		
Gr 3 Inj. site Erythema; Post-Inj. 3 (6-11 years)	0	4.3		
Inj. site Swelling; Post-Inj. 3 (6-11 years)	3.1	10.6		
Gr 3 Inj. site Swelling; Post-Inj. 3 (6-11 years)	0	4.3		
Fever; Post-Inj. 1 (6-11 years)	26.3	4.1		
Gr 3 Fever; Post-Inj. 1 (6-11 years)	3	0		
Headache; Post-Inj. 1 (6-11 years)	48.5	24.5		
Gr 3 Headache; Post-Inj. 1 (6-11 years)	0	0		
Malaise; Post-Inj. 1 (6-11 years)	34.3	20.4		
Gr 3 Malaise; Post-Inj. 1 (6-11 years)	0	0		
Myalgia; Post-Inj. 1 (6-11 years)	26.3	16.3		
Gr 3 Myalgia; Post-Inj. 1 (6-11 years)	0	0		
Asthenia; Post-Inj. 1 (6-11 years)	14.1	14.3		
Gr 3 Asthenia; Post-Inj. 1 (6-11 years)	0	0		
Fever; Post-Inj. 2 (6-11 years)	15.6	14.9		
Gr 3 Fever; Post-Inj. 2 (6-11 years)	1	0		
Headache; Post-Inj. 2 (6-11 years)	30.2	31.9		

Gr 3 Headache; Post-Inj. 2 (6-11 years)	1	2.1		
Malaise; Post-Inj. 2 (6-11 years)	20.8	19.1		
Gr 3 Malaise; Post-Inj. 2 (6-11 years)	0	2.1		
Myalgia; Post-Inj. 2 (6-11 years)	19.8	14.9		
Gr 3 Myalgia; Post-Inj. 2 (6-11 years)	1	0		
Asthenia; Post-Inj. 2 (6-11 years)	12.5	6.4		
Gr 3 Asthenia; Post-Inj. 2 (6-11 years)	0	0		
Fever; Post-Inj. 3 (6-11 years)	19.8	19.1		
Gr 3 Fever; Post-Inj. 3 (6-11 years)	0	0		
Headache; Post-Inj. 3 (6-11 years)	30.2	36.2		
Gr 3 Headache; Post-Inj. 3 (6-11 years)	0	4.3		
Malaise; Post-Inj. 3 (6-11 years)	26	23.4		
Gr 3 Malaise; Post-Inj. 3 (6-11 years)	0	2.1		
Myalgia; Post-Inj. 3 (6-11 years)	19.8	31.9		
Gr 3 Myalgia; Post-Inj. 3 (6-11 years)	0	2.1		
Asthenia; Post-Inj. 3 (6-11 years)	15.6	10.6		
Gr 3 Asthenia; Post-Inj. 3 (6-11 years)	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of All Subjects Seropositive for Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point title	Percentage of All Subjects Seropositive for Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity for the dengue virus serotypes was assessed by the microneutralization assay. Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1, 2, and 3 and post-dose 1, 2, and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Percentage of subjects				
number (not applicable)				
Dengue parental serotype 1; Pre-dose 1	29.6	38.4		
Dengue parental serotype 1; Post-dose 1	55.4	37.9		
Dengue parental serotype 1; Pre-dose 2	42.3	39.1		
Dengue parental serotype 1; Post-dose 2	98.4	39.1		
Dengue parental serotype 1; Pre-dose 3	74.7	41.8		
Dengue parental serotype 1; Post-dose 3	98.4	46.1		

Dengue parental serotype 2; Pre-dose 1	17.1	21.2		
Dengue parental serotype 2; Post-dose 1	40.4	21.1		
Dengue parental serotype 2; Pre-dose 2	32.8	20.4		
Dengue parental serotype 2; Post-dose 2	68.1	16.3		
Dengue parental serotype 2; Pre-dose 3	35.5	20.9		
Dengue parental serotype 2; Post-dose 3	79	20.2		
Dengue parental serotype 3; Pre-dose 1	30.7	38.4		
Dengue parental serotype 3; Post-dose 1	68.4	38.9		
Dengue parental serotype 3; Pre-dose 2	51.9	39.8		
Dengue parental serotype 3; Post-dose 2	100	40.2		
Dengue parental serotype 3; Pre-dose 3	72.6	39.6		
Dengue parental serotype 3; Post-dose 3	98.9	43.8		
Dengue parental serotype 4; Pre-dose 1	14.1	18.2		
Dengue parental serotype 4; Post-dose 1	74.1	18.9		
Dengue parental serotype 4; Pre-dose 2	57.7	20.4		
Dengue parental serotype 4; Post-dose 2	97.9	19.6		
Dengue parental serotype 4; Pre-dose 3	82.8	18.7		
Dengue parental serotype 4; Post-dose 3	98.9	23.6		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Aged 2 to 5 years Seropositive for Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point title	Percentage of Subjects Aged 2 to 5 years Seropositive for Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity for the dengue virus serotypes was assessed by the microneutralization assay. Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1, 2, and 3 and post-dose 1, 2, and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	100	50		
Units: Percentage of subjects				
number (not applicable)				
Dengue parental serotype 1; Pre-dose 1	30	32		

