An Observational Study to Assess the Real-world Effectiveness and Safety of EVUSHELD™ (Tixagevimab/Cilgavimab) as Pre-exposure Prophylaxis Against COVID-19 Among EVUSHELD-eligible Populations in the United States Department of Defense Healthcare System (VALOR DOD)

First published: 03/01/2024

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Study Ongoing

Administrative details

EU PAS number

EUPAS106412

Study ID

106413

DARWIN EU® study

No

Study countries

United States

Study description

The novel coronavirus disease 2019 (COVID-19) is caused by severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2). Despite relatively high vaccine uptake (approximately 85% of the US population aged 5 years and older has received at least one COVID-19 vaccination dose), and aggressive introduction of vaccination booster programs to maintain/increase protection levels, there were approximately 260,000 COVID-19 cases and 2,500 deaths recorded in the US weekly as of 25 October 2022. Persons who are immunocompromised are particularly vulnerable to become infected with SARS-CoV-2 and to also experience severe illness. Paradoxically, these individuals also are more likely to experience suboptimal vaccine response, thereby placing them at greater risk of infection. EVUSHELD™ is a combination product of tixagevimab and cilgavimab, both of which are neutralizing IgG1 monoclonal antibodies that bind to distinct, non-overlapping epitopes within the receptor binding domain of the spike protein of SARS-CoV-2. On 26 January 2023, the US FDA stated that EVUSHELD (tixagevimab co-packaged with cilgavimab) is not currently authorized for emergency use in pre-exposure prophylaxis of COVID-19 in the US until further notice due to the high frequency of circulating SARS-CoV-2 variants that EVUSHELD does not neutralize. Accordingly, this Phase IV observational, retrospective study, based on analyses of secondary electronic healthcare databases will assess real-world effectiveness of EVUSHELD as PrEP among EVUSHELD-eligible persons against SARS-CoV-2 infection, COVID-19-related hospitalization, and other COVID-19-related outcomes. The primary effectiveness outcomes is COVID-19 hospitalization up to 6 months after exposure. The primary safety outcomes will be anaphylaxis, MIS, HF, MI, stroke, and DVT.

Study status

Ongoing

Contact details

Study institution contact

Carla Talarico carla.talarico@astrazeneca.com

Study contact

carla.talarico@astrazeneca.com

Primary lead investigator

Jess Edison

Primary lead investigator

Study timelines

Date when funding contract was signed

Actual: 13/08/2022

Study start date

Planned: 30/09/2023

Actual: 21/07/2023

Data analysis start date

Planned: 05/01/2023

Actual: 08/11/2023

Date of final study report

Planned: 24/02/2024

Sources of funding

- Pharmaceutical company and other private sector

More details on funding

AstraZeneca

Regulatory

Was the study required by a regulatory body?

Yes

Is the study required by a Risk Management Plan (RMP)?

Not applicable

Other study registration identification numbers and links

N/A

Methodological aspects

Study type

Study type list

Study type:

Non-interventional study

Main study objective:

This Phase IV observational study, which will employ a retrospective cohort design and be based on analyses of secondary electronic healthcare databases, has therefore been designed to assess real-world effectiveness and safety of EVUSHELD as PrEP among EVUSHELD-eligible persons against SARS-CoV-2 infection, COVID-19 hospitalization, and other COVID-19-related outcomes.

Study Design

Non-interventional study design

Cohort

Population studied

Age groups

- Adolescents (12 to < 18 years)
- Adults (18 to < 46 years)
- Adults (46 to < 65 years)
- Adults (65 to < 75 years)
- Adults (75 to < 85 years)
- Adults (85 years and over)

Estimated number of subjects

3000

Study design details

Outcomes

1 To assess the effectiveness of EVUSHELD (EV) as PrEP against COVID-19 hospitalizations up to 6 months following its initial administration, overall and by variant time period. 2 To compare the incidence of anaphylaxis, multisystem inflammatory syndrome (MIS), HF, MI, stroke, and DVT up to 6 months following the initial dose of EV as PrEP vs. patients who did and did not receive EV, Assess the effectiveness of EV 600mg (PrEP): 1 Against medically attended mild/moderate or severe COVID-19 up to 6 months 2 Against variant, by calendar time period, & time interval 3 For patients/population who received EV outside of the bulleted list in the EUA Fact Sheet, CDC & NIH guidelines 4 Effectiveness against mild, moderate, and severe COVID-19 for patients only dosed with EV 300mg

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Data analysis plan

Propensity score (PS) matching will be used to match exposed patients to unexposed patients in fixed 1:1. In a given calendar unit, all newly exposed EV patients will be identified, and their eligibility for inclusion in this study assessed based on available EHR information. Next, for each exposed patient who meets selection criteria, an appropriate matched unexposed patient will be obtained from patients unexposed to EV as of this date, based on PS. Matching also will ensure that exposed and unexposed patients are within the same calendar unit and healthcare encounter type. As this is a secondary data study, the matching step will be performed prospectively on retrospectively collected data. All Primary and Secondary Objectives will be addressed using Cox proportional hazards regression models to estimate unadjusted and adjusted hazard ratios. Pending a review of sample sizes, several subgroup analyses will be conducted. A number of sensitivity and exploratory analyses are planned.

Data management

ENCePP Seal

The use of the ENCePP Seal has been discontinued since February 2025. The ENCePP Seal fields are retained in the display mode for transparency but are no longer maintained.

Data sources

Data sources (types)

Administrative healthcare records (e.g., claims)

Drug dispensing/prescription data

Use of a Common Data Model (CDM)

CDM mapping

No

Data quality specifications

Check conformance

Unknown

Check completeness

Unknown

Check stability

Unknown

Check logical consistency

Unknown

Data characterisation

Data characterisation conducted

No