STATUS DECISION OF CONTROLLED AND NON-CONTROLLED SUBSTANCE(S)

Substance: 2-Hydroxyestrone

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

Controlled ☐
Not Controlled ☑

under the schedules of the Controlled Drugs and Substances Act (CDSA) for the following reason(s):

• The substance has not been shown in the scientific literature to display anabolic activity, and is not included under item 23 of Schedule IV to the CDSA.

Prepared by: ___________________________ Date: August 16th 2011
Vincent Marleau

Verified by: ___________________________ Date: __________
Mark Kozlowski

Approved by: ___________________________ Date: __________
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Eva Roig
Drug Status Report

**Drug:** 2-Hydroxyestrone

**Drug Name Status:** 2-Hydroxyestrone is the common name.

**Chemical Name:** Estra-1,3,5(1)-trien-17-one, 2,3-dihydroxy-

**Other Names:** Catecholestrone; Estratrien-2,3-Diol-17-one; 1,3,5[10]-Estratriene-2,3-diol-17-one; 2,3-Dihydroxy-1(10),2,4-estratriene-17-one.

**Chemical structure:**

![Chemical Structure](image)

**Molecular Formula:** $C_{18}H_{22}O_3$

**Pharmacological class / Application:** Steroid

**CAS-RN:** 362-06-1

**International status:**

US: 2-Hydroxyestrone is not listed specifically in the Schedules to the US Controlled Substances Act and is not mentioned anywhere on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor the Red List - List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control.

Canadian Status: 2-Hydroxyestrone is not currently listed in the CDSA. The substance is a derivative of estradiol\(^1\) and is reported to have an effect on breast cell proliferation and

carcinogenesis\textsuperscript{2} with no evidence of anabolic activity. Since 2-hydroxyestrone does not display any anabolic activity and is not a derivative of an anabolic steroid, it cannot be included under the heading “Anabolic steroids and their derivatives:” of item 23 of Schedule IV to the CDSA.

**Recommendation:** 2-Hydroxyestrone is not included under the Schedules to the CDSA and is not a controlled substance.

**Date:** 16 August 2011