Report on New Patented Drugs – Isentress

Under its transparency initiative, the PMPRB publishes the results of the reviews of new patented drugs by Board Staff, for purposes of applying the Board's *Excessive Price Guidelines* (Guidelines) for all new active substances introduced after January 1, 2002.

**Brand Name:** Isentress

**Generic Name:** *(raltegravir potassium)*

**DIN:** 02301881 (400 mg tablet)

**Patentee:** Merck Frosst Canada Ltd.

**Indication – as per product monograph:**

In combination with other antiretroviral agents is indicated for the treatment of HIV-1 infection in treatment-experienced adult patients who have evidence of viral replication and HIV-1 strains resistant to multiple antiretroviral agents.

**Date of Issuance of First Patent Pertaining to the Medicine:** February 13, 2007

**Notice of Compliance with Conditions (NOC/c):** November 27, 2007

**Date of First Sale:** November 28, 2007

**ATC Class:** J05AX

Antiinfectives for System Use; Antivirals for system use; Direct Acting Antivirals; Other antivirals

**APPLICATION OF THE GUIDELINES**

**Summary**

The introductory price of Isentress was found to be within the Guidelines because the cost of therapy did not exceed the cost of therapy of existing drugs in the therapeutic class comparison and did not exceed the range of prices of the same medicine in the comparator countries listed in the *Patented Medicines Regulations* (Regulations) in which Isentress was sold.
Scientific Review

Isentress is a new active substance and the PMPRB’s Human Drug Advisory Panel (HDAP) recommended that Isentress be classified as a category 3 new medicine (provides moderate, little or no therapeutic advantage over comparable existing medicines).

The Therapeutic Class Comparison (TCC) test of the Guidelines provides that the price of a category 3 new drug product cannot exceed the prices of other comparable drugs that treat the same disease or condition. Comparators are generally selected from among existing drug products in the same 4th level of the World Health Organization (WHO) Anatomical Therapeutic Chemical (ATC) classification system that are clinically equivalent in addressing the approved indication. See the PMPRB's Compendium of Guidelines, Policies and Procedures for a more complete description of the Guidelines and the policies on TCCs.

The HDAP recommended Fuzeon (enfuvirtide), Aptivus (tipranavir) plus Norvir Sec (ritonavir), Aptivus (tipranavir) plus Norvir Liquid (ritonavir), Prezista (darunavir ethonolate) plus Norvir Sec (ritonavir), and Prezista (darunavir ethonolate) plus Norvir Liquid (ritonavir) as appropriate comparators. Fuzeon shares the same 4th level ATC class as Isentress and is indicated in combination with other antiretroviral agents for the treatment of HIV-1 infection in treatment-experienced patients with evidence of HIV-1 replication despite ongoing antiretroviral therapy. Aptivus and Prezista, two protease inhibitors, which do not share the same 4th level ATC class as Isentress, are both indicated for treatment-experienced patients infected with HIV. They are included in treatment guidelines and review documents as treatment options for treatment-experienced adult patients.

The Guidelines provide that the dosage recommended for comparison purposes will normally not be higher than the maximum of the usual recommended dosage. The recommended comparable dosage regimens for Isentress and the comparable drug products were based on their respective product monographs and supported by clinical literature.

Price Review

Under the Guidelines, the introductory price of a category 3 new drug product will be presumed to be excessive if it exceeds the prices of all of the comparable drug products based on the TCC test or if it exceeds the range of prices of the same medicine sold in the seven countries listed in the Regulations.

The introductory price of Isentress 400 mg tablet was within the Guidelines as the cost per treatment did not exceed the cost per treatment of the comparator medicines as shown in the table below.
## Introductory Period (November to December 2007)

<table>
<thead>
<tr>
<th>Trade name</th>
<th>Strength</th>
<th>Dosage Regimen (Daily)</th>
<th>Unit Price</th>
<th>Treatment Cost (Daily)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Isentress (raltegravir)</td>
<td>400 mg</td>
<td>2 tablets</td>
<td>$13.5000&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>$27.0000</td>
</tr>
<tr>
<td>Fuzeon (enfuvirtide)</td>
<td>108 mg</td>
<td>2 vials</td>
<td>$39.7600&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>$79.5200</td>
</tr>
<tr>
<td>Aptivus (tipranavir) + Norvir Sec (ritonavir)</td>
<td>250 mg + 100 mg</td>
<td>4 capsules + 4 capsules</td>
<td>$8.2500&lt;sup&gt;(1)&lt;/sup&gt; + $1.3625&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>$38.4500</td>
</tr>
<tr>
<td>Aptivus (tipranavir) + Norvir Liquid (ritonavir)</td>
<td>250 mg + 80 mg/mL</td>
<td>4 capsules + 5 mL</td>
<td>$8.2500&lt;sup&gt;(1)&lt;/sup&gt; + $1.0898&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>$38.4490</td>
</tr>
<tr>
<td>Prezista (darunavir ethonolate) + Norvir Sec (ritonavir)</td>
<td>300 mg + 100 mg</td>
<td>4 tablets + 2 capsules</td>
<td>$6.9600&lt;sup&gt;(1)&lt;/sup&gt; + $1.3625&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>$30.5650</td>
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<tr>
<td>Prezista (darunavir ethonolate) + Norvir Liquid (ritonavir)</td>
<td>300 mg + 80 mg/mL</td>
<td>4 tablets + 2.5 mL</td>
<td>$6.9600&lt;sup&gt;(1)&lt;/sup&gt; + $1.0898&lt;sup&gt;(1)&lt;/sup&gt;</td>
<td>$30.5645</td>
</tr>
</tbody>
</table>

**Sources:**

<sup>(1)</sup> Régie de l’assurance maladie du Québec, Juin 2007

In 2007, Isentress was being sold in three countries listed in the Regulations, namely Sweden, Switzerland and the United States. In compliance with the Guidelines, the price of Isentress in Canada did not exceed the range of prices in those countries, it was the lowest.

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**The publication of Summary Reports is part of the PMPRB’s commitment to make its price review process more transparent.**

Where comparators and dosage regimens are referred to in the Summary Reports, they have been selected by the HDAP for the purpose of carrying out the PMPRB’s regulatory mandate, which is to review the prices of patented medicines sold in Canada to ensure that such prices are not excessive.

The PMPRB reserves the right to exclude from the therapeutic class comparison list any drug if it has reason to believe it is being sold at an excessive price.

In its Summary Reports, the PMPRB will also refer to the publicly available prices of comparators provided such prices are not more than 10% above a non-excessive price in which case no price will be made available. As a result, the publication of these prices is for information purposes only and should not be relied upon as being considered within the Guidelines.

The information contained in the PMPRB’s Summary Reports should not be relied upon for any purpose other than stated and is not to be interpreted as an endorsement, recommendation or approval of any drug nor is it intended to be relied upon as a substitute for seeking appropriate advice from a qualified health care practitioner.
References – Isentress

1. Anonymous. 48-week data on raltegravir in naïve patients. AIDS Patient Care Stds 2007; 21(9):703.