Dengue parental serotype 1; Post-dose 1	54.7	33.3		
Dengue parental serotype 1; Pre-dose 2	38.7	31.1		
Dengue parental serotype 1; Post-dose 2	97.8	31.1		
Dengue parental serotype 1; Pre-dose 3	72.2	36.4		
Dengue parental serotype 1; Post-dose 3	98.9	44.2		
Dengue parental serotype 2; Pre-dose 1	14	16		
Dengue parental serotype 2; Post-dose 1	32.6	16.7		
Dengue parental serotype 2; Pre-dose 2	29	15.2		
Dengue parental serotype 2; Post-dose 2	64.1	11.1		
Dengue parental serotype 2; Pre-dose 3	28.9	18.2		
Dengue parental serotype 2; Post-dose 3	77.8	20.9		
Dengue parental serotype 3; Pre-dose 1	28	32		
Dengue parental serotype 3; Post-dose 1	62.1	35.4		
Dengue parental serotype 3; Pre-dose 2	45.2	32.6		
Dengue parental serotype 3; Post-dose 2	100	33.3		
Dengue parental serotype 3; Pre-dose 3	70	34.1		
Dengue parental serotype 3; Post-dose 3	100	39.5		
Dengue parental serotype 4; Pre-dose 1	13	18		
Dengue parental serotype 4; Post-dose 1	74.7	22.9		
Dengue parental serotype 4; Pre-dose 2	60.2	17.4		
Dengue parental serotype 4; Post-dose 2	100	20		
Dengue parental serotype 4; Pre-dose 3	87.8	22.7		
Dengue parental serotype 4; Post-dose 3	100	27.9		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Aged 6 to 11 Years Seropositive for Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point title	Percentage of Subjects Aged 6 to 11 Years Seropositive for Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity for the dengue virus serotypes was assessed by the microneutralization assay. Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1, 2, and 3 and post-dose 1, 2, and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	99	49		
Units: Percentage of subjects				
number (not applicable)				
Dengue parental serotype 1; Pre-dose 1	29.3	44.9		
Dengue parental serotype 1; Post-dose 1	56.1	42.6		
Dengue parental serotype 1; Pre-dose 2	45.8	46.8		
Dengue parental serotype 1; Post-dose 2	99	46.8		
Dengue parental serotype 1; Pre-dose 3	77.1	46.8		
Dengue parental serotype 1; Post-dose 3	97.9	47.8		
Dengue parental serotype 2; Pre-dose 1	20.2	26.5		
Dengue parental serotype 2; Post-dose 1	48	25.5		
Dengue parental serotype 2; Pre-dose 2	36.5	25.5		
Dengue parental serotype 2; Post-dose 2	71.9	21.3		
Dengue parental serotype 2; Pre-dose 3	41.7	23.4		
Dengue parental serotype 2; Post-dose 3	80.2	19.6		
Dengue parental serotype 3; Pre-dose 1	33.3	44.9		
Dengue parental serotype 3; Post-dose 1	74.5	42.6		
Dengue parental serotype 3; Pre-dose 2	58.3	46.8		
Dengue parental serotype 3; Post-dose 2	100	46.8		
Dengue parental serotype 3; Pre-dose 3	75	44.7		
Dengue parental serotype 3; Post-dose 3	97.9	47.8		
Dengue parental serotype 4; Pre-dose 1	15.2	18.4		
Dengue parental serotype 4; Post-dose 1	73.5	14.9		
Dengue parental serotype 4; Pre-dose 2	55.2	23.4		
Dengue parental serotype 4; Post-dose 2	95.8	19.1		
Dengue parental serotype 4; Pre-dose 3	78.1	14.9		
Dengue parental serotype 4; Post-dose 3	97.9	19.6		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of All Subjects Seropositive for Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point title	Percentage of All Subjects Seropositive for Dengue Virus

	Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity against the dengue virus serotypes was assessed by the plaque reduction neutralization test (PRNT). Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1 and post-dose 2 and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Percentage of subjects				
number (not applicable)				
Dengue parental serotype 1; Pre-dose 1	30.6	36.4		
Dengue parental serotype 1; Post-dose 2	94.7	39.1		
Dengue parental serotype 1; Post-dose 3	96.2	48.3		
Dengue parental serotype 2; Pre-dose 1	31.5	41.4		
Dengue parental serotype 2; Post-dose 2	97.9	43.5		
Dengue parental serotype 2; Post-dose 3	98.4	47.2		
Dengue parental serotype 3; Pre-dose 1	35	46.5		
Dengue parental serotype 3; Post-dose 2	98.9	51.1		
Dengue parental serotype 3; Post-dose 3	98.4	67.4		
Dengue parental serotype 4; Pre-dose 1	19.3	22.2		
Dengue parental serotype 4; Post-dose 2	98.4	35.9		
Dengue parental serotype 4; Post-dose 3	98.9	48.3		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Aged 2 to 5 years Seropositive for Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point title	Percentage of Subjects Aged 2 to 5 years Seropositive for Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity against the dengue virus serotypes was assessed by the plaque reduction neutralization test (PRNT). Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1 and post-dose 2 and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	100	50		
Units: Percentage of subjects				
number (not applicable)				
Dengue parental serotype 1; Pre-dose 1	30.3	30		
Dengue parental serotype 1; Post-dose 2	96.7	31.1		
Dengue parental serotype 1; Post-dose 3	97.8	41.9		
Dengue parental serotype 2; Pre-dose 1	30.3	38		
Dengue parental serotype 2; Post-dose 2	96.7	37.8		
Dengue parental serotype 2; Post-dose 3	100	44.2		
Dengue parental serotype 3; Pre-dose 1	35.4	38		
Dengue parental serotype 3; Post-dose 2	98.9	53.3		
Dengue parental serotype 3; Post-dose 3	98.9	65.1		
Dengue parental serotype 4; Pre-dose 1	16.2	22		
Dengue parental serotype 4; Post-dose 2	97.8	35.6		
Dengue parental serotype 4; Post-dose 3	100	46.5		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Aged 6 to 11 Years Seropositive for Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point title	Percentage of Subjects Aged 6 to 11 Years Seropositive for Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity against the dengue virus serotypes was assessed by the plaque reduction neutralization test (PRNT). Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1 and post-dose 2 and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	99	49		
Units: Percentage of subjects				
number (not applicable)				
Dengue parental serotype 1; Pre-dose 1	30.9	42.9		
Dengue parental serotype 1; Post-dose 2	92.6	46.8		
Dengue parental serotype 1; Post-dose 3	94.8	54.3		
Dengue parental serotype 2; Pre-dose 1	32.7	44.9		
Dengue parental serotype 2; Post-dose 2	98.9	48.9		
Dengue parental serotype 2; Post-dose 3	96.9	50		
Dengue parental serotype 3; Pre-dose 1	34.7	55.1		
Dengue parental serotype 3; Post-dose 2	98.9	48.9		
Dengue parental serotype 3; Post-dose 3	97.9	69.6		
Dengue parental serotype 4; Pre-dose 1	22.4	22.4		
Dengue parental serotype 4; Post-dose 2	98.9	36.2		
Dengue parental serotype 4; Post-dose 3	97.9	50		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of All Subjects Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point title	Percentage of All Subjects Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity for the dengue virus serotypes was assessed by the microneutralization assay. Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1, 2, and 3 and post-dose 1, 2, and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Percentage of subjects				
number (not applicable)				
At least 1 positive serotype; Pre-dose 1	32.2	40.4		

