Clinical trial results:
A Phase IV Vaccine Study under the National Cohort Study of Effectiveness and Safety of SARS-CoV-2/Covid-19 vaccines (ENFORCE PLUS)

Summary

EudraCT number	2021-003188-90
Trial protocol	DK
Global end of trial date	31 December 2023

Results information

Result version number	v1 (current)
This version publication date	28 February 2025
First version publication date	28 February 2025
Summary attachment (see zip file)	End Note (ENFORCE PLUS_Eudract_End note_2025FEB10.pdf)

Trial information

Trial identification

Sponsor protocol code	ENFORCE-PLUS

Additional study identifiers

ISRCTN number	-
ClinicalTrials.gov id (NCT number)	NCT06360744
WHO universal trial number (UTN)	-

Notes:

Sponsors

Sponsor organisation name	CHIP - Rigshospitalet - University of Copenhagen
Sponsor organisation address	Blegdamsvej 9, Section 2100, Copenhagen, Denmark, 2100
Public contact	Jens Lundgren, CHIP - Rigshospitalet, University of Copenhagen, 45 3545 5757, jens.lundgren@regionh.dk
Scientific contact	Jens Lundgren, CHIP - Rigshospitalet, University of Copenhagen, 45 3545 5757, jens.lundgren@regionh.dk

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	31 December 2023
Is this the analysis of the primary completion data?	Yes
Primary completion date	31 December 2023
Global end of trial reached?	Yes
Global end of trial date	31 December 2023
Was the trial ended prematurely?	No

Notes:

General information about the trial

Main objective of the trial:

The primary objective of the study is to clarify whether vaccination with the Johnson & Johnson/Janssen vaccine leads to changes in the number and activation of platelets as well as anti-PF4 level and to compare whether the Johnson & Johnson/Janssen vaccine causes a stronger activation of platelets as well as an increase in anti-PF4 antibodies than mRNA vaccines

Protection of trial subjects:

Informed Consent is obtained from the participant before any trial -related procedures were conducted.

Background therapy: -

Evidence for comparator: -

Actual start date of recruitment	21 June 2021
Long term follow-up planned	No
Independent data monitoring committee (IDMC) involvement?	Yes

Notes:

Population of trial subjects

Subjects enrolled per country

Country: Number of subjects enrolled	Denmark: 25
Worldwide total number of subjects	25
EEA total number of subjects	25

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)	0
Adolescents (12-17 years)	0
Adults (18-64 years)	25
From 65 to 84 years	0
85 years and over	0

Subject disposition

Recruitment

Recruitment details:

The Danish COVID-19 vaccination programme does not include vaccination with the SARS-CoV-2 vaccine from Janssen, however vaccination with this vaccine is approved via a medical prescription. The ENFORCE PLUS protocol is proposed to be linked to ENFORCE with additional safety measures introduced the first month after vaccination.

Pre-assignment

Screening details:

The difference between the ENFORCE trial (EudraCT no.2020-006003) and this ENFORCE PLUS trial was the J&J vaccine was given by the trial staff and the ENFORCE participants received their vaccination in the Danish Vaccination Programme.

Period 1

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

Arms

Arm title	Vaccine Janssen

Arm description:

The vaccine is used according to the approved Summary of Product Characteriestics.

Arm type	Experimental
Investigational medicinal product name	Jcovden.
Investigational medicinal product code	
Other name	Janssen/Johnson & Johnson CoV-2 vaccine
Pharmaceutical forms	Injection
Routes of administration	Intramuscular use

Dosage and administration details:

The vaccine is used according to the approved Summary of Product.

Number of subjects in period 1	Vaccine Janssen
Started	25
Completed	25

Baseline characteristics

Reporting groups

Reporting group title	Entire trial

Reporting group description: -

Reporting group values	Entire trial	Total	
Number of subjects	25	25	
Age categorical Units: Subjects			
In utero	0	0	
Preterm newborn infants (gestational age < 37 wks)	0	0	
Newborns (0-27 days)	0	0	
Infants and toddlers (28 days-23 months)	0	0	
Children (2-11 years)	0	0	
Adolescents (12-17 years)	0	0	
Adults (18-64 years)	25	25	
From 65-84 years	0	0	
85 years and over	0	0	
Gender categorical Units: Subjects			
Female	11	11	
Male	14	14	

End points

End points reporting groups

Reporting group title	Vaccine Janssen

Reporting group description:

The vaccine is used according to the approved Summary of Product Characteriestics.

Primary: Antibody Level

End point title	Antibody Level[1]

End point description:

Primary Outcome: Minimal protective neutralising antibody titre (MPNAT) i.e. the minimum level of neutralising antibodies sufficient to protect the person from becoming infected.
MPNAT will be measured via profiling of antibodies against SARS-CoV-2 Spike epitopes performed at each visit until month 60.
We will use two different large-scale methods.
1. ELISA detection of total serum Ig to the Receptor Binding Domain (Wantai), this specific method will be stopped after January 2023 as the positive rate has reached 99%.
2. A multiantigen serological test including both the N-terminal Domain (NTD), The Receptor Binding Domain (RBD), the complete Spike (S) protein and the Nucleocapsid (NC) protein as antigens (from Mesoscale).
Additionally, an ACE2 competition assay will be used to score the receptor blocking potential of antibodies raised by vaccination (Mesoscale).

End point type	Primary

End point timeframe:

Antibody level will be measured via profiling of antibodies against SARS-CoV-2 Spike epitopes performed at each visit until month 24

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: The statistical analysis are described in the ENFORCE trial

End point values	Vaccine Janssen			
Subject group type	Reporting group			
Number of subjects analysed	25			
Units: Number of subjects analysed				
AUH antibody data enrollment (N, % of total)	23			
AUH antibody data, 3 month after first vaccination	21			
AUH antibody data, 6 month after first vaccination	21			

Statistical analyses

No statistical analyses for this end point

Adverse events

Adverse events information	
Timeframe for reporting adverse events: 3 month after vaccination.	
Assessment type	Systematic
Dictionary used	
Dictionary name	MedDRA
Dictionary version	24.1
Reporting groups	
Reporting group title	Vaccine Janssen
Reporting group description: Number of persons with at least one Adverse Event reported	

Serious adverse events	Vaccine Janssen		
Total subjects affected by serious adverse events			
subjects affected / exposed	0 / 25 (0.00%)		
number of deaths (all causes)	0		
number of deaths resulting from adverse events	0		

Frequency threshold for reporting non-serious adverse events: 4 %

Non-serious adverse events	Vaccine Janssen		
Total subjects affected by non-serious adverse events			
subjects affected / exposed	1 / 25 (4.00%)		
Product issues			
Influenza like illness			
subjects affected / exposed	1 / 25 (4.00%)		
occurrences (all)	1		

More information

Substantial protocol amendments (globally)

Were there any global substantial amendments to the protocol? No

Interruptions (globally)

Were there any global interruptions to the trial? No

Limitations and caveats

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

Since all 25 participants had completed their thir visit (3 month after vaccination) and already were in the follow-up phase, completely identical to the ENFORCE protocoll the participants were transferred for their follow-up to the ENFORCE database.

Notes: