

## SCHIZOPHRENIA Factsheet

September 2020

### What are anticonvulsants?

Anticonvulsant medications influence the actions of neurotransmitters including glutamate and GABA, leading to a decrease in brain cell (neuron) excitability. They may be prescribed as an immediate adjunct to antipsychotic medication in order to treat acute symptoms of psychosis, such as aggressive behaviour. They may also be used as part of an ongoing treatment regime in order to supplement antipsychotic effects or combat side effects like movement disorders. Anticonvulsant medications assessed in this topic primarily include valproate, carbamazepine, and lamotrigine.

#### What is the evidence for anticonvulsants?

Moderate to low quality evidence suggests a medium-sized effect of improved mental health with adjunctive lamotrigine as measured on some but not all assessment scales, and with adjunctive valproate, particularly in the short-term (< 4 weeks). Lamotrigine is associated with an increased risk of any adverse effect compared to placebo.

There may be some benefit of adjunctive valproate for reducing aggressive behaviour in the short term (1 week), but not in the longer term (4 weeks). There is a lower risk of constipation and tardive dyskinesia with valproate, but an increased risk of sedation compared to placebo.

Moderate to low quality evidence suggests no improvements in symptoms after augmenting clozapine with lamotrigine or topiramate in treatment-resistant patients.



NeuRA (Neuroscience Research Australia) is one of the largest independent medical and clinical research institutes in Australia and an international leader in neurological research.

Diseases of the brain and nervous system pose the greatest health, economic and social burden of any disease group because they are chronic, debilitating and have no known cures.

Medical research is the cornerstone of efforts to advance the health and wellbeing of families and the community. Our dedicated scientists are focussed on transforming their research into significant and practical benefits for all patients.

While we hope you find this information useful, it is always important to discuss any questions about schizophrenia or its treatment with your doctor or other health care provider.

#### For more information see the technical table

# HOW YOUR SUPPORT HELPS

We are able to make significant advances due to the generosity of countless people. Your donation allows us to continue to work towards transforming lives. For information on how you can support our research, phone 1300 888 019 or make a secure donation at neura.edu.au/donate/schizophrenia.