# Assesing the Safety of Antihypertensive medication in Pregnancy (ASAP)

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# Administrative details

EU PAS number	
EUPAS104849	
Study ID	
104955	
DARWIN EU® study	
No	
Study countries	
-	
Spain	

### Study status

Ongoing

Research institutions and networks

### **Institutions**

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

Spain

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Institution

### **HSRP Unit**

### Contact details

### **Study institution contact**

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Study contact

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### Primary lead investigator

Clara Rodríguez-Bernal

**Primary lead investigator** 

# Study timelines

### Date when funding contract was signed

Planned: 01/09/2022 Actual: 01/09/2022

### Study start date

Planned: 01/03/2023 Actual: 02/05/2023

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

Planned: 30/12/2025

# Sources of funding

Other

### More details on funding

Agencia Estatal de investigación (National Research Agency)

# 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

Disease epidemiology

Drug utilisation

#### Main study objective:

To carry out a study on the safety of antihypetensive (AH) drugs during pregnancy, on one hand, and the role of hypertension on pregnancy outcomes, on the other, in an attempt to disentangle the effect of the medications from that of the illness itself, using for this purpose the PREGVAL cohort, constructed with data from the Valencia Health System Integrated Database (VID).

# Study Design

### Non-interventional study design

Cohort

### Study drug and medical condition

### **Anatomical Therapeutic Chemical (ATC) code**

(C02AB01) methyldopa (levorotatory) methyldopa (levorotatory) (C07AG01) labetalol labetalol (C08CA05) nifedipine

nifedipine

(C07AB07) bisoprolol

bisoprolol

(C01CA24) epinephrine

epinephrine

(C09CA) Angiotensin II receptor blockers (ARBs), plain

Angiotensin II receptor blockers (ARBs), plain

(C03CA01) furosemide

furosemide

(C04AD03) pentoxifylline

pentoxifylline

(C07AA05) propranolol

propranolol

(C03CA04) torasemide

torasemide

### Medical condition to be studied

Pregnancy

Hypertension

Congenital anomaly

Abortion

Foetal death

Stillbirth

# Population studied

#### Age groups

Adults (18 to < 46 years)

#### Special population of interest

Pregnant women

### **Estimated number of subjects**

600000

# Study design details

#### **Outcomes**

congenital anomalies, abortion, fetal death, stillbirth, neonatal death, Preterm birth, Small for Gestational age.

#### Data analysis plan

We will conduct 3 separate comparisons in our analyses: 1) women with CH exposed to antihypertensive (AH) medications during the pregnancy period vs women with CH unexposed to AH (control), 2) women with CH unexposed to AH (uncontrolled hypertension-considering blood pressure measures during pregnancy) vs. women with CH unexposed to AH (controlled hypertension-considering blood pressure measures during pregnancy) and, 3) women with CH unexposed to AH (controlled hypertension-considering blood pressure measures during pregnancy) vs. women without CH who did not receive AH medications during the pregnancy period (control). In each analysis, we first will determine the frequency of and unadjusted odds ratio (OR) and 95% confidence intervals (CIs) for the different outcomes. To account for the differences in the baseline characteristics in the groups that are being compared, we will perform propensity score analyses. Then, we will use inverse probability treatment-weighting (IPTW).

### 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

Electronic healthcare records (EHR)

# 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