

## POST-TRAUMATIC STRESS DISORDER Factsheet

August 2021

### What are glutamatergic modulators?

Glutamate receptor modulators have been suggested as an adjunctive treatment to psychological exposure therapies when individuals have sub-optimal responses to these therapies. D-cycloserine is a partial N-methyl-D-aspartate (NMDA) agonist that stimulates NMDA glutamate synapses involved in emotional learning and strengthens the fear extinction learning that takes place in exposure-based treatments.

### What is the evidence on D-cycloserine for PTSD?

Moderate to low quality evidence finds no significant improvement in PTSD symptoms with D-cycloserine plus exposure-based treatment compared to placebo plus exposure-based treatment. There may be some improvement in people on serotonin reuptake inhibitor medications, in people with co-occurring anxiety disorders, in people receiving more therapy sessions, and in people given earlier and greater D-cycloserine doses.

For more information see the technical table

### HOW YOUR SUPPORT HELPS

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*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.*