



Clinical trial results:

A phase III, randomized, observer-blind, placebo controlled, multicenter clinical trial to assess Herpes Zoster recurrence and the reactogenicity, safety and immunogenicity of GSK Biologicals' Herpes Zoster vaccine (HZ/su) when administered intramuscularly on a 0 and 2 month schedule to adults 50 years of age with a prior episode of Herpes Zoster

Summary

EudraCT number	2016-000744-34
Trial protocol	FI ES GB
Global end of trial date	15 February 2024

Results information

Result version number	v1
This version publication date	03 March 2025
First version publication date	03 March 2025

Trial information

Trial identification

Sponsor protocol code	204939
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Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT04091451
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	GlaxoSmithKline
Sponsor organisation address	Rue de l'Institut 89, Rixensart, Belgium, B-1330
Public contact	GSK Response Center, GlaxoSmithKline, 44 8664357343, GSKClinicalSupportHD@gsk.com
Scientific contact	GSK Response Center, GlaxoSmithKline, 44 8664357343, GSKClinicalSupportHD@gsk.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?	No

Notes:

Results analysis stage

Analysis stage	Final
Date of interim/final analysis	15 July 2024
Is this the analysis of the primary completion data?	No
Global end of trial reached?	Yes
Global end of trial date	15 February 2024
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

•To compare the incidence of HZ recurrence in the HZ/su group to the placebo group. A formal non-inferiority analysis with non-inferiority margin of 5 was performed. Criterion: The objective was to be met if the upper limit (UL) of the 95% CI of the ratio of the incidence of HZ recurrence (HZ/su versus placebo) was below (<) 5.

Protection of trial subjects:

Vaccine administration was to be preceded by a review of the participants' medical history (especially with regard to previous vaccination and possible occurrence of undesirable events) and a medical history driven clinical examination. Following the administration of the vaccine, participants were observed for at least 30 minutes with appropriate medical treatment and supervision readily available in case of an anaphylactic reaction. Blood samples were obtained by a trained professional and medical assistance was available.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	17 September 2019
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	Estonia: 199
Country: Number of subjects enrolled	Finland: 246
Country: Number of subjects enrolled	Hong Kong: 39
Country: Number of subjects enrolled	Mexico: 77
Country: Number of subjects enrolled	Panama: 17
Country: Number of subjects enrolled	Russian Federation: 149
Country: Number of subjects enrolled	Spain: 472
Country: Number of subjects enrolled	United Kingdom: 231
Worldwide total number of subjects	1430
EEA total number of subjects	917

Notes:

Subjects enrolled per age group

In utero	0
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Preterm newborn - gestational age < 37 wk	0
Newborns (0-27 days)	0
Infants and toddlers (28 days-23 months)	0
Children (2-11 years)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	812
From 65 to 84 years	596
85 years and over	22

Subject disposition

Recruitment

Recruitment details:

The study was conducted at 46 centers in 8 countries (Estonia, Finland, Hong Kong, Mexico, Panama, Russian Federation, Spain and United Kingdom).

Pre-assignment

Screening details:

A total of 1430 participants were enrolled into the study, of which 1426 participants received at least 1 dose of study treatment/vaccine (HZ/su or placebo) and were included in the Exposed Set.

Period 1

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

Blinding implementation details:

The study was conducted in an observer-blind manner.

Arms

Are arms mutually exclusive?	Yes
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Arm title	HZ/su Group
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Arm description:

Participants with a prior episode of HZ randomized to the HZ/su group were scheduled to receive 2 doses of HZ/su vaccine, one at Day 1 and one at Month 2.

Arm type	Experimental
Investigational medicinal product name	Herpes Zoster subunit (HZ/su) vaccine
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder and suspension for suspension for injection
Routes of administration	Intramuscular use

Dosage and administration details:

2 doses of HZ/su vaccine were administered intramuscularly according to a 0,2 months vaccination schedule, at Day 1 and Month 2.

Arm title	Placebo Group
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Arm description:

Participants with a prior episode of HZ randomized to the Placebo group were scheduled to receive 2 doses of placebo, one at Day 1 and one at Month 2.

Arm type	Placebo
Investigational medicinal product name	Placebo
Investigational medicinal product code	
Other name	
Pharmaceutical forms	Powder for solution for injection
Routes of administration	Intramuscular use

Dosage and administration details:

2 doses of Placebo were administered intramuscularly according to a 0,2 months vaccination schedule, at Day 1 and Month 2.

Number of subjects in period 1^[1]	HZ/su Group	Placebo Group
Started	714	712
Completed	646	640
Not completed	68	72
Migrated/moved from the study area	3	5
Suspected HZ episode	1	-
Consent withdrawn by subject	21	27
Adverse Event	15	10
Lost to follow-up	8	8
Non-emergency unblinding/Non-compliance	15	18
Protocol deviation	5	4

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: A total of 1430 participants were enrolled into the study, of which 1426 participants received at least 1 dose of study treatment/vaccine (HZ/su or placebo) and were included in the Exposed Set.

Baseline characteristics

Reporting groups

Reporting group title	HZ/su Group
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Reporting group description:

Participants with a prior episode of HZ randomized to the HZ/su group were scheduled to receive 2 doses of HZ/su vaccine, one at Day 1 and one at Month 2.

Reporting group title	Placebo Group
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Reporting group description:

Participants with a prior episode of HZ randomized to the Placebo group were scheduled to receive 2 doses of placebo, one at Day 1 and one at Month 2.

Reporting group values	HZ/su Group	Placebo Group	Total
Number of subjects	714	712	1426
Age categorical			
Units: Participants			
From 50-59 years	232	232	464
From 60-69 years	293	294	587
70 years and over	189	186	375
Age Continuous			
Units: Years			
arithmetic mean	64.2	64.1	
standard deviation	± 8.5	± 8.8	-
Sex: Female, Male			
Units: Participants			
Male	284	278	562
Female	430	434	864
Ethnicity (NIH/OMB)			
Units: Subjects			
Hispanic or Latino	80	77	157
Not Hispanic or Latino	634	635	1269
Unknown or Not Reported	0	0	0

End points

End points reporting groups

Reporting group title	HZ/su Group
Reporting group description:	
Participants with a prior episode of HZ randomized to the HZ/su group were scheduled to receive 2 doses of HZ/su vaccine, one at Day 1 and one at Month 2.	
Reporting group title	Placebo Group
Reporting group description:	
Participants with a prior episode of HZ randomized to the Placebo group were scheduled to receive 2 doses of placebo, one at Day 1 and one at Month 2.	

