

# POST-TRAUMATIC STRESS DISORDER Factsheet

August 2021

### What are anticonvulsants?

Anticonvulsants are primarily used to treat epilepsy, but may also be effective for some mental disorders. Anticonvulsant medications influence the actions of neurotransmitters including glutamate and GABA, leading to a decrease in brain cell (neuron) excitability. Anticonvulsant medications for PTSD symptoms assessed in this topic include topiramate, tiagabine, and divalproex.

#### What is the evidence on anticonvulsants for PTSD?

Moderate quality evidence found topiramate improved symptom response more than placebo. Tiagabine showed less symptom improvement than the antidepressant phenalzine, and divalproex showed less symptom improvement than the antidepressants phenelzine, paroxetine, and desipramine. There were more dropouts due to adverse events with topiramate than with the antidepressant brofaromine.

No other significant differences were found in response, symptom improvement or adverse effects between anticonvulsants and other pharmaceutical agents (antidepressants and antipsychotics).



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 PTSD and 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

Barker Street, Randwick NSW 2031 PO Box 1165 Randwick Sydney NSW 2031 Australia