At least 1 positive serotype; Post-dose 1	80.8	40		
At least 1 positive serotype; Pre-dose 2	69.8	40.9		
At least 1 positive serotype; Post-dose 2	100	42.4		
At least 1 positive serotype; Pre-dose 3	88.7	42.9		
At least 1 positive serotype; Post-dose 3	98.9	48.3		
At least 2 positive serotypes; Pre-dose 1	29.1	38.4		
At least 2 positive serotypes; Post-dose 1	66.8	38.9		
At least 2 positive serotypes; Pre-dose 2	49.2	39.8		
At least 2 positive serotypes; Post-dose 2	100	40.2		
At least 2 positive serotypes; Pre-dose 3	75.3	39.6		
At least 2 positive serotypes; Post-dose 3	98.9	43.8		
At least 3 positive serotypes; Pre-dose 1	19.6	24.2		
At least 3 positive serotypes; Post-dose 1	52.8	25.3		
At least 3 positive serotypes; Pre-dose 2	38.1	22.6		
At least 3 positive serotypes; Post-dose 2	98.4	21.7		
At least 3 positive serotypes; Pre-dose 3	67.7	25.3		
At least 3 positive serotypes; Post-dose 3	98.4	25.8		
All 4 positive serotypes; Pre-dose 1	10.6	13.1		
All 4 positive serotypes; Post-dose 1	37.8	12.6		
All 4 positive serotypes; Pre-dose 2	27.5	16.1		
All 4 positive serotypes; Post-dose 2	66	10.9		
All 4 positive serotypes; Pre-dose 3	33.9	13.2		
All 4 positive serotypes; Post-dose 3	79	15.7		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Aged 2 to 5 years Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point title	Percentage of Subjects Aged 2 to 5 years Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity for the dengue virus serotypes was assessed by the microneutralization assay. Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1, 2, and 3 and post-dose 1, 2, and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	100	50		
Units: Percentage of subjects				
number (not applicable)				
At least 1 positive serotype; Pre-dose 1	31	34		
At least 1 positive serotype; Post-dose 1	78.9	35.4		
At least 1 positive serotype; Pre-dose 2	67.7	32.6		
At least 1 positive serotype; Post-dose 2	100	33.3		
At least 1 positive serotype; Pre-dose 3	90	36.4		
At least 1 positive serotype; Post-dose 3	100	44.2		
At least 2 positive serotypes; Pre-dose 1	28	32		
At least 2 positive serotypes; Post-dose 1	65.3	35.4		
At least 2 positive serotypes; Pre-dose 2	46.2	32.6		
At least 2 positive serotypes; Post-dose 2	100	33.3		
At least 2 positive serotypes; Pre-dose 3	75.6	34.1		
At least 2 positive serotypes; Post-dose 3	100	39.5		
At least 3 positive serotypes; Pre-dose 1	17	24		
At least 3 positive serotypes; Post-dose 1	48.4	27.1		
At least 3 positive serotypes; Pre-dose 2	33.3	19.6		
At least 3 positive serotypes; Post-dose 2	98.9	20		
At least 3 positive serotypes; Pre-dose 3	65.6	27.3		
At least 3 positive serotypes; Post-dose 3	98.9	30.2		
All 4 positive serotypes; Pre-dose 1	9	8		
All 4 positive serotypes; Post-dose 1	31.6	10.4		
All 4 positive serotypes; Pre-dose 2	25.8	10.9		
All 4 positive serotypes; Post-dose 2	63	8.9		
All 4 positive serotypes; Pre-dose 3	27.8	13.6		
All 4 positive serotypes; Post-dose 3	77.8	18.6		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Aged 6 to 11 Years Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point title	Percentage of Subjects Aged 6 to 11 Years Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Each Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity for the dengue virus serotypes was assessed by the microneutralization assay. Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1, 2, and 3 and post-dose 1, 2, and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	99	49		
Units: Percentage of subjects				
number (not applicable)				
At least 1 positive serotype; Pre-dose 1	33.3	46.9		
At least 1 positive serotype; Post-dose 1	82.7	44.7		
At least 1 positive serotype; Pre-dose 2	71.9	48.9		
At least 1 positive serotype; Post-dose 2	100	51.1		
At least 1 positive serotype; Pre-dose 3	87.5	48.9		
At least 1 positive serotype; Post-dose 3	97.9	52.2		
At least 2 positive serotypes; Pre-dose 1	30.3	44.9		
At least 2 positive serotypes; Post-dose 1	68.4	42.6		
At least 2 positive serotypes; Pre-dose 2	52.1	46.8		
At least 2 positive serotypes; Post-dose 2	100	46.8		
At least 2 positive serotypes; Pre-dose 3	75	44.7		
At least 2 positive serotypes; Post-dose 3	97.9	47.8		
At least 3 positive serotypes; Pre-dose 1	22.2	24.5		
At least 3 positive serotypes; Post-dose 1	57.1	23.4		
At least 3 positive serotypes; Pre-dose 2	42.7	25.5		
At least 3 positive serotypes; Post-dose 2	97.9	23.4		
At least 3 positive serotypes; Pre-dose 3	69.8	23.4		
At least 3 positive serotypes; Post-dose 3	97.9	21.7		
All 4 positive serotypes; Pre-dose 1	12.1	18.4		
All 4 positive serotypes; Post-dose 1	43.9	14.9		
All 4 positive serotypes; Pre-dose 2	29.2	21.3		
All 4 positive serotypes; Post-dose 2	68.8	12.8		
All 4 positive serotypes; Pre-dose 3	39.6	12.8		
All 4 positive serotypes; Post-dose 3	80.2	13		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of All Subjects Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point title	Percentage of All Subjects Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity against the dengue virus serotypes was assessed by the plaque reduction neutralization

