



### SCHIZOPHRENIA LIBRARY

# SCHIZOPHRENIA Factsheet

## October 2020

#### What is the arculate fasciculus?

The arcuate fasciculus is a bundle of axons that connects the temporal cortex and inferior parietal cortex to locations in the frontal lobe. One of the key roles of the arcuate fasciculus is connecting Broca's and Wernicke's areas, which are involved in producing and understanding language. Therefore, there may be anomalies in the arculate fasciculus of people with schizophrenia who experience auditory-verbal hallucinations.

#### What is the evidence for changes in the arculate fasciculus?

Moderate quality evidence found reduced white matter integrity in the bilateral arcuate fasciculus, including bilateral anterior and posterior segments, and the left long segment.

There was reduced white matter integrity in the left, but not the right arcuate fasciculus in people with schizophrenia who experience auditory-verbal hallucinations.



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 enefits 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**.

NeuRA (Neuroscience Research Australia) Foundation T 1300 888 019 F +61 2 9399 1082 ABN 57 008 429 961 Margarete Ainsworth Building Barker Street, Randwick NSW 2031 PO Box 1165 Randwick Sydney NSW 2031 Australia