

FOR HEALTHCARE PROFESSIONALS who manage girls and women of childbearing potential and male patients of reproductive potential treated with valproate\* (Depakine)

> Includes information on use of valproate in accordance with the pregnancy prevention program

YOU MUST READ THIS GUIDE CAREFULLY BEFORE ANY PRESCRIPTION OF VALPROATE TO GIRLS (OF ANY AGE), WOMEN OF CHILDBEARING POTENTIAL AND MALE PATIENTS OF REPRODUCTIVE POTENTIAL

\* Valproate is a generic term including valproic acid, valproate sodium, valproate semisodium, valproate magnesium, and valpromide.



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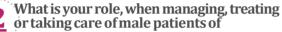
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<sup>o</sup> Congenital malformations <sup>o</sup> Neurodevelopmental disorders <sup>···</sup>

## **MALE PATIENTS OF REPRODUCTIVE POTENTIAL**

to children of fathers treated with valporate What you must know about the potential risk in the 3 months prior to conception ..... 21



reproductive potential with epilepsy if you are a:

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#### HCP: Healthcare Professional; NDD: Neurodevelopmental Disorders; WCBP: Women of Childbearing Potential

## **Purpose of this Healthcare Professional guide**

Valproate use during pregnancy is harmful for the unborn child. Children exposed in utero to valproate have a higher risk for:

- Congenital malformations.
- Neurodevelopmental disorders.

There is a potential risk of neurodevelopmental disorders in children born to men treated with valproate in the 3 months prior to conception.

Valproate educational tools have been developed specifically for HCPs, female and male patients. They include:

- This HCP Guide
- 2 Annual Risk Acknowledgement Forms (female and male patients)
- 2 Patient Guides (female and male patients)
- A Patient Card

The objective of this HCP guide is to provide all HCPs involved in the patient journey with information about:

- The prescribing conditions in girls, WCBP and male patients of reproductive potential.
- The teratogenic and neurodevelopmental risks, associated with the use of valproate during pregnancy.
- The potential neurodevelopmental risk, associated with the use of valproate in the 3 months prior to conception for male patients of reproductive potential,
- The actions necessary to minimize the risks.

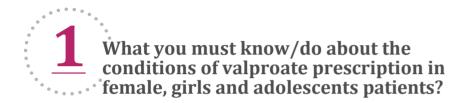
HCPs targeted by this guide include:

- Specialists.
- General Practitioners.
- Gynecologists/Obstetricians, Midwives, Nurses,
- Pharmacists

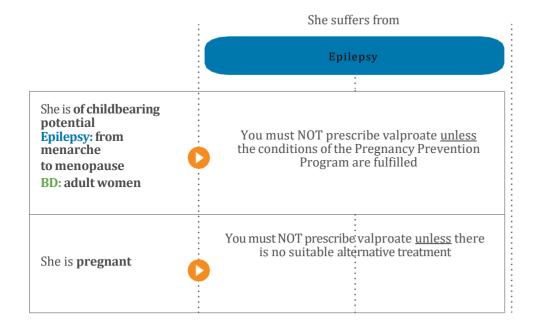
For patients who are minors or without the capacity to make an informed decision, provide the information to their parents/legal representative/ caregiver and make sure they clearly understand it.

Please read the most up-to-date version of the Summary of Product Characteristics before prescribing valproate.

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- Valproate must be initiated and supervised by a specialist experienced in the management of epilepsy.
- It should not be used in female children/adolescents and WCBP unless other treatments are ineffective or not tolerated.
- It should be prescribed and dispensed according to the conditions of the valproate Pregnancy Prevention Program.



**Overview of the Pregnancy Prevention Program Conditions (for details read the Summary of Product Characteristics)** 

- Assess patients for pregnancy potential,
- Explain the risks of congenital malformations and neurodevelopmental disorders,
- Perform a pregnancy test prior to initiation and during treatment, as needed,
- Counsel on the need for effective contraception throughout the treatment,
- Explain the need for pregnancy planning,
- Explain the need to urgently consult the physician in case of pregnancy,
- Review regularly (at least annually) the treatment by the specialist,
- Provide the Patient Guide,
- Complete the Annual Risk Acknowledgement Form with the patient at initiation and at annual review.

These conditions also concern women who are not currently sexually active unless the prescriber considers that there are compelling reasons to indicate that there is no risk of pregnancy.