Primary: Incidence rate of confirmed Herpes Zoster (HZ) cases

End point title	Incidence rate of confirmed Herpes Zoster (HZ) cases
End point description:	
A suspected case of HZ is defined as a new unilateral rash accompanied by pain (broadly defined to include allodynia, pruritus or other sensations) and no alternative diagnosis. A suspected case of HZ was confirmed by an algorithm that included Polymerase Chain Reaction (PCR) and the HZ Ascertainment Committee (HZAC) determination. The incidence rate (n/T) of confirmed HZ cases, expressed in terms of 1000 person-years rate, was calculated as the number of participants reporting at least one confirmed HZ case (n) in a group, over the sum of follow-up period expressed in years (T) in the same group, and multiplied by 1000.	
The analysis was performed on the modified Exposed Set (mES), which excluded participants from the Exposed Set who were not administered 2 doses of the study treatment per protocol, or who developed a confirmed case of HZ prior to 30 days after the second vaccination.	
End point type	Primary
End point timeframe:	
From 30 days post-second vaccination (Month 3) until study end (duration of approximately 2 to 5 years depending on the enrolment date)	

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	668	682		
Units: Cases per 1000 person-years				
number (not applicable)	0.0	4.1		

Statistical analyses

Statistical analysis title	Statistical Analysis 1
Statistical analysis description:	
To demonstrate the non-inferiority of HZ/su vaccine compared to placebo in terms of incidence of HZ recurrence from 30 days post-second vaccination (Month 3) until study end (duration of approximately 2 to 5 years depending on the enrolment date).	
Comparison groups	HZ/su Group v Placebo Group

Number of subjects included in analysis	1350
Analysis specification	Pre-specified
Analysis type	non-inferiority ^[1]
Method	Poisson
Parameter estimate	Incidence Rate Ratio (IRR)
Point estimate	0
Confidence interval	
level	95 %
sides	2-sided
lower limit	0
upper limit	0.46

Notes:

[1] - The non-inferiority was to be demonstrated if the upper limit (UL) of the 95% confidence interval (CI) of the ratio of the incidence of HZ recurrence between HZ/su group and Placebo group was below (<) 5.

Secondary: Incidence rate of confirmed HZ cases

End point title	Incidence rate of confirmed HZ cases
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End point description:

A suspected case of HZ is defined as a new unilateral rash accompanied by pain (broadly defined to include allodynia, pruritus or other sensations) and no alternative diagnosis. A suspected case of HZ was confirmed by an algorithm that included PCR and the HZAC determination. The incidence rate (n/T) of confirmed HZ cases, expressed in terms of 1000 person-years rate, was calculated as the number of participants reporting at least one confirmed HZ case (n) in a group, over the sum of follow-up period expressed in years (T) in the same group, and multiplied by 1000. The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered.

End point type	Secondary
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End point timeframe:

From first vaccination (Day 1) until study end (duration of approximately 2 to 5 years depending on the enrolment date)

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	714	712		
Units: Cases per 1000 person-years				
number (not applicable)	0.0	3.6		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants with any and Grade 3 solicited administration site events

End point title	Number of participants with any and Grade 3 solicited administration site events
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End point description:

Assessed solicited administration site events included erythema, pain, pruritus and swelling at the injection site. Any = occurrence of the event regardless of intensity grade. Grade 3 pain = significant pain at rest, which prevented normal, everyday activities. Grade 3 erythema, swelling = erythema,

swelling with a surface diameter greater than (>) 100 millimeters (mm). Grade 3 pruritus = itchy sensation that prevented normal, everyday activities.

The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered and with the solicited administration site events diary card data available after the corresponding vaccination for the specified duration.

End point type	Secondary
End point timeframe:	
Within 7 days after each vaccination (occurring at Day 1 and Month 2)	

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	697	697		
Units: Participants				
Any Erythema, post-vacc. Day 1 (N=697;697)	164	5		
Grade 3 Erythema, post-vacc. Day 1 (N=697;697)	8	0		
Any Pain, post-vacc. Day 1, (N=697;697)	562	61		
Grade 3 Pain, post-vacc. Day 1 (N=697;697)	49	2		
Any Pruritus, post-vacc. Day 1 (N=697;697)	148	24		
Grade 3 Pruritus, post-vacc. Day 1 (N=697;697)	4	0		
Any Swelling, post-vacc. Day 1 (N=697;697)	91	1		
Grade 3 Swelling, post-vacc. Day 1 (N=697;697)	3	0		
Any Erythema, post-vacc. Month 2 (N=669;682)	164	0		
Grade 3 Erythema, post-vacc. Month 2 (N=669;682)	14	0		
Any Pain, post-vacc. Month 2 (N=669;682)	503	48		
Grade 3 Pain, post-vacc. Month 2 (N=669;682)	48	0		
Any Pruritus, post-vacc. Month 2 (N=669;682)	142	10		
Grade 3 Pruritus, post-vacc. Month 2 (N=669;682)	7	0		
Any Swelling, post-vacc. Month 2 (N=669;682)	82	1		
Grade 3 Swelling, post-vacc. Month 2 (N=669;682)	3	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Duration in days of solicited administration site events

End point title	Duration in days of solicited administration site events
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End point description:

Duration is the number of days in which a participant experienced the symptom within the 7-day solicited follow-up period. Assessed solicited administration site events included erythema, pain, pruritus and swelling at the injection site.

The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered, with solicited diary data available after the corresponding vaccination and who experienced the specified solicited administration site event within 7 days following the respective study treatment dose. Here, 'N' = participants with available data for each specified category. '99999' was entered as a placeholder value in those instances where the median and inter-quartile range (Q1-Q3) could not be calculated as there were 0 participants analyzed for that specific event.

End point type	Secondary
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End point timeframe:

Within 7 days after each vaccination (occurring at Day 1 and Month 2)

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	562	61		
Units: Days				
median (inter-quartile range (Q1-Q3))				
Erythema, post-vaccination at Day 1 (N=164;5)	3.0 (2.0 to 5.0)	3.0 (2.0 to 4.0)		
Pain, post-vaccination at Day 1 (N=562;61)	3.0 (2.0 to 4.0)	1.0 (1.0 to 2.0)		
Pruritus, post-vaccination at Day 1 (N=148;24)	2.0 (1.0 to 3.0)	1.0 (1.0 to 3.0)		
Swelling, post-vaccination at Day 1 (N=91;1)	3.0 (1.0 to 4.0)	2.0 (2.0 to 2.0)		
Erythema, post-vaccination at Month 2 (N=164;0)	3.0 (2.0 to 5.0)	99999 (99999 to 99999)		
Pain, post-vaccination at Month 2 (N=503;48)	3.0 (2.0 to 4.0)	1.0 (1.0 to 2.0)		
Pruritus, post-vaccination at Month 2 (N=142;10)	2.0 (1.0 to 3.0)	1.0 (1.0 to 2.0)		
Swelling, post-vaccination at Month 2 (N=82;1)	3.0 (2.0 to 4.0)	6.0 (6.0 to 6.0)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants with any, Grade 3 and related solicited systemic events

End point title	Number of participants with any, Grade 3 and related solicited systemic events
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End point description:

Assessed solicited systemic events included fatigue, fever (defined as axillary temperature greater than or equal to (\geq) 38.0°C/100.4°F), gastrointestinal symptoms (GS), headache, malaise, myalgia, and shivering. Any = occurrence of the event regardless of intensity grade or relation to the study vaccination. Grade 3 = event that prevented normal, everyday activities. Grade 3 fever = axillary temperature higher than ($>$) 39.0°C/102.2°F. Related = event assessed by the investigator as related to the study vaccination.

