Committee to Evaluate Drugs (CED)

Recommendations and Reasons

Quetiapine fumarate

Product:
QUETIAPINE FUMARATE (Seroquel®)
50mg, 200mg, 300mg, 400mg extended-release tablets

Class of drugs: Anti-psychotic

Indication: Treatment of schizophrenia

Manufacturer: AstraZeneca Canada

CED Recommendation-

The CED recommended that quetiapine fumarate extended-release not be listed as General Benefit on the Ontario Drug Benefit (ODB) Formulary, on the basis that it costs more than alternatives that are already funded.

Executive Officer Decision

Taking into consideration the CED’s recommendation and based on a subsequent listing agreement with the manufacturer that addresses cost, the Executive Officer decided to list quetiapine fumarate extended-release as General Benefit on the ODB Formulary.

Status

Funding is available through the Ontario Public Drugs Programs

Highlights of Recommendation:

- Quetiapine fumarate extended release (XR) is a once daily formulation of quetiapine fumarate immediate release. The 25mg, 100mg, 200mg, and 300mg immediate release tablets are listed on the ODB Formulary and the 150mg tablet is not.
- The extended release formulation allows patients who are clinically stable on the immediate release formulation, which is taken twice daily, to be switched to the once daily dosing regimen.
- The CED looked at three studies, including one that compared quetiapine fumarate XR to placebo and to quetiapine fumarate immediate release.
- The new formulation works as well as the twice-daily dosage and patients tolerate it well. There is no evidence of a therapeutic advantage for the longer-acting formulation.
- Overall, the CED noted that the extended release formulation is as safe and effective as the immediate release formulation. However, quetiapine fumarate XR costs more than other antipsychotic agents currently available on the ODB Formulary. Although it is priced at parity with the manufacturer’s quetiapine fumarate immediate release product, there are generic quetiapine fumarate immediate release products.

Background:

Schizophrenia is a complex mental illness. Researchers believe that a biochemical imbalance in the brain causes the symptoms of schizophrenia, which may include hallucinations, delusions, disorganized thinking, impaired judgment, impulsiveness, social withdrawal, and difficulties with perception, memory, or abstract thinking.

Although there is no cure for schizophrenia, antipsychotic medications can help control the symptoms of the illness by changing the balance of chemicals in the brain. Antipsychotic medications are only a part of a comprehensive treatment plan that includes education, counseling and social support programs.

Antipsychotic medications are grouped into classes according to their side effects. Older, first-generation medications are known as conventional antipsychotics or neuroleptics; newer, second-generation agents are known as atypical antipsychotics. There are currently four oral atypical antipsychotics and 12 oral conventional agents listed on the Ontario Drug Benefit Formulary and clozapine is funded through the Special Drugs Program.

Quetiapine fumarate is an oral atypical antipsychotic agent.

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**Detailed Discussion:**

- Quetiapine fumarate XR is a once-daily, extended-release formulation of quetiapine fumarate. Quetiapine fumarate immediate-release is taken twice daily and is listed on the ODB Formulary as General Benefit.

- A multi-centre, randomized, double-blind, placebo controlled trial (Kahn et al. *J Clin Psychiatry 2007*) of 6-weeks duration compared the efficacy of quetiapine fumarate XR with placebo and with quetiapine fumarate immediate-release. The study demonstrated that there was a significant reduction in the total score on the Positive and Negative Symptom Scale (PANSS) compared to baseline for treatment groups versus placebo group. The study concluded that quetiapine fumarate XR was effective for the management of symptoms associated with acute schizophrenia and was tolerated as well as the quetiapine fumarate immediate-release.

- Two unpublished studies from the manufacturer's submission demonstrated that once daily quetiapine fumarate XR is effective and well tolerated in patients switched from quetiapine immediate-release at the same total daily dosage.

- There are no direct comparison data of quetiapine fumarate XR versus other alternate atypical antipsychotic agents, and relative efficacy cannot be determined.

- The manufacturer did not provide a pharmacoeconomic analysis, on the basis that quetiapine fumarate XR is priced at parity with the manufacturer's quetiapine fumarate immediate release. However, quetiapine fumarate XR costs more than generic quetiapine fumarate. In addition, quetiapine fumarate XR also costs more than other long-acting antipsychotics already listed on the ODB Formulary.

- Overall, the CED noted that the unpublished trials showed comparable efficacy and safety of quetiapine fumarate XR with immediate release quetiapine fumarate. No evidence of a therapeutic advantage was seen with a longer-acting, once daily formulation. Because quetiapine fumarate XR costs more than generic quetiapine fumarate immediate release and other atypical antipsychotics, the CED recommended that the Ministry not list quetiapine fumarate XR on the ODB Formulary.

**CEDAC Recommendation:**

(http://www.cadth.ca/index.php/en/cdr/recommendations)

The Canadian Expert Drug Advisory Committee (CEDAC) did not review this product.