# What you must do if you are managing a girl/adolescent treated with valproate

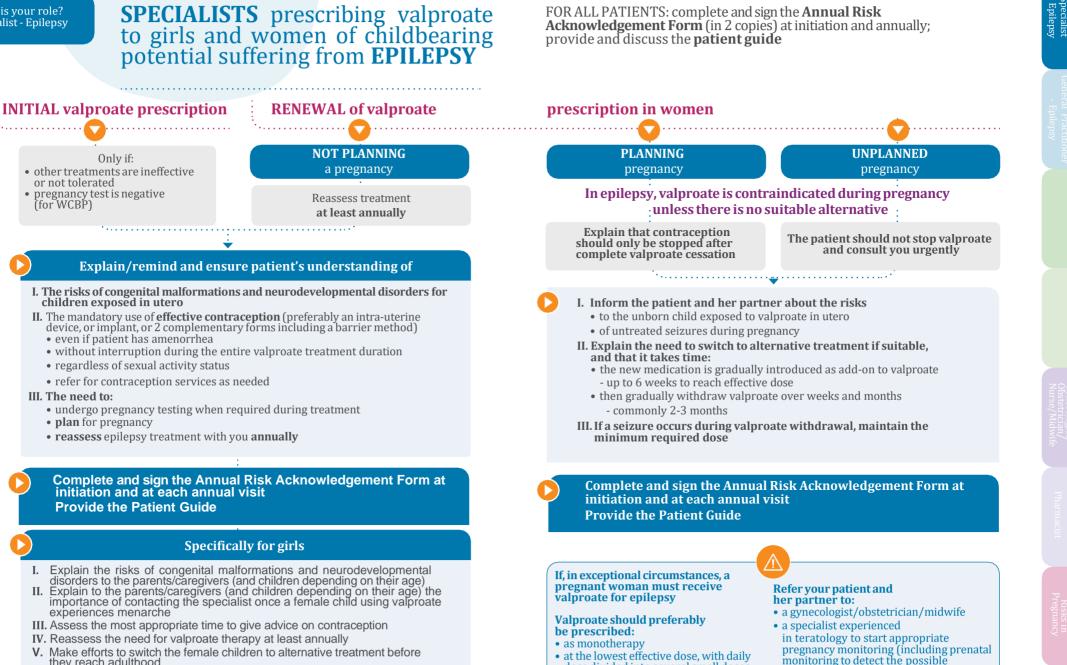
- Explain to her or her parents/caregivers (depending on age) the risks of congenital malformations and neurodevelopmental disorders
- Explain to her or her /caregivers the importance of contacting the specialist once she experiences menarche
- Reassess the need for valproate therapy at least annually and consider alternative treatment options as soon as she experienced menarche
- Make efforts to switch her to alternative treatment before she reaches adulthood.

## Specialist - Epilepsy

General Practitioner - Epilepsy

Gynecologist/Obstetrician/ Nurse/Midwife

Pharmacist



dose divided into several small doses

as a prolonged release

formulation

FOR ALL PATIENTS: complete and sign the **Annual Risk** 

V. Make efforts to switch the female children to alternative treatment before they reach adulthood

8

What is your role?

Specialist - Epilepsy

**INITIAL valproate prescription** 

Only if:

other treatments are ineffective

children exposed in utero

even if patient has amenorrhea

• regardless of sexual activity status

**Provide the Patient Guide** 

• pregnancy test is negative

or not tolerated

III. The need to:

• plan for pregnancy

(for WCBP)

Explain that if she thinks she is pregnant or becomes pregnant, she should not stop valproate and contact you immediately.



occurrence of neural tube defects or

other malformations)

## **GENERAL PRACTITIONERS** managing girls and women of childbearing potential who are suffering from **EPILEPSY** and are taking **valproate**



FOR ALL PATIENTS: provide and discuss the **patient guide** 

In epilepsy, valproate is contraindicated during pregnancy unless there is no suitable alternative

I. Inform the patient and her partner about the risks • to the unborn child exposed to valproate in utero

for switching to alternative treatment if suitable III. Tell your patient to continue valproate until the date

**Provide the Patient Guide** 

• of untreated seizures during pregnancy II. Refer promptly the patient to her specialist

of the appointment with her specialist

If she is

PLANNING

pregnancy

Explain that contraception should only be stopped after

complete valproate cessation

**Refer your patient and her** 

• a gynecologist/obstetrician/midwife

• specialist in teratology for evaluation and further counselling

partner to:

If she has

**UNPLANNED** 

pregnancy

The patient should not stop valproate

and urgently consult her specialist

### **GYNECOLOGISTS, OBSTETRICIANS, MIDWIVES, NURSES** managing girls and women of childbearing potential taking **valproate** Obstetrician/Nurse/ Midwife In epilepsy, valproate is contraindicated during pregnancy unless there is no suitable alternative. GIRLS and NON-PREGNANT WOMEN taking valproate Explain/remind and ensure patient's understanding of I. The risks of congenital malformations and neurodevelopmental disorders for children exposed in utero II. The mandatory use of effective contraception (preferably an intra-Specialist n°1 uterine device, or implant, or 2 complementary forms including a barrier method) even if patient has amenorrhea One specialist of the disease • without interruption during the entire valproate treatment duration for which valproate is prescribed for evaluation regardless of sexual activity status and counselling on switch III. The need to: and discontinuation

- undergo pregnancy testing when required during treatment
- plan for pregnancy

What is your role?

