



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 Characteristics.

| | |
|--|---|
| 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 Characteristics. | |

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

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|-----------------|--------|
| 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.

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| 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. |
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Notes: