IN BRIEF A Summary of the Evidence

Desvenlafaxine Versus Venlafaxine for the Treatment of Adult Patients With Major Depressive Disorder: A Review

Key Messages

• Desvenlafaxine does not appear to be more clinically effective than venlafaxine for the treatment of adult patients with major depressive disorder (based on limited evidence).

• The cost-effectiveness of desvenlafaxine compared with venlafaxine for the treatment of adult patients with major depressive disorder is unknown.

Context

Major depressive disorder (MDD) is a chronic condition characterized by at least two weeks of depressed mood or a reduced interest or pleasure in the activities of daily living. Other symptoms can include changes in weight, appetite, and/or sleep; fatigue or loss of energy; feelings of worthlessness or inappropriate guilt; inability to concentrate; and recurrent thoughts of death or suicide. In Canada, 4.7% of the population report MDD symptoms in a given year, and 11.3% of Canadians will experience MDD at some point in their lives. MDD can affect a person’s ability to function normally and is the second-leading cause of disability worldwide. As a result, the economic impact of the disorder is considerable due to its treatment costs and to lost productivity.

Technology

Serotonin-norepinephrine reuptake inhibitors (SNRIs) are a first-line drug option for the treatment of MDD. They work by increasing the levels of the neurotransmitters serotonin and norepinephrine in the brain. Both of these neurotransmitters play an important role in mood. Venlafaxine was the first-available SNRI and is considered to be one of the most effective antidepressants available. Desvenlafaxine is the primary metabolite of venlafaxine, and it is thought that it might have some advantages over venlafaxine. For example, it could result in more stable plasma concentrations and fewer drug interactions and, theoretically, because desvenlafaxine is better at increasing serotonin and norepinephrine levels, there is a possibility it could be more effective.

Issue

A review of the evidence on the clinical and cost-effectiveness of desvenlafaxine compared with venlafaxine for the treatment of adult patients with MDD will help inform treatment decisions.

Methods

A limited literature search was conducted of key resources, and titles and abstracts of the retrieved publications were reviewed. Full-text publications were evaluated for final article selection according to predetermined selection criteria (population, intervention, comparator, outcomes, and study designs).

Results

The literature search identified 307 citations, with no additional articles identified from other sources. Of these, three systematic reviews met the criteria for inclusion in this review.
Read more about CADTH and its review of desvenlafaxine versus venlafaxine for the treatment of adult patients with major depressive disorder at:
cadth.ca/desvenlafaxine-versus-venlafaxine-treatment-adult-patients-major-depressive-disorder-review-0

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