

SCHIZOPHRENIA LIBRARY

# SCHIZOPHRENIA Factsheet

#### What is clozapine?

Second generation antipsychotics (sometimes referred to as 'atypical' antipsychotics) such as clozapine are a newer class of antipsychotic medication than first generation 'typical' antipsychotics. Second generation antipsychotics are effective for the positive symptoms of schizophrenia. It is sometimes claimed that they are more effective than first generation antipsychotics in treating the negative symptoms of schizophrenia, although the evidence for this is weak. Negative symptoms include a lack of ordinary mental activities such as emotional expression, social engagement, thinking and motivation, whereas positive symptoms include the experiences of perceptual abnormalities (hallucinations) and fixed, false, irrational beliefs (delusions). Second generation antipsychotics may also cause less extra-pyramidal side effects. These include dyskinesias such as repetitive, involuntary, and purposeless body or facial movements, Parkinsonism (cogwheel muscle rigidity, pill-rolling tremor and reduced or slowed movements), akathisia (motor restlessness, especially in the legs, and resembling agitation) and dystonias such as muscle contractions causing unusual twisting of parts of the body, most often in the neck. These effects are caused by the dopamine receptor antagonist action of these drugs.

#### What is the evidence for clozapine?

Moderate to high quality evidence suggests clozapine may provide benefit for symptoms, global state, reducing relapse, and increasing study retention compared to first generation antipsychotics. Clozapine may provide no advantage over first generation antipsychotics for outcomes of mortality, ability to work, or suitability for early hospital discharge. Moderate quality evidence suggests clozapine may be associated with less movement disorders, increased blood problems, increased drowsiness, hypersalivation and temperature compared to first generation antipsychotics.

Moderate quality evidence suggests clozapine may produce better clinically significant response and reduced symptom severity when compared to second generation zotepine, as well as fewer hospital admissions than other second generation antipsychotics. Clozapine is associated with fewer extrapyramidal effects than risperidone and zotepine. More hypersalivation, white blood cell reduction, triglycerides, sedation, seizures, and weight gain are reported with clozapine than risperidone, olanzapine, or quetiapine.

Moderate quality evidence suggests no differences in global state or relapse rates between clozapine and clozapine plus sulpiride. There is less hypersalivation, appetite loss, weight gain and abdominal distension with clozapine plus sulpiride compared to clozapine alone.

#### 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.

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