The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered and with the solicited systemic events diary card data available after

the corresponding vaccination for the specified duration.

End point type	Secondary
End point timeframe:	
Within 7 days after each vaccination (occurring at Day 1 and Month 2)	

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	698	697		
Units: Participants				
Any Fatigue, post-vacc. Day 1 (N=698;697)	329	146		
Grade 3 Fatigue, post-vacc. Day 1 (N=698;697)	42	10		
Related Fatigue, post-vacc. Day 1 (N=698;697)	292	105		
Any Fever, post-vacc. Day 1 (N=698;697)	26	4		
Grade 3 Fever, post-vacc. Day 1 (N=698;697)	1	0		
Related Fever, post-vacc. Day 1 (N=698;697)	26	4		
Any GS, post-vacc. Day 1 (N=698;697)	103	79		
Grade 3 GS, post-vacc. Day 1 (N=698;697)	8	4		
Related GS, post-vacc. Day 1 (N=698;697)	84	54		
Any Headache, post-vacc. Day 1 (N=698;697)	266	136		
Grade 3 Headache, post-vacc. Day 1 (N=698;697)	21	11		
Related Headache, post-vacc. Day 1 (N=698;697)	224	90		
Any Malaise, post-vacc. Day 1 (N=698;697)	260	70		
Grade 3 Malaise, post-vacc. Day 1 (N=698;697)	30	9		
Related Malaise, post-vacc. Day 1 (N=698;697)	231	52		
Any Myalgia, post-vacc. Day 1 (N=698;697)	262	65		
Grade 3 Myalgia, post-vacc. Day 1 (N=698;697)	17	8		
Related Myalgia, post-vacc. Day 1 (N=698;697)	240	45		
Any Shivering, post-vacc. Day 1 (N=698;697)	185	43		
Grade 3 Shivering, post-vacc. Day 1 (N=698;697)	16	0		
Related Shivering, post-vacc. Day 1 (N=698;697)	174	36		
Any Fatigue, post-vacc. Month 2 (N=671;680)	364	115		
Grade 3 Fatigue, post-vacc. Month 2 (N=671;680)	59	10		
Related Fatigue, post-vacc. Month 2 (N=671;680)	327	85		

Any Fever, post-vacc. Month 2 (N=671;680)	66	5		
Grade 3 Fever, post-vacc. Month 2 (N=671;680)	4	1		
Related Fever, post-vacc. Month 2 (N=671;680)	63	3		
Any GS, post-vacc. Month 2 (N=671;680)	118	54		
Grade 3 GS, post-vacc. Month 2 (N=671;680)	11	4		
Related GS, post-vacc. Month 2 (N=671;680)	102	37		
Any Headache, post-vacc. Month 2 (N=671;680)	290	113		
Grade 3 Headache, post-vacc. Month 2 (N=671;680)	30	6		
Related Headache, post-vacc. Month 2 (N=671;680)	256	73		
Any Malaise, post-vacc. Month 2 (N=671;680)	321	69		
Grade 3 Malaise, post-vacc. Month 2 (N=671;680)	45	7		
Related Malaise, post-vacc. Month 2 (N=671;680)	290	50		
Any Myalgia, post-vacc. Month 2 (N=671;680)	294	54		
Grade 3 Myalgia, post-vacc. Month 2 (N=671;680)	41	2		
Related Myalgia, post-vacc. Month 2 (N=671;680)	269	40		
Any Shivering, post-vacc. Month 2 (N=671;680)	253	32		
Grade 3 Shivering, post-vacc. Month 2 (N=671;680)	37	2		
Related Shivering, post-vacc. Month 2 (N=671;680)	234	28		

Statistical analyses

No statistical analyses for this end point

Secondary: Duration in days of solicited systemic events

End point title	Duration in days of solicited systemic events
End point description:	
Duration is the number of days in which a participant experienced the symptom within the 7-day solicited follow-up period. Assessed solicited systemic events included fatigue, fever (defined as axillary temperature $\geq 38.0^{\circ}\text{C}/100.4^{\circ}\text{F}$), gastrointestinal symptoms (GS), headache, malaise, myalgia and shivering.	
The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered, with solicited diary data available after the corresponding vaccination and who experienced the specified solicited systemic event within 7 days following the respective study treatment dose. Here, 'N' = participants with available data for each specified category.	
End point type	Secondary
End point timeframe:	
Within 7 days after each vaccination (occurring at Day 1 and Month 2)	

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	364	146		
Units: Days				
median (inter-quartile range (Q1-Q3))				
Fatigue, post-vaccination at Day 1 (N=329;146)	2.0 (1.0 to 3.0)	2.0 (1.0 to 4.0)		
Fever, post-vaccination at Day 1 (N=26;4)	1.0 (1.0 to 2.0)	1.0 (1.0 to 2.0)		
GS, post-vaccination at Day 1 (N=103;79)	1.0 (1.0 to 3.0)	2.0 (1.0 to 2.0)		
Headache, post-vaccination at Day 1 (N=266;136)	2.0 (1.0 to 3.0)	1.0 (1.0 to 3.0)		
Malaise, post-vaccination at Day 1 (N=260;70)	2.0 (1.0 to 3.0)	2.0 (1.0 to 4.0)		
Myalgia, post-vaccination at Day 1 (N=262;65)	2.0 (1.0 to 3.0)	2.0 (1.0 to 4.0)		
Shivering, post-vaccination at Day 1 (N=185;43)	1.0 (1.0 to 2.0)	1.0 (1.0 to 2.0)		
Fatigue, post-vaccination at Month 2 (N=364;115)	2.0 (1.0 to 3.0)	2.0 (1.0 to 4.0)		
Fever, post-vaccination at Month 2 (N=66;5)	1.0 (1.0 to 1.0)	1.0 (1.0 to 1.0)		
GS, post-vaccination at Month 2 (N=118;54)	2.0 (1.0 to 3.0)	1.0 (1.0 to 2.0)		
Headache, post-vaccination at Month 2 (N=290;113)	2.0 (1.0 to 3.0)	2.0 (1.0 to 2.0)		
Malaise, post-vaccination at Month 2 (N=321;69)	2.0 (1.0 to 3.0)	2.0 (1.0 to 4.0)		
Myalgia, post-vaccination at Month 2 (N=294;54)	2.0 (1.0 to 3.0)	2.0 (1.0 to 5.0)		
Shivering, post-vaccination at Month 2 (N=253;32)	1.0 (1.0 to 2.0)	2.0 (1.0 to 3.0)		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants with any, Grade 3 and related unsolicited adverse events (AEs)