test (PRNT). Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1 and post-dose 2 and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Percentage of subjects				
number (not applicable)				
At least 1 positive serotype; Pre-dose 1	37.6	48.5		
At least 1 positive serotype; Post-dose 2	100	57.6		
At least 1 positive serotype; Post-dose 3	99.5	73		
At least 2 positive serotypes; Pre-dose 1	31.5	41.4		
At least 2 positive serotypes; Post-dose 2	99.5	41.3		
At least 2 positive serotypes; Post-dose 3	99.5	52.8		
At least 3 positive serotypes; Pre-dose 1	29.9	37.4		
At least 3 positive serotypes; Post-dose 2	98.4	41.3		
At least 3 positive serotypes; Post-dose 3	98.4	46.1		
All 4 positive serotypes; Pre-dose 1	17.3	19.2		
All 4 positive serotypes; Post-dose 2	90.9	29.3		
All 4 positive serotypes; Post-dose 3	94.1	39.3		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Aged 2 to 5 years Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point title	Percentage of Subjects Aged 2 to 5 years Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity against the dengue virus serotypes was assessed by the plaque reduction neutralization test (PRNT). Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1 and post-dose 2 and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	100	50		
Units: Percentage of subjects				
number (not applicable)				
At least 1 positive serotype; Pre-dose 1	39.4	42		
At least 1 positive serotype; Post-dose 2	100	64.4		
At least 1 positive serotype; Post-dose 3	100	74.4		
At least 2 positive serotypes; Pre-dose 1	30.3	36		
At least 2 positive serotypes; Post-dose 2	100	33.3		
At least 2 positive serotypes; Post-dose 3	100	44.2		
At least 3 positive serotypes; Pre-dose 1	28.3	34		
At least 3 positive serotypes; Post-dose 2	97.8	33.3		
At least 3 positive serotypes; Post-dose 3	100	41.9		
All 4 positive serotypes; Pre-dose 1	14.1	16		
All 4 positive serotypes; Post-dose 2	90.2	26.7		
All 4 positive serotypes; Post-dose 3	96.7	37.2		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Aged 6 to 11 Years Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point title	Percentage of Subjects Aged 6 to 11 Years Seropositive for At Least One, Two, Three or Four Dengue Virus Serotypes Before and After Vaccination With CYD Dengue Vaccine

End point description:

Seropositivity against the dengue virus serotypes was assessed by the plaque reduction neutralization test (PRNT). Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre-dose 1 and post-dose 2 and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	99	49		
Units: Percentage of subjects				
number (not applicable)				
At least 1 positive serotype; Pre-dose 1	35.7	55.1		
At least 1 positive serotype; Post-dose 2	100	51.1		
At least 1 positive serotype; Post-dose 3	99	71.7		
At least 2 positive serotypes; Pre-dose 1	32.7	46.9		

At least 2 positive serotypes; Post-dose 2	98.9	48.9		
At least 2 positive serotypes; Post-dose 3	99	60.9		
At least 3 positive serotypes; Pre-dose 1	31.6	40.8		
At least 3 positive serotypes; Post-dose 2	98.9	48.9		
At least 3 positive serotypes; Post-dose 3	96.9	50		
All 4 positive serotypes; Pre-dose 1	20.4	22.4		
All 4 positive serotypes; Post-dose 2	91.6	31.9		
All 4 positive serotypes; Post-dose 3	91.7	41.3		

Statistical analyses

No statistical analyses for this end point

Secondary: Geometric Mean Titers (GMTs) of Antibodies Against Each Serotype with the Parental Dengue Virus Strain in Dengue-immune Subjects Before and After Injection with CYD Dengue Vaccine

End point title	Geometric Mean Titers (GMTs) of Antibodies Against Each Serotype with the Parental Dengue Virus Strain in Dengue-immune Subjects Before and After Injection with CYD Dengue Vaccine

End point description:

Geometric mean titers of antibodies against parental dengue virus serotypes were assessed by the plaque reduction neutralization test (PRNT).

End point type	Secondary

End point timeframe:

Pre-dose 1 and post-dose 2 and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Titers (1/dil)				
geometric mean (confidence interval 95%)				
Dengue parental serotype 1; Pre-dose 1, All	17.4 (13 to 23.2)	22.8 (14.9 to 34.8)		
Dengue parental serotype 1; Post-dose 2, All	125 (98.5 to 159)	26.4 (16.7 to 41.8)		
Dengue parental serotype 1; Post-dose 3, All	179 (143 to 224)	38.1 (23.4 to 62.1)		
Dengue parental serotype 2; Pre-dose 1, All	14.4 (11.2 to 18.3)	18.2 (12.8 to 25.8)		
Dengue parental serotype 2; Post-dose 2, All	151 (128 to 178)	17.3 (12.5 to 23.9)		
Dengue parental serotype 2; Post-dose 3, All	178 (152 to 207)	21.6 (14.8 to 31.5)		
Dengue parental serotype 3; Pre-dose 1, All	16.4 (12.7 to 21.2)	21.8 (15.2 to 31.3)		

