

# SCHIZOPHRENIA Factsheet

#### What is treatment-resistant schizophrenia?

Antipsychotic medications generally provide symptom relief and improvement in quality of life for people with schizophrenia. However, some people with schizophrenia find that antipsychotic medications do not provide adequate relief from their symptoms. This topic covers the course and outcome of treatment resistance, please see the treatment topics for information on potential treatments for treatment-resistant schizophrenia.

### What is the evidence for treatment-resistant schizophrenia?

Moderate to high quality evidence finds a response rate to clozapine of around 40% after not responding to other antipsychotics. Authors suggest around 12-20% of people are ultra-resistant (not responding to at least two antipsychotics and clozapine). Moderate quality evidence finds people with treatment-resistant schizophrenia have higher rates of smoking, alcohol or substance abuse, suicide ideation, more glutamatergic abnormalities, and more familial loading for schizophrenia than people with treatment-responsive schizophrenia. They also have lower dopaminergic abnormalities, less grey matter and poorer quality of life. Only 4% reported severe adverse reactions to treatment. Costs are 3 to 11 times higher per annum for people with treatment-resistant schizophrenia than for people who respond to treatment.

Moderate quality evidence suggests optimal identification of people with treatment resistance involves; 1) At least a moderate severity of illness with functional impairment, and less than 20% symptom reduction for at least 12 weeks; 2) At least two oral antipsychotics and one long-acting injectable antipsychotic needs to have been tried for 6 weeks (oral) and 4 months (injectable), at a dose of at least 600 mg of chlorpromazine equivalents. Information on past response should be gathered from patient/carer reports, staff and case notes, pill counts, and dispensing charts; 3) Current adherence to treatment needs to be at least 80% of prescribed doses and should be assessed using at least two sources (e.g. pill counts, dispensing chart reviews, and patient/carer report). Antipsychotic plasma levels should be monitored on at least one occasion and trough antipsychotic serum levels need to be measured on at least two occasions separated by at least two weeks, and without prior notification; 4) Standardised rating scales with prospective evaluation needs to be used to assess symptoms, cognition and functioning; 5) Specify time course of illness; early onset = within one year of treatment onset, medium-term onset = one to five years after treatment onset, late onset = over five years after treatment onset; 6) Ultra-treatment resistance is classified using the above criteria plus failure to respond to clozapine treatment.

#### 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**.

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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.