

# DRIVE - Brand-specific influenza vaccine effectiveness in Europe, season 2021/22 (DRIVE 2021/22)

**First published:** 26/04/2022

**Last updated:** 14/03/2024

Study

Finalised

## Administrative details

### PURI

<https://redirect.ema.europa.eu/resource/46889>

### EU PAS number

EUPAS46888

### Study ID

46889

### DARWIN EU® study

No

### Study countries

☐ Austria

- ☐ Finland
  - ☐ France
  - ☐ Iceland
  - ☐ Italy
  - ☐ Romania
  - ☐ Spain
  - ☐ United Kingdom
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## **Study description**

The Development of Robust and Innovative Vaccine Effectiveness (DRIVE) project is a public-private partnership aiming to build capacity in Europe for estimating brand-specific influenza vaccine effectiveness (IVE). The DRIVE Project, which is funded by the Innovative Medicines Initiative (IMI), was initiated as a response to the changes for licensing of influenza vaccines in Europe. The new guidance on influenza vaccines by the European Medicines Agency (EMA) came into effect in the beginning of 2017. This guidance states that the performance of influenza vaccines should no longer be assessed based on serological assays, but should be based on post-authorization effectiveness studies 1. The main objective of the 2021/22 season is to estimate brand-specific seasonal IVE in Europe by health care setting and age group. In DRIVE, data from several independently operating national or regional study sites is analysed jointly to obtain sufficient geographical coverage and sample size for brand-specific IVE estimates. This document describes the characteristics of the participating study sites, the site-specific statistical analysis as well as the statistical analysis to pool data across study sites for the 2021/22 influenza season. Committee for Medicinal Products for Human Use. Guideline on Influenza Vaccines - Non-clinical and Clinical Module.

EMA/CHMP/BWP/310834/2012. In. London: Eur Med Agency, 2016.

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## **Study status**

Finalised

## **Research institutions and networks**

# Institutions

## P95 Clinical and Epidemiology Services

- ☐ Belgium
- ☐ Colombia
- ☐ Netherlands
- ☐ South Africa
- ☐ Thailand
- ☐ United States

**First published:** 07/11/2022

**Last updated:** 21/02/2025

**Institution**

Laboratory/Research/Testing facility

Non-Pharmaceutical company

ENCEPP partner

## Medical University of Vienna

- ☐ Austria

**First published:** 01/02/2024

**Last updated:** 26/02/2024

**Institution**

Educational Institution

Hospital/Clinic/Other health care facility

The Foundation for the Promotion of Health and  
Biomedical Research of Valencia Region (FISABIO)

☐ Spain

**First published:** 01/02/2024

**Last updated:** 05/11/2024

**Institution**

Medical University Vienna Austria, Directorate of Health (Embætti landlæknis ) Iceland, Istituto Superiore di Sanità Italy, Royal College of General Practitioners Research and Surveillance Centre & University of Oxford United Kingdom, Innovative clinical research network in vaccinology (I-REIVAC INSERM) France, Centro Interuniversitario di Ricerca sull'Influenza e sulle altre infezioni trasmissibili Italian Hospital Network Italy, National Institute for Infectious Disease “Prof. Dr. Matei Balș” Romania, Fundación para el Fomento de la Investigación Sanitaria y Biomédica de la Comunitat Valenciana (FISABIO) Spain, Germans Trias i Pujol University Hospital Spain

# Networks

## Development of Robust and Innovative Vaccine Effectiveness (DRIVE)

- ☐ Belgium
- ☐ European Union
- ☐ Finland
- ☐ France
- ☐ Italy
- ☐ Netherlands
- ☐ Spain
- ☐ United Kingdom

**First published:** 22/05/2019

**Last updated:** 20/08/2024

Network

## Contact details

### Study institution contact

Javier Diez-Domingo

Study contact

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### Primary lead investigator

Anke Stuurman

## Study timelines

### **Date when funding contract was signed**

Planned: 23/05/2017

Actual: 23/05/2017

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### **Study start date**

Planned: 01/10/2021

Actual: 01/10/2021

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### **Data analysis start date**

Planned: 11/05/2022

Actual: 09/05/2022

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### **Date of final study report**

Planned: 30/06/2022

Actual: 05/07/2022

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

Abbott, GSK, SP, Seqirus, Innovative Medicines Initiative 2 (IMI-2)

## Study protocol

## Regulatory

**Was the study required by a regulatory body?**

No

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

Not applicable

## Methodological aspects

### Study type

#### Study type list

**Study type:**

Non-interventional study

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**Scope of the study:**

Effectiveness study (incl. comparative)

**Main study objective:**

To estimate brand-specific seasonal influenza vaccine effectiveness in Europe by health care setting and age group, influenza season 2021/22.

## Study Design

## Non-interventional study design

Case-control

Cohort

## Study drug and medical condition

### Anatomical Therapeutic Chemical (ATC) code

(J07BB) Influenza vaccines

Influenza vaccines

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### Medical condition to be studied

Influenza

## Population studied

### Age groups

Children (2 to < 12 years)

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)

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### Estimated number of subjects

200000

## Study design details



## Outcomes

laboratory confirmed influenza, by type and subtype/lineage

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## Data analysis plan

Site-specific confounder-adjusted influenza vaccine effectiveness estimates will be obtained using logistic or Poisson regression, depending on the study design. The site-specific estimates will be pooled using random effects meta-analysis.

## Documents

### Study results

[DRIVE\\_D7.9-IVE-Results-Report\\_Season-2021-22\\_FINAL.pdf](#)(6.51 MB)

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## Data management

## Data sources

### Data sources (types)

[Disease registry](#)

[Electronic healthcare records \(EHR\)](#)

[Other](#)

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### Data sources (types), other

Prospective patient-based data collection, Exposure registry, Case-control surveillance database

## Use of a Common Data Model (CDM)

**CDM mapping**

No

Data quality specifications

**Check conformance**

Unknown

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**Check completeness**

Unknown

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**Check stability**

Unknown

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**Check logical consistency**

Unknown

Data characterisation

**Data characterisation conducted**

No