Dengue parental serotype 3; Post-dose 2, All	155 (129 to 186)	26.6 (18.1 to 39)		
Dengue parental serotype 3; Post-dose 3, All	190 (162 to 224)	36.2 (25.1 to 52)		
Dengue parental serotype 4; Pre-dose 1, All	8.12 (6.91 to 9.54)	8.94 (6.97 to 11.5)		
Dengue parental serotype 4; Post-dose 2, All	144 (126 to 166)	12.8 (9.5 to 17.2)		
Dengue parental serotype 4; Post-dose 3, All	184 (159 to 212)	16.7 (12.2 to 22.8)		
Dengue parental serotype 1; Pre-dose 1, 2-5 years	16.4 (11.1 to 24.3)	16.2 (9.47 to 27.5)		
Dengue parental serotype 1; Post-dose 2, 2-5 years	135 (97.2 to 187)	19 (10.1 to 35.7)		
Dengue parental serotype 1; Post-dose 3, 2-5 years	205 (149 to 282)	31.3 (14.9 to 65.9)		
Dengue parental serotype 2; Pre-dose 1, 2-5 years	11.8 (8.94 to 15.6)	13.9 (9.31 to 20.6)		
Dengue parental serotype 2; Post-dose 2, 2-5 years	135 (109 to 168)	13.2 (8.8 to 19.9)		
Dengue parental serotype 2; Post-dose 3, 2-5 years	195 (163 to 234)	21.8 (12.1 to 39.2)		
Dengue parental serotype 3; Pre-dose 1, 2-5 years	16.2 (11.2 to 23.4)	16.7 (10.2 to 27.4)		
Dengue parental serotype 3; Post-dose 2, 2-5 years	171 (131 to 224)	26.5 (15.4 to 45.7)		
Dengue parental serotype 3; Post-dose 3, 2-5 years	214 (169 to 270)	35 (20.3 to 60.6)		
Dengue parental serotype 4; Pre-dose 1, 2-5 years	7.76 (6.2 to 9.7)	9.02 (6.27 to 13)		
Dengue parental serotype 4; Post-dose 2, 2-5 years	165 (134 to 203)	14.4 (8.83 to 23.6)		
Dengue parental serotype 4; Post-dose 3, 2-5 years	223 (181 to 276)	18.7 (11.2 to 31.4)		
Dengue parental serotype 1; Pre-dose 1, 6-11 years	18.4 (12 to 28.4)	32.3 (16.6 to 63.1)		
Dengue parental serotype 1;Post-dose 2, 6-11 years	116 (81.7 to 165)	36.2 (18.5 to 71)		
Dengue parental serotype 1;Post-dose 3, 6-11 years	157 (115 to 216)	45.8 (23.6 to 88.8)		
Dengue parental serotype 2; Pre-dose 1, 6-11 years	17.5 (11.6 to 26.3)	24 (13.4 to 43.1)		
Dengue parental serotype 2;Post-dose 2, 6-11 years	168 (130 to 216)	22.3 (13.4 to 37)		
Dengue parental serotype 2;Post-dose 3, 6-11 years	163 (127 to 208)	21.4 (12.9 to 35.6)		
Dengue parental serotype 3; Pre-dose 1, 6-11 years	16.6 (11.5 to 24)	28.6 (16.7 to 48.7)		
Dengue parental serotype 3;Post-dose 2, 6-11 years	141 (109 to 182)	26.6 (15.1 to 46.8)		
Dengue parental serotype 3;Post-dose 3, 6-11 years	171 (137 to 213)	37.3 (22.5 to 61.6)		
Dengue parental serotype 4; Pre-dose 1, 6-11 years	8.5 (6.72 to 10.8)	8.87 (6.21 to 12.6)		
Dengue parental serotype 4;Post-dose 2, 6-11 years	127 (106 to 153)	11.4 (7.96 to 16.3)		
Dengue parental serotype 4;Post-dose 3, 6-11 years	152 (126 to 184)	15 (10.2 to 22)		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of Subjects Seropositive for Yellow Fever Antibodies Before and Following First Injection with CYD Dengue Vaccine

End point title	Percentage of Subjects Seropositive for Yellow Fever Antibodies Before and Following First Injection with CYD Dengue Vaccine

End point description:

Seropositivity for yellow fever was assessed by the plaque reduction neutralization test (PRNT). Seropositivity was defined as a titer ≥10 1/dil.

End point type	Secondary

End point timeframe:

Pre- and post-dose 1

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Percentage of subjects				
number (not applicable)				
Pre-dose 1; All subjects	81.4	83.8		
Post-dose 1; All subjects	86.5	83.2		
Pre-dose 1; 2-5 years	68	74		
Post-dose 1; 2-5 years	76.6	72.9		
Pre-dose 1; 6-11 years	94.9	93.9		
Post-dose 1; 6-11 years	95.9	93.6		

Statistical analyses

No statistical analyses for this end point

Secondary: Geometric Mean Titers (GMTs) of Antibodies Against Yellow Fever Virus Before and Following First Injection with CYD Dengue Vaccine

End point title	Geometric Mean Titers (GMTs) of Antibodies Against Yellow Fever Virus Before and Following First Injection with CYD Dengue Vaccine

End point description:

Geometric mean titers of antibodies against yellow fever virus were assessed by the plaque reduction neutralization test (PRNT).

