

**VOLUNTARY COMPLIANCE UNDERTAKING  
OF  
SANOFI PASTEUR LIMITED (FORMERLY AVENTIS PASTEUR LIMITED)  
TO  
THE PATENTED MEDICINE PRICES REVIEW BOARD**

**1. Product Summary**

- 1.1 Dukoral™ (Oral, Inactivated Travellers' Diarrhea and Cholera Vaccine) is a patented medicine sold in Canada by Sanofi Pasteur Limited (sanofi pasteur), formerly Aventis Pasteur Limited, under license from SBL Vaccine AB.
- 1.2 Dukoral™ is indicated for the protection against travellers' diarrhea and/or cholera in adults and children 2 years of age and older who will be visiting areas where there is a risk of contracting travellers' diarrhea caused by enterotoxigenic *E. coli* or cholera caused by *V. cholerae*. Dukoral™ is classified in the WHO ATC index 2003 as a member of the 4<sup>th</sup> level ATC class J07AE: vaccines; cholera vaccines, and is the first entry in this class to be introduced in Canada. Dukoral™ (DIN 02247208) is supplied in vials containing one dose of vaccine (1mg Recombinant *cholera* toxin B subunit per dose; 250 m *Vibrio cholerae Inaba* 48 classical biotype, heat inactivated, per dose; 250 m *Vibrio cholerae Inaba* 6973 E1 Tor biotype, formalin inactivated, per dose; 250 m *Vibrio cholerae Ogawa* 50 classical biotype, formalin inactivated, per dose, and 250 m *Vibrio cholerae Ogawa* 50 classical biotype, heat inactivated, per dose).
- 1.3 Canadian Patent 1,340,577 pertaining to Dukoral™ was granted to Vitec AB Sweden on June 1, 1999 and will expire on June 1, 2016. Sanofi Pasteur Limited is the patentee for purposes of the Patented Medicine Prices Review Board (PMPRB).
- 1.4 Health Canada issued a Notice of Compliance for Dukoral™ on February 21, 2003. Sanofi pasteur began selling Dukoral™ on April 23, 2003.

**2. Application of the Excessive Price Guidelines**

- 2.1 The PMPRB's Human Drug Advisory Panel (HDAP) recommended that Dukoral™ be classified as a category 3 new medicine. For the prophylaxis of traveller's diarrhea, the HDAP recommended trimethoprim/sulfamethoxazole, ciprofloxacin and norfloxacin as comparators.
- 2.2 In accordance with the PMPRB's Excessive Price Guidelines (the Guidelines), Board Staff conducted the review of the price of Dukoral™. A Therapeutic Class Comparison (TCC) test and an International Price Comparison (IPC) test were conducted. The results of the IPC test indicated that the introductory price of Dukoral™ of \$28.5206 per vial appeared to exceed the maximum non-excessive (MNE) price of \$25.1842 by 13.2% based on the highest international price, namely the U.K. At the time of introduction in

2003 Dukoral™ was sold in Sweden and the U.K. Dukoral™ is presently sold in France, Germany, Italy, Sweden and the U.K.

- 2.3 The price review results showed that the average transaction price (ATP) of Dukoral™ continued to exceed the Guidelines in 2004 and the first half of 2005, such that cumulative excess revenues as of June 30, 2005 totalled \$481,198.49.
- 2.4 The MNE prices for 2004 and 2005 are \$25.7383 and \$25.9901 respectively. Assuming that the Canadian price does not become the highest of the comparator countries, the 2006 MNE price would be \$26.6449.

**3. Position of Patentee**

- 3.1 This Voluntary Compliance Undertaking (VCU) constitutes no admission by sanofi pasteur that the price of Dukoral™ is or was excessive for purposes of the *Patent Act*.

**4. Terms of the Voluntary Compliance Undertaking**

4.1 Under the terms of this VCU, sanofi pasteur undertakes as follows:

- a) To agree that the MNE price of Dukoral™ was \$25.1842 in 2003, \$25.7383 in 2004 and that it is \$25.9901 in 2005. Based on the CPI methodology, the MNE price is calculated to be \$26.6449 in 2006.
- b) To reduce the average transaction price of Dukoral™ by the end of the January 1 to June 30, 2006 regulatory filing period to the lower of the 2006 MNE price of \$26.6449 or the highest international price.
- c) To offset excess revenues received during the period April 23, 2003 to June 30, 2005 by making a payment to Her Majesty the Queen in Right of Canada, within 30 days of acceptance of this VCU, in the amount of \$481,198.49.
- d) To offset any excess revenues received during the period July 1, 2005 to December 31, 2005 by making a payment to Her Majesty the Queen in Right of Canada within 30 days of the filing of semi-annual price and sales data as required by the *Patented Medicines Regulations* in the amount of the excess revenues, as calculated by the PMPRB, received as a result of selling Dukoral™ at prices higher than the MNE price of \$25.9901 during that period.
- e) To ensure that the price reported by sanofi pasteur remains within the Guidelines while Dukoral™ is under the PMPRB's jurisdiction or such time as Dukoral™ is no longer sold by sanofi pasteur in Canada.

**Sanofi Pasteur Limited**

Signature: \_\_\_\_\_

Company Officer: \_\_\_\_\_

Position: \_\_\_\_\_

Date: \_\_\_\_\_