Gvnecologist/

• reassess the treatment with her specialist annually

#### **Provide the Patient Guide**



FOR ALL PATIENTS: provide and discuss the patient guide

if suitable for her

## Specialist n°2

One specialist in teratology to start appropriate pregnancy monitoring (including prenatal monitoring to detect the possible occurrence of neural tube defects or other malformations) for evaluation and counselling

#### **Provide the Patient Guide**

Explain that if she thinks she is pregnant or becomes pregnant, **she** should not stop valproate and contact her specialist immediately. .....

## **PHARMACISTS** counselling girls and women of childbearing potential taking **valproate**

#### Explain/remind and ensure patient's understanding of

- I. The risks of congenital malformations and neurodevelopmental disorders for children exposed in utero
- **II.** The mandatory use of **effective contraception** (preferably an intrauterine device, or implant, or 2 complementary forms including a barrier method)
  - even if patient has amenorrhea
  - without interruption during the entire valproate treatment duration
  - regardless of sexual activity status

#### III. The need to:

- undergo pregnancy testing when required during treatment
- plan for pregnancy
- reassess the treatment with her specialist annually

#### About educational materials

#### \_\_\_\_\_

#### PATIENT CARD

Ensure it is provided to patients

In epilepsy, valproate is contraindicated during pregnancy unless there is no suitable alternative.

- Discuss it every time valproate is dispensed
- Advise the patient to keep it anytime

#### PATIENT GUIDE

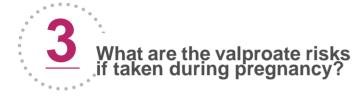
• Ensure the patient received it

- Dispense valproate in the original package with an outer warning
- Unpacking should be avoided. If it cannot be avoided, always provide a copy of the package leaflet, patient card and the outer box if available

Ex sh

Explain that if she thinks she is pregnant or becomes pregnant, **she should not stop valproate and contact her specialist immediately**.





Valproate use during pregnancy is harmful for the unborn child. Children exposed in utero to valproate have a high risk for:

- Congenital malformations,
- Neurodevelopmental disorders.

The risks are dose-related. There is no threshold dose below which no risk exists. Any dose of valproate during pregnancy can be harmful for the unborn child. The nature of the risks for children exposed to valproate during pregnancy is the same irrespective of the indication for which valproate has been prescribed.

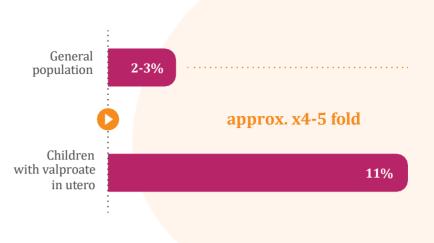
Both valproate monotherapy and valproate polytherapy including other antiepileptics, are frequently associated with abnormal pregnancy outcomes.

In utero exposure to valproate may also result in:

- Unilateral or bilateral hearing impairment or deafness, that may not be reversible <sup>4</sup>,
- Eye malformations (including colobomas, microphthalmos) that have been reported in conjunction with other congenital malformations. These eye malformations may affect vision.

Available evidence does not show that folate supplementation prevents birth defects due to valproate exposure<sup>5</sup>.

## **Risk of congenital malformations**



## 1. Congenital malformations

About  $11\%^3$  of children of epileptic women exposed to valproate monotherapy during pregnancy had major congenital malformations.

This risk is greater than in the general population (about 2-3%).

Available data show an increased incidence of minor or major malformations. The most common types of malformations included:

- Neural tube defects
- Facial dysmorphism
- Cleft lip and palate
- Craniostenosis
- Cardiac, renal and urogenital defects

- Limb defects (including bilateral aplasia of the radius)
- Multiple anomalies involving various body systems.



## 2. Neurodevelopmental disorders

Exposure to valproate in utero can have adverse effects on mental and physical development of the exposed children.

► The exact gestational period of risk is uncertain **and the possibility of a risk throughout the entire pregnancy cannot be excluded**.

▶ Up to 30 or 40% of preschool children exposed in utero may experience delays in their early development such as: <sup>6-9</sup>

- Talking and walking later
- Lower intellectual abilities
- Poor language skills (speaking and understanding)
- Memory problems

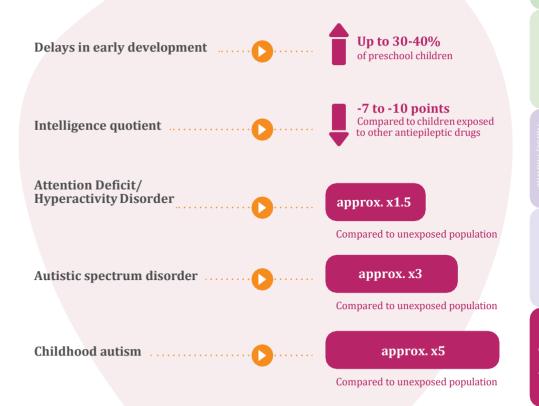
▶ In school aged children (age 6) with a history of valproate exposure in utero, intelligence quotient measured was on average 7-10 points lower than in children exposed to other antiepileptics<sup>10</sup>.

