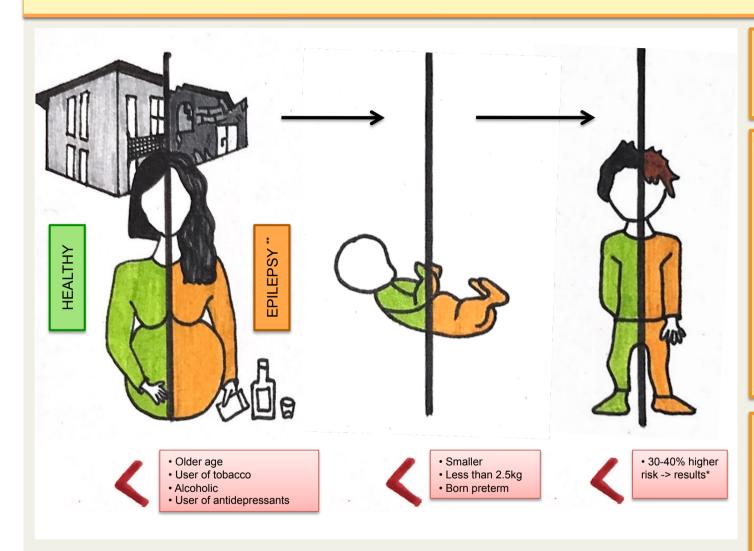
# Mental retardation due to the use of antiepileptic drugs during pregnancy



## **Glossary:**

- ¹NDs: neurodevelopmental disorders
- 2VPA: valproate
- 3AED: antiepileptic drugs

### Source:

Risk of early neurodevelopmental disorders associated with in utero exposure to valproate and other antiepileptic drugs: a nationwide cohort study in France. Joël Coste, Pierre-Olivier Blotiere, [...] Rosemary Dray-Spira. Scientific Reports 2020 (17362). DOI: 10.1038/s41598-020-74409-x

#### Goal:

This poster determines the risk of NDs<sup>1</sup> in a child related to the period of exposure to AED<sup>3</sup>, like the medicine *Valproat*<sup>2</sup>, during pregnancy.

#### Results:

- ➤ If exposed to AED³ during pregnancy, the child has 4 to 5 times higher risk of early\*:
- o NDs1.
- o disorders of psychological development,
- o mental retardation.
- o when older will probably need speech therapy.
- ➤ The results show that AED³ have different impact according to the period of exposure:
- o children exposed during the second and the third trimesters of pregnancy\*\* have a markedly increased risk (even at low doses), unlike the ones exposed only during the first trimester.

#### Relevance:

This study is very important, because e.g. nowadays mothers with stress caused by work and pregnancy at the same time, maybe in a moment of low money, can have attacks of epilepsy. Even a good medic would recommend drugs like VPA<sup>2</sup> because mostly of the studies done before this one weren't so specific and hadn't so much data to analyse.

Maffei Riccardo 5Ga, Menghini Lorenza 5Gb Biology SPF, Peduzzi Stefano BKS Chur, November 2020