

# Delineating a full phenotype of health, neurodevelopment and adaptive functioning in children and young adults with Fetal Valproate Spectrum Disorder.

**First published:** 26/01/2022

**Last updated:** 23/04/2024

Study

Ongoing

## Administrative details

### EU PAS number

EUPAS45205

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### Study ID

47518

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### DARWIN EU® study

No

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### Study countries

☐ Australia

☐ Ireland

☐ New Zealand

## **Study description**

Exposure in the womb to the antiseizure medication sodium valproate (VPA) is associated with an increased risk of altered fetal development leading to a range of congenital anomalies and neurodevelopmental difficulties (Fetal Valproate Spectrum Disorder (ICD-11 LD2F.03). There is limited data available regarding the health and neurodevelopment of children and young people with Fetal Valproate Spectrum Disorder (FVSD). In younger and school age children information is extrapolated from studies investigating the risks associated with VPA exposure, but studies into older children and young people with fetal VPA exposure are extremely limited. Further, there is almost no documented evidence about health and neurodevelopmental outcomes for teenagers and young adults with the condition, particularly from the second decade of life onwards. This project aims to ascertain parent views regarding the health and neurodevelopmental difficulties experienced by children and young people with FVSD as they get older. This is a preliminary study and utilises both standardised and validated questionnaires, and a set of bespoke questions specific to later outcomes that have been developed through expert collaboration and engagement with key charities who support families who have a child with FVSD. While the findings will themselves provide key insights into the wider phenotype of FVSD in older children and young adults, the results will also aid the design of future, more detailed clinical studies regarding health and neurodevelopment in older children and young adults with FVSD, which in turn, will provide the required information to enable optimal diagnosis and intervention through clinical services.

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## **Study status**

Ongoing

## **Research institutions and networks**

# Institutions

## University of Manchester

☐ United Kingdom

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

**Last updated:** 01/02/2024

**Institution**

**Educational Institution**

## Contact details

### Study institution contact

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**Study contact**

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### Primary lead investigator

Rebecca Bromley

**Primary lead investigator**

## Study timelines

### Date when funding contract was signed

Planned: 01/04/2019

Actual: 01/04/2019

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**Study start date**

Planned: 14/02/2022

Actual: 18/02/2022

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**Data analysis start date**

Planned: 01/06/2022

Actual: 01/09/2022

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**Date of final study report**

Planned: 19/12/2022

## Sources of funding

- Pharmaceutical company and other private sector

## More details on funding

IMI ConcePTION, Research/Clinical Salary

## Study protocol

[EUPAS45205-45352.pdf](#)(774.81 KB)

[ConcePTION WP2 Demonstration 3. Protocol Version 2. 24.01.22.pdf](#)(768.53 KB)

## 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:**

Assessment of risk minimisation measure implementation or effectiveness

Disease epidemiology

Other

#### **If 'other', further details on the scope of the study**

Phenotyping Study

#### **Main study objective:**

To ascertain maternal views regarding the health, neurodevelopment and adaptive functioning of children and young adults with Fetal Valproate Spectrum Disorder in order to establish the phenotype of FVSD in older children and young adults.

## Study Design

## Non-interventional study design

Cohort

Cross-sectional

## Study drug and medical condition

### Anatomical Therapeutic Chemical (ATC) code

(N03AG01) valproic acid

valproic acid

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### Medical condition to be studied

Foetal anticonvulsant syndrome

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### Additional medical condition(s)

Fetal Valproate Spectrum Disorder

## Population studied

### Age groups

Children (2 to < 12 years)

Adolescents (12 to < 18 years)

Adults (18 to < 46 years)

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### Estimated number of subjects

114

## Study design details

## **Outcomes**

Parent reported cognitive development as measured by the Patient Reported Outcome Measurement Information System (PROMIS) Cognitive Function Item Bank (custom short-form). The following outcomes will also be explored: - Physical Health - Neurodevelopmental disorders - Service utilization - Academic Functioning & Educational Outcomes - Social Development - Emotional & Behavioral Development - Sensory Issues - Employment (16+ only) - Independence & Daily Living

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## **Data analysis plan**

Data will be explored and described in terms of means, frequencies and percentages for the FVSD and comparison groups. This data will be inspected to develop a preliminary conceptualization of the FVSD phenotype. Differences within the FVSD group by age, sex and dose will also be explored. Appropriate statistical tests (e.g. t-test and Chi-square) will then be used to examine differences between the group with FVSD and the control group and, should large enough numbers be obtained, analysis adjusting for confounder and moderating and/or mediating factors will be undertaken (e.g. multiple linear and logistic regression analyses). Data from each age group will be pooled for analysis where appropriate and group differences will be explored using either total/mean scores (for scales measuring an underlying latent trait) or frequencies (for checklists of directly observable variables).

## **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.

This study has been awarded the ENCePP seal

### **Conflicts of interest of investigators**

[EUPAS45205-45354.pdf](#)(164.98 KB)

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### **Composition of steering group and observers**

[EUPAS45205 Composition of Steering Group and Observers.pdf](#)(53.51 KB)

[EUPAS45205-45486.pdf](#)(53.51 KB)

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## Data sources

### **Data sources (types)**

[Other](#)

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### **Data sources (types), other**

This study will acquire new data directly from parents of children and young people with FVSD. The study will be promoted through collaboration with Charities who support families of children with Fetal Valproate Spectrum Disorder. This will include international Charities but limited to English speaking countries.

## 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