

# Phenotyping and Identification of Biological Markers in STXBP1 Encephalopathy (FIBMEX)

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Study

Planned

## Administrative details

### EU PAS number

EUPAS107644

### Study ID

107645

### DARWIN EU® study

No

### Study countries

☐ Spain

### Study description

This is a prospective observational study to evaluate the phenotype of 10 patients under 10 years of age with developmental epileptic encephalopathy due to STXBP1 gene mutation. The study will consist of a clinical and neurodevelopmental evaluation, magnetic resonance imaging, prolonged electroencephalogram, cardiological study, and cerebrospinal fluid biomarker analysis. A 3-year follow-up of these patients will be performed. The aim of the study is, knowing the baseline phenotype, to analyze the response to commonly used drugs and to anticipate the response to different drugs available on the market in this group of patients based on clinical and biomarker evaluation (EEG, MRI and study of specific proteins and neurotransmitters in plasma, urine and CSF).

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### **Study status**

Planned

## Contact details

### **Study institution contact**

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**Study contact**

[agnagel@neurologiaclinica.es](mailto:agnagel@neurologiaclinica.es)

### **Primary lead investigator**

Antonio Gil-Nagel

**Primary lead investigator**

## Study timelines

**Date when funding contract was signed**

Planned: 14/11/2023

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**Study start date**

Planned: 01/01/2024

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**Date of final study report**

Planned: 31/12/2027

## Sources of funding

- Other

## More details on funding

Fundacion Iniciativa para las Neurociencias

## 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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**Main study objective:**

- To determine the expression pattern of biomarkers in cerebrospinal fluid in STXBP1. - Characterize electroencephalographic patterns and determine the presence of new markers in EEG signal. - In-depth characterization of MR imaging in patients with STXBP1 mutation

## Study Design

**Non-interventional study design**

Cohort

## Population studied

**Age groups**

- Infants and toddlers (28 days – 23 months)
- Children (2 to < 12 years)

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**Estimated number of subjects**

10

## Study design details

**Data analysis plan**

The study group will be compared with a cohort of patients with similar characteristics to those of the study. That is, in the case of CSF with healthy

subjects of the same age and in the case of MRI, EEG with patients affected by other EEDs and with healthy controls.

## 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)

[Other](#)

## 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