End point title	Number of participants with any, Grade 3 and related unsolicited adverse events (AEs)
End point description:	
<p>An unsolicited AE is defined as any AE reported in addition to those solicited during the clinical study. Also, any 'solicited' symptom with onset outside the specified period of follow-up for solicited symptoms was reported as an unsolicited adverse event. Any = occurrence the event regardless of intensity grade or relation to the study vaccination. Grade 3 = event that prevented normal, everyday activities. Related = event assessed by the investigator as related to the study vaccination.</p> <p>The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered and for whom unsolicited AEs data were available for the specified duration after each vaccination.</p>	
End point type	Secondary

End point timeframe:

Within 30 days after each vaccination (occurring at Day 1 and Month 2)

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	714	712		
Units: Participants				
Any Unsol. AEs, post-vacc. Day 1 (N=714;712)	118	104		
Grade 3 Unsol. AEs, post-vacc. Day 1 (N=714;712)	12	10		
Related Unsol. AEs, post-vacc. Day 1 (N=714;712)	32	18		
Any Unsol. AEs, post-vacc. Month 2 (N=675;686)	120	116		
Grade 3 Unsol. AEs, post-vacc. Month 2 (N=675;686)	13	6		
Related Unsol. AEs, post-vacc. Month 2 (N=675;686)	33	7		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants with any and related serious adverse events (SAEs)

End point title	Number of participants with any and related serious adverse events (SAEs)
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End point description:

An SAE is defined as any untoward medical occurrence that resulted in death, was life-threatening, required hospitalization or prolongation of existing hospitalization, resulted in disability/incapacity or was a congenital anomaly/birth defect in the offspring of a study participant. Any = occurrence of the SAE regardless of intensity grade or relation to the study vaccination. Related = SAE assessed by the investigator as related to the study vaccination.

The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered and for whom SAEs data were available for the specified duration.

End point type	Secondary
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End point timeframe:

From first vaccination (Day 1) to 30 days post-last vaccination (last vaccination administered at Day 1 for participants who received only 1 dose and at Month 2 for participants who received 2 doses)

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	714	712		
Units: Participants				
Any SAEs (N=714;712)	11	11		
Related SAEs (N=714;712)	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants with any and related potential immune-mediated diseases (pIMDs)

End point title	Number of participants with any and related potential immune-mediated diseases (pIMDs)
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End point description:

pIMDs are defined as a subset of AEs that include autoimmune diseases and other inflammatory and/or neurologic disorders of interest which may or may not have an autoimmune aetiology. Any = occurrence of the pIMD regardless of intensity grade or relation to the study vaccination. Related = pIMD assessed by the investigator as related to the study vaccination.

The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered and for whom pIMDs data were available for the specified duration.

End point type	Secondary
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End point timeframe:

From first vaccination (Day 1) to 30 days post-last vaccination (last vaccination administered at Day 1 for participants who received only 1 dose and at Month 2 for participants who received 2 doses)

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	714	712		
Units: Participants				
Any pIMDs (N=714;712)	2	2		
Related pIMDs (N=714;712)	0	1		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants with any and related SAEs

End point title	Number of participants with any and related SAEs
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End point description:

An SAE is defined as any untoward medical occurrence that resulted in death, was life-threatening, required hospitalization or prolongation of existing hospitalization, resulted in disability/incapacity or was a congenital anomaly/birth defect in the offspring of a study participant. Any = occurrence of the SAE regardless of intensity grade or relation to the study vaccination. Related = SAE assessed by the investigator as related to the study vaccination.

The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered and for whom SAEs data were available for the specified duration.

End point type	Secondary
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End point timeframe:

From 30 days post-last vaccination until 1 year post-last vaccination (last vaccination administered at Day 1 for participants who received only 1 dose and at Month 2 for participants who received 2 doses)

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	714	712		
Units: Participants				
Any SAEs (N=714;712)	35	22		
Related SAEs (N=714;712)	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants with any and related pIMDs

End point title	Number of participants with any and related pIMDs
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End point description:

pIMDs are defined as a subset of AEs that include autoimmune diseases and other inflammatory and/or neurologic disorders of interest which may or may not have an autoimmune aetiology. Any = occurrence of the pIMD regardless of intensity grade or relation to the study vaccination. Related = pIMD assessed by the investigator as related to the study vaccination.

The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered and for whom pIMDs data were available for the specified duration.

End point type	Secondary
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End point timeframe:

From 30 days post-last vaccination until 1 year post-last vaccination (last vaccination administered at Day 1 for participants who received only 1 dose and at Month 2 for participants who received 2 doses)

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	714	712		
Units: Participants				
Any pIMDs (N=714;712)	2	5		
Related pIMDs (N=714;712)	0	0		

Statistical analyses

No statistical analyses for this end point

Secondary: Number of participants with SAEs related to investigational vaccine, related to study participation or to GSK concomitant medication/vaccine

End point title	Number of participants with SAEs related to investigational
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End point description:

An SAE is defined as any untoward medical occurrence that resulted in death, was life-threatening, required hospitalization or prolongation of existing hospitalization, resulted in disability/incapacity or was a congenital anomaly/birth defect in the offspring of a study participant. Any SAEs related to the investigational vaccine or related to study participation or to a GSK concomitant medication/vaccine as assessed by the investigator are reported.

The analysis was performed on the Exposed Set, which included all participants with at least one dose of the study treatment administered and for whom SAEs related to investigational vaccine/study participation/GSK concomitant medication/vaccine data were available for the specified duration.

End point type	Secondary
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End point timeframe:

From first vaccination (Day 1) until study end (duration of approximately 2 to 5 years depending on the enrolment date)

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	714	712		
Units: Participants	1	1		

Statistical analyses

No statistical analyses for this end point

Secondary: Percentage of participants with vaccine response for anti-glycoprotein E (anti-gE) antibodies as determined by Enzyme Linked Immunosorbent Assay (ELISA)

End point title	Percentage of participants with vaccine response for anti-glycoprotein E (anti-gE) antibodies as determined by Enzyme Linked Immunosorbent Assay (ELISA)
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End point description:

Vaccine response for anti-gE antibodies is defined as:

- For initially seronegative participants, anti-gE antibody concentration at post-vaccination \geq 4-fold the cut-off value for anti-gE [97 international units per liter (IU/L)].
- For initially seropositive participants, anti-gE antibody concentration at post-vaccination \geq 4-fold the pre-vaccination anti-gE antibody concentration.