End point type	Secondary

End point timeframe:

Pre- and post-dose 1

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Titers (1/dil)				
geometric mean (confidence interval 95%)				
Pre-dose 1; All subjects	32.3 (26.5 to 39.4)	36 (27.1 to 47.7)		
Post-dose 1; All subjects	43.7 (36.1 to 52.8)	36 (27.3 to 47.3)		
Pre-dose 1; 2-5 years	15.9 (12.3 to 20.6)	20.5 (13.7 to 30.7)		
Post-dose 1; 2-5 years	22.4 (17.5 to 28.7)	21.2 (14.4 to 31.1)		
Pre-dose 1; 6-11 years	66.1 (52.8 to 82.9)	63.9 (45.8 to 89.2)		
Post-dose 1; 6-11 years	82.9 (66.2 to 104)	61.8 (44 to 86.7)		

Statistical analyses

No statistical analyses for this end point

Secondary: Geometric Mean Titers (GMTs) of Antibodies Against Each Serotype with the Parental Dengue Virus Strain Before and Following Injection with CYD Dengue Vaccine

End point title	Geometric Mean Titers (GMTs) of Antibodies Against Each Serotype with the Parental Dengue Virus Strain Before and Following Injection with CYD Dengue Vaccine

End point description:

Geometric mean titers of antibodies against parental dengue virus serotypes were assessed by the microneutralization assay.

End point type	Secondary

End point timeframe:

Pre-dose 1, 2, and 3 and post-dose 1, 2, and 3

End point values	Dengue vaccine group	Control group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	199	99		
Units: Titers (1/dil)				
geometric mean (confidence interval 95%)				
Dengue parental serotype 1; Pre-dose 1, All	18.8 (13.8 to 25.6)	23.9 (15.5 to 36.9)		
Dengue parental serotype 1; Post-dose 1, All	43.1 (30 to 61.9)	22.8 (14.8 to 35.1)		
Dengue parental serotype 1; Pre-dose 2, All	29.2 (20.5 to 41.7)	26 (16.2 to 41.5)		
Dengue parental serotype 1; Post-dose 2, All	214 (171 to 266)	26.1 (16.3 to 42)		

Dengue parental serotype 1; Pre-dose 3, All	64.1 (46.1 to 89.2)	28.9 (17.7 to 47.3)		
Dengue parental serotype 1; Post-dose 3, All	254 (203 to 318)	35.3 (21.2 to 58.7)		
Dengue parental serotype 2; Pre-dose 1, All	7.55 (6.5 to 8.78)	7.76 (6.31 to 9.53)		
Dengue parental serotype 2; Post-dose 1, All	15.5 (12.4 to 19.4)	7.51 (6.19 to 9.12)		
Dengue parental serotype 2; Pre-dose 2, All	11.6 (9.52 to 14.1)	7.32 (6.06 to 8.84)		
Dengue parental serotype 2; Post-dose 2, All	21.4 (17.6 to 25.9)	6.99 (5.82 to 8.39)		
Dengue parental serotype 2; Pre-dose 3, All	11.4 (9.39 to 13.8)	7.26 (6.01 to 8.78)		
Dengue parental serotype 2; Post-dose 3, All	22.3 (18.9 to 26.4)	7.73 (6.24 to 9.58)		
Dengue parental serotype 3; Pre-dose 1, All	13.1 (10.3 to 16.5)	16.3 (11.6 to 22.8)		
Dengue parental serotype 3; Post-dose 1, All	41.4 (30.9 to 55.4)	15.3 (11 to 21.3)		
Dengue parental serotype 3; Pre-dose 2, All	22.6 (17.3 to 29.5)	15.4 (11.2 to 21.2)		
Dengue parental serotype 3; Post-dose 2, All	128 (108 to 150)	15.5 (11.2 to 21.5)		
Dengue parental serotype 3; Pre-dose 3, All	31 (24.3 to 39.6)	14 (10.3 to 19)		
Dengue parental serotype 3; Post-dose 3, All	99.2 (84.8 to 116)	16 (11.5 to 22.2)		
Dengue parental serotype 4; Pre-dose 1, All	7.52 (6.37 to 8.87)	8.08 (6.39 to 10.2)		
Dengue parental serotype 4; Post-dose 1, All	87.9 (65.4 to 118)	7.84 (6.25 to 9.83)		
Dengue parental serotype 4; Pre-dose 2, All	21.3 (16.9 to 26.8)	7.73 (6.27 to 9.53)		
Dengue parental serotype 4; Post-dose 2, All	158 (134 to 186)	7.81 (6.27 to 9.74)		
Dengue parental serotype 4; Pre-dose 3, All	39.2 (31.7 to 48.5)	7.49 (6.06 to 9.26)		
Dengue parental serotype 4; Post-dose 3, All	147 (126 to 172)	8.54 (6.71 to 10.9)		
Dengue parental serotype 1; Pre-dose 1, 2-5 years	20.3 (12.9 to 32)	18.6 (10.4 to 33.4)		
Dengue parental serotype 1; Post-dose 1, 2-5 years	44.8 (25.9 to 77.3)	19.6 (10.6 to 36.1)		
Dengue parental serotype 1; Pre-dose 2, 2-5 years	31.3 (18.1 to 53.9)	19.7 (10.1 to 38.2)		
Dengue parental serotype 1; Post-dose 2, 2-5 years	281 (204 to 386)	20.9 (10.5 to 41.7)		
Dengue parental serotype 1; Pre-dose 3, 2-5 years	65.2 (39.6 to 107)	22.1 (11 to 44.5)		
Dengue parental serotype 1; Post-dose 3, 2-5 years	315 (228 to 436)	35.9 (16.4 to 78.6)		
Dengue parental serotype 2; Pre-dose 1, 2-5 years	6.66 (5.63 to 7.88)	6.48 (5.3 to 7.92)		
Dengue parental serotype 2; Post-dose 1, 2-5 years	12.7 (9.35 to 17.3)	6.73 (5.39 to 8.41)		
Dengue parental serotype 2; Pre-dose 2, 2-5 years	10.1 (7.85 to 12.9)	6.28 (5.19 to 7.61)		
Dengue parental serotype 2; Post-dose 2, 2-5 years	17.1 (13.4 to 21.8)	6.13 (5.06 to 7.44)		
Dengue parental serotype 2; Pre-dose 3, 2-5 years	9.03 (7.17 to 11.4)	6.68 (5.37 to 8.32)		