There are limited data on the long-term outcomes.

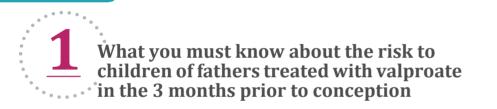
An increased risk in children with a history of valproate exposure in utero compared to the unexposed population:

- Attention deficit/hyperactivity disorder<sup>11</sup>: approximately 1.5-fold,
- Autistic spectrum disorder<sup>12</sup>: approximately 3-fold,
- Childhood autism<sup>12</sup>: approximately 5-fold.

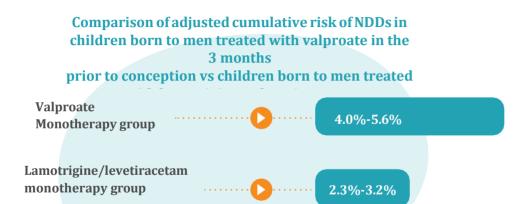




#### Treating male patients



A retrospective observational study in 3 European Nordic countries suggests an increased risk of neuro-developmental disorders (NDDs) in children (from 0 to 11 vears old) born to men treated with valproate as monotherapy in the 3 months prior to conception compared to those born to men treated with lamotrigine or



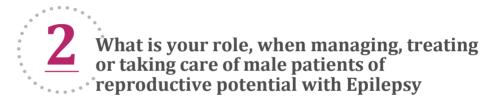
The pooled adjusted hazard ratio for NDDs overall obtained from the

meta-analysis of the datasets was 1.50 (95% Confidence Interval: 1.09, 2.07).

The study was not large enough to investigate associations with specific NDD subtypes studied (composite endpoint included autism spectrum disorder, intellectual disability, communication disorder, attention deficit/hyperactivity disorder, movement disorders). Due to study limitations, including potential confounding by indication and differences in follow-up time between exposure groups, the causal role of valproate is possible but not considered to be confirmed.

The study did not evaluate the risk of NDDs in children born to men who had discontinued valproate for more than 3 months prior to conception (i.e., allowing a new spermatogenesis without valproate exposure).

The observed potential risk of NDDs after paternal exposure in the 3 months before conception is of lower magnitude than the known risk for NDDs after maternal exposure during pregnancy.



It is recommended that valproate is initiated and supervised by a specialist experienced in the management of epilepsy

#### SPECIALIST and GENERAL PRACTITIONER

- Explain/remind and ensure patient's knowledge of
- I. The potential risk of neurodevelopmental disorders for children born to men treated with valproate in the 3 months prior to conception.
- The study did not evaluate the risk with of NDDs in children born to II. men who had discontinued valproate for more than 3 months prior to conception.
- III. As a precautionary measure, discuss with the patient regularly **the need**:
- To consider **effective contraception**, including for a female partner, while using valproate and for 3 months after stopping the treatment.
- To consult a specialist to discuss treatment alternatives when they are planning to conceive a child and before discontinuation of contraception.

Male patients treated with valproate should be regularly reviewed by their prescriber to evaluate whether valproate remains the most suitable treatment for the patient.

For male patients planning to conceive a child, suitable treatment alternatives should be considered and discussed with the male patients. Individual circumstances should be evaluated in each case.

It is recommended that advice from a specialist experienced in the management of epilepsy should be sought as appropriate.

#### **Provide the Patient Guide**

#### PHARMACIST

• Ensure the patient received the Patient Guide and Patient card

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HCP: Health Care Professional; NDD: Neurodevelopmental Disorders; WCBP: Women of Childbearing Potential

# Call for adverse events reporting

Sanofi contact details for reporting of adverse events:

- Telephone: +2 022286000
- E-mail for reporting: <u>pharmacovigilance.eg@sanofi.com</u>

Egyptian Pharmacovigilance Center at Egyptian Drug Authority contact details for reporting of adverse events:

- Address: 21 Abd El Aziz Al Soud Street, El- Manial, Cairo, Egypt
- PO Box: 11451
- Telephone: (+2)02 25354100, Extension: 1470
- Fax: +202 -23610497
- Email: <a href="mailto:pv.followup@edaegypt.gov.eg">pv.followup@edaegypt.gov.eg</a>
- Online reporting: <u>https://primaryreporting.who-umc.org/EG</u>
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## NOTES


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