The analysis was performed on the Adapted Per Protocol Set for immunogenicity, which included all evaluable participants from the Exposed Set who met all eligibility criteria, received 2 doses of the HZ/su vaccine/placebo according to their random assignment, did not receive forbidden medications, had no intercurrent medical condition complied with the vaccination and blood sample schedules and for whom results were available for the specified analysis at the specified time points.

End point type	Secondary
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End point timeframe:

At Month 2 and Month 3

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	593	592		
Units: Percentage of participants				
number (confidence interval 95%)				
At Month 2 (N=593;592)	85.8 (82.8 to 88.5)	0.2 (0.0 to 0.9)		
At Month 3 (N=531;521)	95.3 (93.1 to 96.9)	0.2 (0.0 to 1.1)		

Statistical analyses

No statistical analyses for this end point

Secondary: Anti-gE antibody concentrations expressed as Geometric Mean Concentrations (GMCs) as determined by ELISA

End point title	Anti-gE antibody concentrations expressed as Geometric Mean Concentrations (GMCs) as determined by ELISA
End point description:	
Anti-gE antibody concentrations were determined by ELISA and expressed as GMCs in IU/L. The analysis was performed on the Adapted Per Protocol Set for immunogenicity, which included all evaluable participants from the Exposed Set who met all eligibility criteria, received 2 doses of the HZ/su vaccine/placebo according to their random assignment, did not receive forbidden medications, had no intercurrent medical condition complied with the vaccination and blood sample schedules and for whom results were available for the specified analysis at the specified time points.	
End point type	Secondary
End point timeframe:	
At Day 1, Month 2 and Month 3	

End point values	HZ/su Group	Placebo Group		
Subject group type	Reporting group	Reporting group		
Number of subjects analysed	664	658		
Units: IU/L				
geometric mean (confidence interval 95%)				
At Day 1 (N=664;658)	2151.30 (2004.22 to 2309.17)	2087.14 (1942.47 to 2242.58)		
At Month 2 (N=596;599)	24346.52 (22840.59 to 25951.74)	1850.11 (1725.86 to 1983.30)		
At Month 3 (N=534;526)	49175.78 (46500.40 to 52005.09)	1849.08 (1718.02 to 1990.13)		

Statistical analyses

Adverse events

Adverse events information

Timeframe for reporting adverse events:

Solicited AEs: within 7 days after any vaccination. Unsolicited AEs: within 30 days after any vaccination. Deaths & SAEs: from Day 1 until study end (duration of approximately 2 to 5 years). pIMDs: from Day 1 until 1 year post-last vaccination.

Adverse event reporting additional description:

All events presented in the Serious Adverse Events and Non Serious Adverse Events modules are reported for the Exposed Set population during the specified time frames. All SAEs regardless of relation to study vaccine/study participation/GSK concomitant medication/vaccination are reported in the Serious Adverse Events module.

Assessment type	Systematic
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Dictionary used

Dictionary name	MedDRA
Dictionary version	26.0

Reporting groups

Reporting group title	Placebo Group
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Reporting group description:

Participants with a prior episode of HZ randomized to the Placebo group were scheduled to receive 2 doses of placebo, one at Day 1 and one at Month 2.

Reporting group title	HZ/su Group
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Reporting group description:

Participants with a prior episode of HZ randomized to the HZ/su group were scheduled to receive 2 doses of HZ/su vaccine, one at Day 1 and one at Month 2.

Serious adverse events	Placebo Group	HZ/su Group	
Total subjects affected by serious adverse events			
subjects affected / exposed	43 / 712 (6.04%)	56 / 714 (7.84%)	
number of deaths (all causes)	8	12	
number of deaths resulting from adverse events			
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Adenocarcinoma of colon			
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 1	0 / 0	
Lymphoma			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Lung adenocarcinoma			

subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Leiomyosarcoma metastatic			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Invasive ductal breast carcinoma			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastric cancer			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Colorectal cancer			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Breast cancer			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Bladder neoplasm			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Meningioma			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Myeloproliferative neoplasm			

subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Non-small cell lung cancer metastatic			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Pancreatic carcinoma			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Prostate cancer			
subjects affected / exposed	2 / 712 (0.28%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Splenic marginal zone lymphoma			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Vascular disorders			
Peripheral ischaemia			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
General disorders and administration site conditions			
Multiple organ dysfunction syndrome			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Immune system disorders			
Anaphylactic reaction			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Reproductive system and breast disorders			
Benign prostatic hyperplasia			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Respiratory, thoracic and mediastinal disorders			
Acute pulmonary oedema			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Pulmonary embolism			
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)	
occurrences causally related to treatment / all	0 / 0	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Respiratory failure			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Psychiatric disorders			
Completed suicide			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Hallucination			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Injury, poisoning and procedural complications			
Clavicle fracture			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Tibia fracture			

subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)	
occurrences causally related to treatment / all	0 / 0	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Carbon monoxide poisoning			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Abdominal injury			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Costal cartilage fracture			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Craniocerebral injury			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Fibula fracture			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Foot fracture			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Fractured coccyx			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Humerus fracture			

subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ligament sprain			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Lumbar vertebral fracture			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cervical vertebral fracture			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Wound			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Toxicity to various agents			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Cardiac disorders			
Atrioventricular block			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Atrial fibrillation			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Arteriosclerosis coronary artery			

subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Angina unstable			
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Angina pectoris			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Acute myocardial infarction			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Sinus node dysfunction			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Myocardial infarction			
subjects affected / exposed	2 / 712 (0.28%)	2 / 714 (0.28%)	
occurrences causally related to treatment / all	0 / 2	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cardiac failure acute			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Cardiac failure			
subjects affected / exposed	2 / 712 (0.28%)	2 / 714 (0.28%)	
occurrences causally related to treatment / all	0 / 3	0 / 2	
deaths causally related to treatment / all	0 / 1	0 / 2	
Cardiac arrest			

subjects affected / exposed	1 / 712 (0.14%)	2 / 714 (0.28%)	
occurrences causally related to treatment / all	0 / 1	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 2	
Palpitations			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Nervous system disorders			
Transient ischaemic attack			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cerebrovascular accident			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ischaemic stroke			
subjects affected / exposed	2 / 712 (0.28%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Lumbar radiculopathy			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Radiculopathy			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Subarachnoid haemorrhage			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Syncope			

subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Blood and lymphatic system disorders			
Iron deficiency anaemia			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Neutropenia			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Eye disorders			
Retinal detachment			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Iritis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cataract			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastrointestinal disorders			
Abdominal hernia			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Abdominal pain upper			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	