Dengue parental serotype 2; Post-dose 3, 2-5 years	19.7 (15.9 to 24.5)	7.93 (5.76 to 10.9)		
Dengue parental serotype 3; Pre-dose 1, 2-5 years	11.8 (8.54 to 16.4)	12.2 (8 to 18.7)		
Dengue parental serotype 3; Post-dose 1, 2-5 years	37.4 (23.9 to 58.3)	12.9 (8.39 to 20)		
Dengue parental serotype 3; Pre-dose 2, 2-5 years	19.8 (13.4 to 29.4)	12.3 (7.92 to 19)		
Dengue parental serotype 3; Post-dose 2, 2-5 years	129 (104 to 160)	12.6 (8.01 to 19.7)		
Dengue parental serotype 3; Pre-dose 3, 2-5 years	26.7 (18.7 to 38.2)	12.2 (7.85 to 19.1)		
Dengue parental serotype 3; Post-dose 3, 2-5 years	108 (86.9 to 135)	15.3 (9.29 to 25.2)		
Dengue parental serotype 4; Pre-dose 1, 2-5 years	7.04 (5.67 to 8.74)	7.74 (5.6 to 10.7)		
Dengue parental serotype 4; Post-dose 1, 2-5 years	114 (74 to 176)	8.43 (5.97 to 11.9)		
Dengue parental serotype 4; Pre-dose 2, 2-5 years	22.3 (16 to 31)	7.64 (5.53 to 10.6)		
Dengue parental serotype 4; Post-dose 2, 2-5 years	200 (166 to 240)	8.22 (5.76 to 11.7)		
Dengue parental serotype 4; Pre-dose 3, 2-5 years	39.4 (29.5 to 52.8)	7.97 (5.69 to 11.2)		
Dengue parental serotype 4; Post-dose 3, 2-5 years	176 (143 to 217)	9.37 (6.35 to 13.8)		
Dengue parental serotype 1; Pre-dose 1, 6-11 years	17.4 (11.4 to 26.6)	31 (16.1 to 59.6)		
Dengue parental serotype 1;Post-dose 1, 6-11 years	41.5 (25.5 to 67.5)	26.7 (14.2 to 50)		
Dengue parental serotype 1; Pre-dose 2, 6-11 years	27.4 (17.2 to 43.6)	33.9 (17.2 to 66.9)		
Dengue parental serotype 1;Post-dose 2, 6-11 years	165 (122 to 222)	32.4 (16.6 to 63.2)		
Dengue parental serotype 1; Pre-dose 3, 6-11 years	63.2 (40.5 to 98.7)	37.2 (18.4 to 75.4)		
Dengue parental serotype 1;Post-dose 3, 6-11 years	207 (152 to 283)	34.7 (17.4 to 69.1)		
Dengue parental serotype 2; Pre-dose 1, 6-11 years	8.57 (6.67 to 11)	9.32 (6.48 to 13.4)		
Dengue parental serotype 2;Post-dose 1, 6-11 years	18.8 (13.5 to 26.2)	8.4 (6.07 to 11.6)		
Dengue parental serotype 2; Pre-dose 2, 6-11 years	13.3 (9.8 to 18)	8.5 (6.14 to 11.8)		
Dengue parental serotype 2;Post-dose 2, 6-11 years	26.5 (19.7 to 35.7)	7.92 (5.82 to 10.8)		
Dengue parental serotype 2; Pre-dose 3, 6-11 years	14.1 (10.5 to 19)	7.85 (5.75 to 10.7)		
Dengue parental serotype 2;Post-dose 3, 6-11 years	25 (19.4 to 32.3)	7.55 (5.59 to 10.2)		
Dengue parental serotype 3; Pre-dose 1, 6-11 years	14.4 (10.3 to 20.2)	21.8 (12.8 to 37.1)		
Dengue parental serotype 3;Post-dose 1, 6-11 years	45.6 (31 to 67.1)	18.3 (11 to 30.4)		
Dengue parental serotype 3; Pre-dose 2, 6-11 years	25.6 (17.8 to 37)	19.2 (11.9 to 31.1)		
Dengue parental serotype 3;Post-dose 2, 6-11 years	126 (98.6 to 162)	19.1 (11.8 to 30.8)		
Dengue parental serotype 3; Pre-dose 3, 6-11 years	35.6 (25.3 to 50)	15.8 (10.2 to 24.6)		
Dengue parental serotype 3;Post-dose 3, 6-11 years	91.3 (73 to 114)	16.7 (10.7 to 26)		

Dengue parental serotype 4; Pre-dose 1, 6-11 years	8.03 (6.23 to 10.3)	8.43 (5.94 to 12)		
Dengue parental serotype 4;Post-dose 1, 6-11 years	68.2 (45.6 to 102)	7.28 (5.36 to 9.88)		
Dengue parental serotype 4; Pre-dose 2, 6-11 years	20.3 (14.6 to 28.1)	7.82 (5.9 to 10.3)		
Dengue parental serotype 4;Post-dose 2, 6-11 years	126 (96.3 to 164)	7.44 (5.63 to 9.83)		
Dengue parental serotype 4; Pre-dose 3, 6-11 years	39 (28.6 to 53.2)	7.06 (5.37 to 9.29)		
Dengue parental serotype 4;Post-dose 3, 6-11 years	125 (98.9 to 157)	7.82 (5.79 to 10.6)		

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 (post-vaccination) up to 14 days post-vaccination 3.

Assessment type	Non-systematic

Dictionary used

Dictionary name	MedDRA
Dictionary version	11.0

Reporting groups

Reporting group title	Dengue vaccine group

Reporting group description:

Subjects received 3 injections of the CYD Dengue vaccine, 1 injection each at 0, 6, and 12 months.

Reporting group title	Control group

Reporting group description:

Subjects received a placebo as first and second injections at 0 and 6 months, respectively, and pneumococcal polysaccharide vaccine (Pneumo23) as third injection at 12 months.

