



What is quetiapine?

Second generation antipsychotics (sometimes referred to as 'atypical' antipsychotics) such as quetiapine 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 quetiapine?

High and moderate quality evidence suggests quetiapine increases study retention more than placebo, with no differences in movement disorders. There are also no differences in study retention, global state or mental state between quetiapine and first generation antipsychotics. However, quetiapine may be associated with fewer patients leaving the study due to adverse effects than with first generation antipsychotics, with fewer extrapyramidal effects, lower prolactin levels, and less weight gain.

Moderate to low quality evidence suggests no difference in mental state between quetiapine and second generation antipsychotic clozapine, although quetiapine may be associated with less hypersalivation, sedation, electrocardiogram alterations, and lower triglyceride levels than clozapine.

Moderate quality evidence suggests no differences in treatment retention between quetiapine and second generation antipsychotic risperidone, but risperidone has higher efficacy than quetiapine for improving symptoms. Moderate to high quality evidence suggests quetiapine may be associated with fewer extrapyramidal effects and less sedation, but more cholesterol increases, than risperidone.

Moderate quality evidence suggests quetiapine increased study attrition more than second generation antipsychotic paliperidone, and had a lower risk of hypertonia and tremor.

Moderate to high quality evidence suggests second generation antipsychotic olanzapine improves general mental state more than quetiapine. High quality evidence suggests olanzapine results in fewer people leaving the study early due to higher efficacy and there are less hospital re-admissions than with quetiapine. However, moderate quality evidence suggests quetiapine had less weight gain, and high quality evidence suggests less extrapyramidal effects with quetapine than olanzapine.

Moderate quality evidence suggests no differences in mental state between ziprasidone and quetiapine. Quetiapine was associated with fewer extrapyramidal adverse effects than ziprasidone, but led to more weight gain.

For more information see the technical table

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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 schizophrenia or its treatment with your doctor or other health care provider.