Diarrhoea			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Erosive duodenitis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastritis erosive			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Gastrooesophageal reflux disease			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Ileus			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Melaena			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pancreatitis acute			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatobiliary disorders			
Bile duct stone			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Biliary dilatation			

subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cholangitis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cholangitis acute			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Cholecystitis acute			
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Hepatic cirrhosis			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Renal and urinary disorders			
Nephrolithiasis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Musculoskeletal and connective tissue disorders			
Spinal stenosis			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Osteoarthritis			
subjects affected / exposed	2 / 712 (0.28%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 2	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Intervertebral disc protrusion			
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Intervertebral disc disorder			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	
Chondropathy			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Arthritis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infections and infestations			
Clostridium difficile colitis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Diverticulitis			
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 1	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Erysipelas			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Infective exacerbation of chronic obstructive airways disease			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 0	0 / 0	

Neurosyphilis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Pneumonia			
subjects affected / exposed	2 / 712 (0.28%)	4 / 714 (0.56%)	
occurrences causally related to treatment / all	0 / 2	0 / 4	
deaths causally related to treatment / all	0 / 2	0 / 0	
COVID-19			
subjects affected / exposed	1 / 712 (0.14%)	3 / 714 (0.42%)	
occurrences causally related to treatment / all	0 / 1	0 / 3	
deaths causally related to treatment / all	0 / 0	0 / 0	
COVID-19 pneumonia			
subjects affected / exposed	5 / 712 (0.70%)	4 / 714 (0.56%)	
occurrences causally related to treatment / all	0 / 5	0 / 4	
deaths causally related to treatment / all	0 / 0	0 / 1	
Cellulitis			
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)	
occurrences causally related to treatment / all	0 / 0	0 / 2	
deaths causally related to treatment / all	0 / 0	0 / 0	
Vestibular neuronitis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Urinary tract infection			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Staphylococcal bacteraemia			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Septic shock			

subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences causally related to treatment / all	0 / 1	0 / 0	
deaths causally related to treatment / all	0 / 1	0 / 0	
Respiratory tract infection			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 1	
Pyelonephritis acute			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	0 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Metabolism and nutrition disorders			
Type 1 diabetes mellitus			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences causally related to treatment / all	0 / 0	1 / 1	
deaths causally related to treatment / all	0 / 0	0 / 0	
Diabetes mellitus inadequate control			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
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: 0 %

Non-serious adverse events	Placebo Group	HZ/su Group	
Total subjects affected by non-serious adverse events			
subjects affected / exposed	414 / 712 (58.15%)	665 / 714 (93.14%)	
Neoplasms benign, malignant and unspecified (incl cysts and polyps)			
Skin papilloma			
subjects affected / exposed	2 / 712 (0.28%)	1 / 714 (0.14%)	
occurrences (all)	2	1	
Adrenal adenoma			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Melanocytic naevus			

subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Vascular disorders			
Hypertensive crisis			
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)	
occurrences (all)	0	2	
Hypertension			
subjects affected / exposed	3 / 712 (0.42%)	4 / 714 (0.56%)	
occurrences (all)	3	4	
Haematoma			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Intermittent claudication			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Peripheral coldness			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Thrombophlebitis			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Hot flush			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Surgical and medical procedures			
Skin neoplasm excision			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
General disorders and administration site conditions			
Administration site pain			
subjects affected / exposed	94 / 712 (13.20%)	611 / 714 (85.57%)	
occurrences (all)	109	1065	
Fatigue			
subjects affected / exposed	199 / 712 (27.95%)	457 / 714 (64.01%)	
occurrences (all)	262	695	
Malaise			

subjects affected / exposed	112 / 712 (15.73%)	396 / 714 (55.46%)
occurrences (all)	139	584
Chills		
subjects affected / exposed	64 / 712 (8.99%)	330 / 714 (46.22%)
occurrences (all)	76	440
Administration site erythema		
subjects affected / exposed	5 / 712 (0.70%)	238 / 714 (33.33%)
occurrences (all)	5	328
Injection site rash		
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)
occurrences (all)	0	2
Pyrexia		
subjects affected / exposed	10 / 712 (1.40%)	88 / 714 (12.32%)
occurrences (all)	10	94
Injection site bruising		
subjects affected / exposed	1 / 712 (0.14%)	2 / 714 (0.28%)
occurrences (all)	1	2
Asthenia		
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)
occurrences (all)	0	2
Feeling hot		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	3
Influenza like illness		
subjects affected / exposed	2 / 712 (0.28%)	0 / 714 (0.00%)
occurrences (all)	2	0
Administration site swelling		
subjects affected / exposed	2 / 712 (0.28%)	133 / 714 (18.63%)
occurrences (all)	2	173
Discomfort		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Feeling cold		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Pain		

subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)
occurrences (all)	0	2
Vessel puncture site bruise		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Vaccination site scar		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Vaccination site pain		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Vaccination site movement impairment		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Temperature regulation disorder		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Peripheral swelling		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Non-cardiac chest pain		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Medical device pain		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Injection site warmth		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Injection site pruritus		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Injection site joint pain		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1

Injection site hypoaesthesia subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Injection site erythema subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Illness subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Swelling subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	2 / 714 (0.28%) 2	
Immune system disorders Seasonal allergy subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 2	2 / 714 (0.28%) 2	
Hypersensitivity subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	2 / 714 (0.28%) 2	
Reproductive system and breast disorders Epididymal cyst subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Genital erythema subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Ovarian cyst subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Prostatitis subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Respiratory, thoracic and mediastinal disorders Oropharyngeal pain subjects affected / exposed occurrences (all)	5 / 712 (0.70%) 7	7 / 714 (0.98%) 7	

Cough		
subjects affected / exposed	8 / 712 (1.12%)	3 / 714 (0.42%)
occurrences (all)	8	3
Rhinorrhoea		
subjects affected / exposed	3 / 712 (0.42%)	2 / 714 (0.28%)
occurrences (all)	3	3
Epistaxis		
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)
occurrences (all)	0	2
Increased upper airway secretion		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1
Sneezing		
subjects affected / exposed	2 / 712 (0.28%)	0 / 714 (0.00%)
occurrences (all)	2	0
Aphonia		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Asthma		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Catarrh		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Chronic obstructive pulmonary disease		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Dysphonia		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Nasal disorder		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Obstructive sleep apnoea syndrome		

subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Oropharyngeal discomfort			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Pulmonary fibrosis			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Reflux laryngitis			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Rhinitis allergic			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Throat tightness			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Psychiatric disorders			
Insomnia			
subjects affected / exposed	3 / 712 (0.42%)	2 / 714 (0.28%)	
occurrences (all)	3	3	
Anxiety			
subjects affected / exposed	2 / 712 (0.28%)	2 / 714 (0.28%)	
occurrences (all)	2	2	
Depression			
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences (all)	1	1	
Middle insomnia			
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences (all)	1	1	
Depressed mood			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Panic disorder			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	

