Ramipril/Felodipine

Product:
RAMIPRIL/FELODIPINE (Altace Plus Felodipine®)

Class of drugs:
Anti-hypertensive agent

Indication:
Treatment of mild to moderate high blood pressure in patients who need combination drug therapy

Manufacturer:
sanofi-aventis Canada

Highlights of Recommendation:
- Ramipril/felodipine (Altace Plus Felodipine) is a product that contains ramipril and felodipine in a single pill. It is used to treat high blood pressure. Ramipril and felodipine are also available as separate pills and are currently listed on the Ontario Drug Benefit (ODB) Formulary as General Benefits.
- Clinical trials show that using ramipril/felodipine (Altace Plus Felodipine) is more effective than using either ramipril or felodipine alone. However, there are no clinical trials to compare the effectiveness of ramipril/felodipine (Altace Plus Felodipine) with ramipril and felodipine used together as separate pills.
- There is no evidence to indicate that ramipril/felodipine (Altace Plus Felodipine) has fewer side effects than either ramipril or felodipine.
- Ramipril/felodipine (Altace Plus Felodipine) has not been proven to improve patient compliance.
- Ramipril/felodipine (Altace Plus Felodipine) is available as a 2.5mg/2.5mg and 5mg/5mg fixed combination tablets. Using ramipril/felodipine (Altace Plus Felodipine) at ramipril doses above 5mg per day, which is often the dose needed, costs more than taking ramipril and felodipine as separate pills.
- Overall, the Committee noted that the ramipril/felodipine (Altace Plus Felodipine) combination product offers no advantage in terms of effectiveness, side effects, and patient compliance over using ramipril and felodipine as separate pills. Also, using this product at doses higher than 5mg of ramipril may lead to increased drug costs. The Committee recommended ramipril/felodipine (Altace Plus Felodipine) not be listed on the ODB Formulary.

Background:
High blood pressure affects one in five Canadians. Excess weight, lack of exercise, unhealthy diet, stress, smoking, and excessive alcohol consumption increase the risk for high blood pressure. Some patients, however, still develop high blood pressure despite modifying their lifestyle, and require medication to control their blood pressure.

Several types of medications are used to treat high blood pressure, and work differently to lower blood pressure. These include alpha-blockers, angiotensin II receptor blockers, angiotensin-converting enzyme (ACE) inhibitors, beta-blockers, calcium channel blockers, central-acting agents, diuretics, and vasodilators. Ramipril is an ACE inhibitor and felodipine is a calcium channel blocker.

The Formulary funds many of these medications to treat high blood pressure. The standard approach to treating high blood pressure is to prescribe one drug at a time; a second drug is usually added only if the first drug was not effective or the patient experienced side effects at the higher doses.

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Detailed Discussion:

- The manufacturer, sanofi-aventis Canada, asked the Ontario Ministry of Health and Long-Term Care to reimburse ramipril/felodipine (Altace Plus Felodipine) on the ODB Formulary.

- The company presented evidence that indicated significantly greater reduction in systolic and diastolic blood pressure for ramipril/felodipine (Altace Plus Felodipine) compared to each of ramipril or felodipine alone in patients with mild to moderate hypertension. However, no randomized controlled trials (RCTs) comparing the fixed-dose combination with the co-administration of its individual components are available. Therefore, no information on potential synergistic improvements with the fixed dose combination is available.

- The available evidence did not address the issue of increased compliance with the fixed dose combination.

- The frequency and/or severity of adverse events with the fixed dose combination were similar to that observed for the individual components.

- Common side effects of ramipril/felodipine (Altace Plus Felodipine) include persistent coughing, dizziness and headache.

- The recommended dose range of ramipril in the treatment of hypertension is 2.5mg to 20mg per day and doses are often titrated above 5 mg per day. The use of ramipril/felodipine (Altace Plus Felodipine) at doses of ramipril above 5mg per day would be more expensive than the combined use of the individual components, resulting in higher costs for drug plans.

- Overall, the Committee noted that there was insufficient evidence to support a meaningful benefit in terms of clinical efficacy, improved compliance, or improved safety profile with the fixed-dose combination versus administration of the single agent components together.

CEDAC Recommendation:

The Canadian Expert Drug Advisory Committee (CEDAC) recommended not to list ramipril/felodipine (Altace Plus Felodipine).