Serious adverse events	Dengue vaccine group	Control group	
Total subjects affected by serious adverse events			
subjects affected / exposed	2 / 199 (1.01%)	4 / 99 (4.04%)	
number of deaths (all causes)	0	0	
number of deaths resulting from adverse events	0	0	
Gastrointestinal disorders			
Food poisoning			
subjects affected / exposed	0 / 199 (0.00%)	1 / 99 (1.01%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Inguinal hernia			
subjects affected / exposed	0 / 199 (0.00%)	1 / 99 (1.01%)	
occurrences causally related to treatment / all	0 / 0	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Skin and subcutaneous tissue disorders			
Vascular purpura			
subjects affected / exposed	1 / 199 (0.50%)	0 / 99 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Musculoskeletal and connective tissue disorders			

Epiphyseal disorder			
subjects affected / exposed	1 / 199 (0.50%)	0 / 99 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			
Gastrointestinal infection			
subjects affected / exposed	0 / 199 (0.00%)	1 / 99 (1.01%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pneumonia			
subjects affected / exposed	0 / 199 (0.00%)	1 / 99 (1.01%)	
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: 5 %

Non-serious adverse events	Dengue vaccine group	Control group	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	71 / 199 (35.68%)	29 / 99 (29.29%)	
General disorders and administration site conditions			
Injection site Pain; Post-injection 1, All subjects			
alternative assessment type: Systematic			
subjects affected / exposed	41 / 199 (20.60%)	17 / 99 (17.17%)	
occurrences (all)	41	17	
Injection site Erythema; Post-injection 1, All subjects			
alternative assessment type: Systematic			
subjects affected / exposed	15 / 199 (7.54%)	4 / 99 (4.04%)	
occurrences (all)	15	4	
Injection site Swelling; Post-injection 1, All subjects			
alternative assessment type: Systematic			
subjects affected / exposed	11 / 199 (5.53%)	5 / 99 (5.05%)	
occurrences (all)	11	5	
Injection site Pain; Post-injection 2, All subjects			

alternative assessment type: Systematic			
subjects affected / exposed[1]	37 / 188 (19.68%)	16 / 92 (17.39%)	
occurrences (all)	37	16	
Injection site Pain; Post-injection 3, All subjects			
alternative assessment type: Systematic			
subjects affected / exposed[2]	33 / 186 (17.74%)	29 / 90 (32.22%)	
occurrences (all)	33	29	
Injection site Erythema; Post-injection 3, All subjects			
alternative assessment type: Systematic			
subjects affected / exposed[3]	8 / 186 (4.30%)	10 / 90 (11.11%)	
occurrences (all)	8	10	
Injection site Swelling; Post-injection 3, All subjects			
alternative assessment type: Systematic			
subjects affected / exposed[4]	6 / 186 (3.23%)	8 / 90 (8.89%)	
occurrences (all)	6	8	

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: This was a solicited adverse event recorded in a diary card within 7 days after the second injection; the total number (N) reflects those subjects for which the diary cards were returned and for which data were available for the event during the period.

[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: This was a solicited adverse event recorded in a diary card within 7 days after the third injection; the total number (N) reflects those subjects for which the diary cards were returned and for which data were available for the event during the period.

[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: This was a solicited adverse event recorded in a diary card within 7 days after the third injection; the total number (N) reflects those subjects for which the diary cards were returned and for which data were available for the event during the period.

[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: This was a solicited adverse event recorded in a diary card within 7 days after the third injection; the total number (N) reflects those subjects for which the diary cards were returned and for which data were available for the event during the period.

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
29 May 2008	Used serum pregnancy tests instead of urinary pregnancy tests; intensity scales were changed from mild, moderate, and severe to Grade 1, Grade 2, and Grade 3; clarified that the Ministry of Health was also to receive any serious adverse events (SAE) reports; exclusion criterion was added to specify that subjects were not to be previously vaccinated with pneumococcal polysaccharide vaccine; clarified that priority was given to assessing safety over the diagnosis of dengue; SAE reporting section was updated and clarified the use of electronic SAE reporting forms; and avoided the use of the trade name in the ChimeriVax™ in the document.
13 May 2009	Specified the exact name of the study site and provided the Investigator with assessment guidelines for biological abnormalities; specified that the visit could be conducted in 2 days within the time window specified; clarified that the last contact with the subject/subject's parents could be face-to-face; replaced dengue plaque assay with reverse transcriptase-polymerase chain reaction to detect dengue vaccine viremia and/or wild type dengue infection; clarified the procedures of unused product; testing priority was defined as suspected dengue cases detected within 28 days after vaccination and those detected after more than 28 days after vaccination; clarified that yellow fever serology would be assessed by PRNT; clarified that another adult could complete the subject's diary card when parents/legally acceptable representative were not available; and the Guidelines for Assessing Viscerotropic and Neurotropic Adverse Events were updated and provided as a protocol appendix.
09 October 2009	Additional phone call/home visit was implemented 8 to 15 days after the third vaccination; clarified that 2 consecutive febrile episodes were considered separate episodes if the symptom-free interval between the end of the first febrile episode and the onset of the new episode was >14 days; and clarified the time frame to set up the planned phone call/home visit at 3 months after the third vaccination.
08 June 2010	Informed subject and parents/guardians of the vaccine the subject received and about the trial results at the end of the trial; specified that dengue neutralizing antibodies were assessed by both microneutralization assay and complementary testing using PRNT; stated that dengue non-structural protein 1 antigen enzyme-linked immunosorbent assay was to be performed for virological diagnosis of dengue cases; clarified the procedures for checking and collecting memory aid; specified the lower limit of quantitation of the yellow fever serology assay; clarified rules for inclusion/exclusion of subjects by dose from the Per Protocol Analysis Set; and specified that reporting of SAEs and dengue cases data were ongoing and could not be locked before the interim analysis.

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

None reported

Online references

http://www.ncbi.nlm.nih.gov/pubmed/22863660