Persistent depressive disorder subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Sleep disorder subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 2	
Terminal insomnia subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Investigations			
Blood pressure increased subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	1 / 714 (0.14%) 1	
Body temperature increased subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Injury, poisoning and procedural complications			
Fall subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	1 / 714 (0.14%) 1	
Arthropod bite subjects affected / exposed occurrences (all)	2 / 712 (0.28%) 2	1 / 714 (0.14%) 1	
Contusion subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	2 / 714 (0.28%) 2	
Radius fracture subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	1 / 714 (0.14%) 1	
Accident subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Bite subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Concussion			

subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Face injury		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	2
Foot fracture		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Foreign body in throat		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Joint injury		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Limb injury		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Neck injury		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Procedural haemorrhage		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Procedural pain		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Skin laceration		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Thermal burn		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Vaccination complication		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Wound		

subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Wound haemorrhage subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Abdominal injury subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Congenital, familial and genetic disorders			
Haemangioma congenital subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Hydrocele subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Cardiac disorders			
Palpitations subjects affected / exposed occurrences (all)	2 / 712 (0.28%) 2	1 / 714 (0.14%) 1	
Arrhythmia subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Atrial fibrillation subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Myocardial ischaemia subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Tachycardia subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Nervous system disorders			
Hyperaesthesia subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Facial paralysis			

subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Burning sensation		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Migraine		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1
Paraesthesia		
subjects affected / exposed	4 / 712 (0.56%)	3 / 714 (0.42%)
occurrences (all)	4	4
Dizziness		
subjects affected / exposed	3 / 712 (0.42%)	5 / 714 (0.70%)
occurrences (all)	3	5
Headache		
subjects affected / exposed	201 / 712 (28.23%)	384 / 714 (53.78%)
occurrences (all)	270	573
Tremor		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Syncope		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Sinus headache		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Sciatica		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Radiculopathy		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Post herpetic neuralgia		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Polyneuropathy		

subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Neuralgia subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Hypoaesthesia subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Lethargy subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Blood and lymphatic system disorders Anaemia subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Lymphadenopathy subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Splenic lesion subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Ear and labyrinth disorders Vertigo subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	2 / 714 (0.28%) 2	
Ear pain subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Tympanic membrane perforation subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Eye disorders Dry eye subjects affected / exposed occurrences (all)	2 / 712 (0.28%) 2	0 / 714 (0.00%) 0	
Vitreous detachment			

subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)	
occurrences (all)	0	2	
Cataract			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Erythema of eyelid			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Eye pain			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Eye swelling			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Iridocyclitis			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Iritis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Retinal vein thrombosis			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Vision blurred			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Visual impairment			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Gastrointestinal disorders			
Toothache			
subjects affected / exposed	2 / 712 (0.28%)	1 / 714 (0.14%)	
occurrences (all)	2	1	
Dental caries			
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)	
occurrences (all)	1	1	

Gastrooesophageal reflux disease		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1
Abdominal distension		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Abdominal hernia		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Aphthous ulcer		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Diverticulum		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Dry mouth		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Gastritis		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Gingival pain		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Haematochezia		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Hyperchlorhydria		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	2	0
Inguinal hernia		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Nausea		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	2

Oral discomfort			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Stomatitis			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Gastrointestinal disorder			
subjects affected / exposed	117 / 712 (16.43%)	179 / 714 (25.07%)	
occurrences (all)	134	221	
Diarrhoea			
subjects affected / exposed	4 / 712 (0.56%)	3 / 714 (0.42%)	
occurrences (all)	4	4	
Abdominal pain upper			
subjects affected / exposed	3 / 712 (0.42%)	2 / 714 (0.28%)	
occurrences (all)	4	2	
Dyspepsia			
subjects affected / exposed	1 / 712 (0.14%)	3 / 714 (0.42%)	
occurrences (all)	1	3	
Odynophagia			
subjects affected / exposed	0 / 712 (0.00%)	3 / 714 (0.42%)	
occurrences (all)	0	3	
Oral mucosal blistering			
subjects affected / exposed	1 / 712 (0.14%)	2 / 714 (0.28%)	
occurrences (all)	1	2	
Hepatobiliary disorders			
Biliary colic			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Cholecystitis chronic			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Hypertransaminasaemia			
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)	
occurrences (all)	1	0	
Skin and subcutaneous tissue disorders			

Pruritus		
subjects affected / exposed	33 / 712 (4.63%)	228 / 714 (31.93%)
occurrences (all)	41	297
Erythema		
subjects affected / exposed	2 / 712 (0.28%)	10 / 714 (1.40%)
occurrences (all)	2	11
Rash		
subjects affected / exposed	2 / 712 (0.28%)	6 / 714 (0.84%)
occurrences (all)	2	6
Dermatitis		
subjects affected / exposed	3 / 712 (0.42%)	1 / 714 (0.14%)
occurrences (all)	3	1
Hyperhidrosis		
subjects affected / exposed	1 / 712 (0.14%)	2 / 714 (0.28%)
occurrences (all)	1	2
Rash macular		
subjects affected / exposed	0 / 712 (0.00%)	3 / 714 (0.42%)
occurrences (all)	0	3
Blister		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	2	1
Rash pruritic		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1
Acne		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Dermal cyst		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Eczema nummular		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Hand dermatitis		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	2

