# Impact of the COVID-19 epidemic on people with an inflammatory disease (COVIMID)

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# Administrative details

#### **EU PAS number**

EUPAS44456

#### **Study ID**

44457

#### DARWIN EU® study

No

#### **Study countries**

France

#### **Study description**

The proposed study will have an important impact in our knowledge on the impact of such outbreaks in Immune-Mediated Inflammatory Diseases (IMID) patients, namely: - Assessment of the incidence of severe COVID-19 cases in

IMID patients, - Comparison of incidence of severe COVID-19 infections in IMID patients compared to the general population, - Comparison of incidence of severe COVID-19 infections in IMID patients treated with targeted Immuno-Modulating Agents (IMA) or conventional synthetic agents compared to the general population, - Assessment of a differential impact between IMA (e.g. IL-6 blockade versus other modes of action) or Anti-Retroviral Therapy (ART) (e.g. daranuvir/atazanavir/bictegravir/lopinavir versus other ARTs) on the incidence of COVID-19 infections, - Identification of the impact of COVID-19 infection of untimely drug tapering and discontinuation in IMID patients, in terms of loss of compliance as well as disease flare or related consequences. The results will fuel relevant information to set up clinical practice guidelines for the management of IMID patients and their treatments in the context of emergent outbreaks, and to enhance communication of risk.

#### **Study status**

Ongoing

### Research institutions and networks

### Institutions

### Assistance Publique - Hôpitaux de Paris (AP-HP)

France

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Institution (Hospital/Clinic/Other health care facility)

# Contact details

### **Study institution contact**

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Study contact

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**Primary lead investigator** Bruno FAUTREL

Primary lead investigator

# Study timelines

### Date when funding contract was signed

Planned: 10/03/2020

Actual: 03/06/2020

### Study start date

Planned: 01/07/2020 Actual: 22/06/2021

Data analysis start date Planned: 01/07/2020

Actual: 22/06/2021

Date of final study report Planned: 31/12/2022

### Sources of funding

• Other

### More details on funding

French Ministry of Health

# Regulatory

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

No

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

Not applicable

# Methodological aspects

# Study type

# Study type list

### Study type:

Non-interventional study

### Scope of the study:

Assessment of risk minimisation measure implementation or effectiveness Drug utilisation

### Main study objective:

The main objective of the study was to assess the risk of severe COVID-19 among two distinct IMID populations (IMID patients suffering from systemic or organ-specific inflammatory disorders (sosIMID) treated with IMA and IMID patients suffering from HIV (hivIMID) treated with ART, respectively), compared to the general population (individuals without IMID and not treated with IMA or ART).

### Study Design

#### Non-interventional study design

Cohort

# Study drug and medical condition

#### Anatomical Therapeutic Chemical (ATC) code

(J05AF) Nucleoside and nucleotide reverse transcriptase inhibitors Nucleoside and nucleotide reverse transcriptase inhibitors (J05AG) Non-nucleoside reverse transcriptase inhibitors Non-nucleoside reverse transcriptase inhibitors (J05AR) Antivirals for treatment of HIV infections, combinations Antivirals for treatment of HIV infections, combinations (J05AE) Protease inhibitors Protease inhibitors (J05AX) Other antivirals Other antivirals (L04AC) Interleukin inhibitors Interleukin inhibitors Tumor necrosis factor alpha (TNF-alpha) inhibitors (L03AB) Interferons Interferons (L04AX03) methotrexate methotrexate (L01XC02) rituximab rituximab

#### Medical condition to be studied

Multiple sclerosis Neuromyelitis optica spectrum disorder Vasculitis Rheumatoid arthritis Systemic lupus erythematosus Crohn's disease Spondylitis Psoriasis Colitis ulcerative HIV infection

### Additional medical condition(s)

Myelitis,Still's disease,Juvenile idiopathic arthritis Psoriatic arthropathy Juvenile psoriatic arthritis Arthritis enteropathic Cutaneous lupus erythematosus,Systemic scleroderma,Polymyositis

# Population studied

#### Age groups

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)

#### Special population of interest

Immunocompromised

#### **Estimated number of subjects**

1078000

### Study design details

#### Outcomes

Hospital stay in ICU with a specific code of COVID-19 (as principal or related diagnosis) and/or death during a hospital stay with COVID-19 as principal or related diagnosis. A specific ICD-10 code related to COVID-19 infection (U07.1) has been implemented and a specific ICD-10 code for suspicion of COVID-19 is coming. Less severe COVID-19 infections (hospitalization for COVID-19 without ICU stay or death), Death (whatever the place of death), COVID-related deaths occurring during hospitalization with COVID-19, Spacing or discontinuation of IMA and ART dispensation, IMID flare or destabilization (hospital stay with IMID). HIV complications (hospital stay with HIV or complication related to HIV).

#### Data analysis plan

The percentage of severe COVID-19 infections will be compared between IMID patients treated with IMA on the one hand and the HIV population treated with ART on the other hand, taking into account the matching on sex and age with controls from the general population, and using a logistic regression model with inverse probability of treatment weighting (IPTW) propensity score. One

propensity score will be performed for HIV patients treated with ART and other IMIDs treated with IMA, respectively. These models will be repeated for less severe COVID-19 infections, all-cause deaths, and COVID-19-related deaths. Similarly, these models will be repeated to compare the percentage of IMA treatment discontinuation or spacing as well as the percentage of hospitalizations for an IMID flare or HIV complication (respectively). Where possible and relevant, we will compare the effect of the different types of IMA or ART and the effect of co-treatments on these same endpoints.

### Data management

### Data sources

### **Data source(s), other** Système National des Données de Santé "SNDS" France

### Data sources (types)

Administrative healthcare records (e.g., claims)

# 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