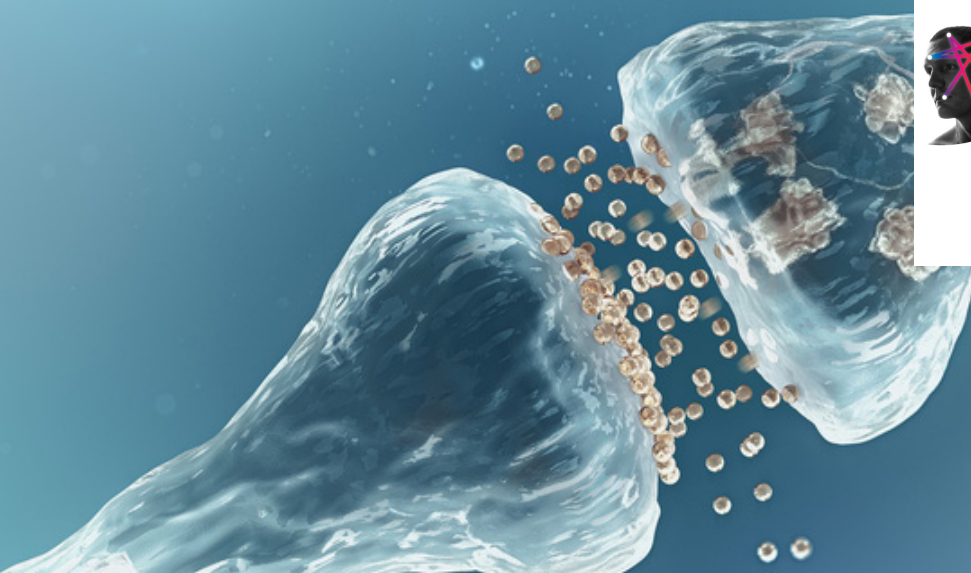




NeuRA

Discover. Conquer. Cure.

SCHIZOPHRENIA LIBRARY



SCHIZOPHRENIA Factsheet

October 2020

What are synaptic proteins?

Synaptic transmission dysfunction is thought to be involved in the development of schizophrenia. Neurons are capable of generating complex patterns of synaptic interconnectivity which are regulated by proteins that are distributed in subcellular compartments of the synapse. Presynaptic compartment injury (e.g. via direct trauma, neurotoxins, viruses, ischemia, or metabolic disorders) and/or disrupted production of neurotrophic factors, contribute to subsequent degeneration of the postsynaptic compartment. These disruptions can in turn alter protein levels.

What is the evidence for synaptic proteins?

Moderate to high quality evidence suggests medium-sized reductions of the synaptic protein synaptophysin in the hippocampus, frontal and cingulate regions of people with schizophrenia. No differences between schizophrenia and controls have been found in reviews of synaptophysin in the occipital or temporal cortices, nor in reviews of SNAP-25, PSD-95, syntaxin or VAMP in the frontal lobes.

For more information see the technical table



NeuRA

Discover. Conquer. Cure.

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.

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.