Rash vesicular subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Rosacea subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Eczema subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	2 / 714 (0.28%) 2	
Renal and urinary disorders			
Bladder discomfort subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Renal colic subjects affected / exposed occurrences (all)	3 / 712 (0.42%) 3	0 / 714 (0.00%) 0	
Hypertonic bladder subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Pollakiuria subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Micturition urgency subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Musculoskeletal and connective tissue disorders			
Joint swelling subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Muscle spasms subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Muscle swelling subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Haematoma muscle			

subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Gouty arthritis		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Flank pain		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Fibromyalgia		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Bursitis		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Bone pain		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Arthritis		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Tendonitis		
subjects affected / exposed	2 / 712 (0.28%)	0 / 714 (0.00%)
occurrences (all)	2	0
Osteoarthritis		
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)
occurrences (all)	0	3
Musculoskeletal stiffness		
subjects affected / exposed	2 / 712 (0.28%)	0 / 714 (0.00%)
occurrences (all)	2	0
Neck pain		
subjects affected / exposed	5 / 712 (0.70%)	4 / 714 (0.56%)
occurrences (all)	5	5
Pain in extremity		
subjects affected / exposed	5 / 712 (0.70%)	6 / 714 (0.84%)
occurrences (all)	6	6
Back pain		

subjects affected / exposed occurrences (all)	4 / 712 (0.56%) 4	7 / 714 (0.98%) 7	
Arthralgia subjects affected / exposed occurrences (all)	8 / 712 (1.12%) 9	23 / 714 (3.22%) 24	
Myalgia subjects affected / exposed occurrences (all)	97 / 712 (13.62%) 122	389 / 714 (54.48%) 560	
Muscle tightness subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Muscle twitching subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 1	0 / 714 (0.00%) 0	
Osteoporosis subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Rotator cuff syndrome subjects affected / exposed occurrences (all)	1 / 712 (0.14%) 2	0 / 714 (0.00%) 0	
Tenosynovitis subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	1 / 714 (0.14%) 1	
Infections and infestations Suspected COVID-19 subjects affected / exposed occurrences (all)	0 / 712 (0.00%) 0	2 / 714 (0.28%) 2	
Nasopharyngitis subjects affected / exposed occurrences (all)	16 / 712 (2.25%) 19	18 / 714 (2.52%) 19	
COVID-19 subjects affected / exposed occurrences (all)	8 / 712 (1.12%) 8	8 / 714 (1.12%) 8	
Oral herpes subjects affected / exposed occurrences (all)	6 / 712 (0.84%) 6	9 / 714 (1.26%) 9	

Urinary tract infection		
subjects affected / exposed	5 / 712 (0.70%)	3 / 714 (0.42%)
occurrences (all)	5	3
Influenza		
subjects affected / exposed	3 / 712 (0.42%)	4 / 714 (0.56%)
occurrences (all)	3	4
Sinusitis		
subjects affected / exposed	3 / 712 (0.42%)	2 / 714 (0.28%)
occurrences (all)	3	3
Conjunctivitis		
subjects affected / exposed	3 / 712 (0.42%)	1 / 714 (0.14%)
occurrences (all)	3	1
Otitis externa		
subjects affected / exposed	2 / 712 (0.28%)	2 / 714 (0.28%)
occurrences (all)	2	2
Upper respiratory tract infection		
subjects affected / exposed	3 / 712 (0.42%)	1 / 714 (0.14%)
occurrences (all)	3	1
Acute sinusitis		
subjects affected / exposed	1 / 712 (0.14%)	2 / 714 (0.28%)
occurrences (all)	1	2
Cystitis		
subjects affected / exposed	1 / 712 (0.14%)	2 / 714 (0.28%)
occurrences (all)	1	2
Herpes simplex		
subjects affected / exposed	0 / 712 (0.00%)	3 / 714 (0.42%)
occurrences (all)	0	3
Ear infection		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1
Gastroenteritis		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1
Respiratory tract infection		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1

Tinea pedis		
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)
occurrences (all)	0	2
Viral infection		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1
Viral upper respiratory tract infection		
subjects affected / exposed	1 / 712 (0.14%)	1 / 714 (0.14%)
occurrences (all)	1	1
Vulvovaginal candidiasis		
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)
occurrences (all)	0	2
Abdominal infection		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Abscess		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Anal abscess		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Bartholinitis		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Borrelia infection		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Bronchitis		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Candida infection		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Epididymitis		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0

Erysipelas		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Eye infection		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Folliculitis		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Fungal infection		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Furuncle		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Genital herpes		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Herpes zoster		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Hordeolum		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Impetigo		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Lower respiratory tract infection		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Onychomycosis		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Pharyngitis		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1

Pharyngotonsillitis		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Pneumonia		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Postoperative wound infection		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Pustule		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Rhinitis		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Tonsillitis		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Tooth abscess		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Tooth infection		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Vaginal infection		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Vestibular neuronitis		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0
Wound infection		
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)
occurrences (all)	0	1
Streptococcal infection		
subjects affected / exposed	1 / 712 (0.14%)	0 / 714 (0.00%)
occurrences (all)	1	0

Metabolism and nutrition disorders			
Dyslipidaemia			
subjects affected / exposed	0 / 712 (0.00%)	2 / 714 (0.28%)	
occurrences (all)	0	2	
Hypercholesterolaemia			
subjects affected / exposed	2 / 712 (0.28%)	0 / 714 (0.00%)	
occurrences (all)	2	0	
Decreased appetite			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Gout			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Hypocalcaemia			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	
Iron deficiency			
subjects affected / exposed	0 / 712 (0.00%)	1 / 714 (0.14%)	
occurrences (all)	0	1	

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? Yes

Date	Amendment
18 March 2019	<p>This protocol amendment incorporated feedback from regulatory authorities with the following changes:</p> <ul style="list-style-type: none">• The primary objective has been revised to a formal non-inferiority analysis with revised success criterion for non-inferiority. Consequently, the sample size was adjusted from 986 to 1426 subjects.• To capture PHN episodes developing after Day HZ-92 according to the protocol definition, the time frame for completing the Zoster Brief Pain Inventory (ZBPI) questionnaire has been clarified. Subjects with suspected herpes zoster (HZ) were required to complete the questionnaire until a 4-week pain-free period was documented. This amendment clarifies procedures for monitoring PHN in subjects who had ongoing symptoms beyond Day HZ-92.• In the tabulation of safety analyses, the collection period for fatal serious adverse events (SAEs) was updated.• The timeframe for primary endpoint (confirmed HZ episodes) was corrected to 30 days post second vaccination instead of 30 days post last vaccination.• Grading of fever was added.• The definition of modified exposed set (mES) was clarified.• "Emergency Unblinding" was added as per requirement of new process for observer-blind studies.
14 April 2020	<p>This protocol amendment outlined measures that may be applicable during special circumstances (e.g., during COVID-19 pandemic). The purpose of the amendment was to introduce measures that may have allowed protection of subject's welfare and safety, as well as maintaining the integrity of the study.</p>

Notes:

Interruptions (globally)

Were there any global interruptions to the trial? Yes

Date	Interruption	Restart date
14 March 2020	<p>ZOSTER-062 enrollment was paused from 14 March 2020 due to COVID-19 pandemic mandates. The duration of this recruitment interruption varied across sites. Each site opened taking into account local laws and regulations regarding site operations.</p>	-

Notes:

Limitations and caveats

None reported