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

Substance:  I - 4-Estren-3alpha,17alpha-diol
II - 4-Estren-3beta,17alpha-diol

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):

- There is no report in the scientific literature that these substances are anabolic steroids or derivatives of an anabolic steroid. Therefore, they cannot be included under item 23 of Schedule IV to the CDSA.

Prepared by: _______________________________ Date: March 14th 2011
Evelyn Soo

Verified by: _______________________________ Date: ____________
Marianne Tang

Approved by: _______________________________ Date: ____________
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Marniew Bewer
Drug Status Report

**Drug:**
I - 4-Estren-3alpha,17alpha-diol  
II - 4-Estren-3beta,17alpha-diol

**Drug Name Status:**
I - 4-Estren-3alpha,17alpha-diol  
II - 4-Estren-3beta,17alpha-diol are the proper (INN) names.

**Chemical Name:**
I - 4-Estren-3alpha,17alpha-diol  
II - 4-Estren-3beta,17alpha-diol

**Chemical structure:**

![Chemical structure diagram]

**Molecular Formula:** $C_{18}H_{28}O_2$

**Pharmacological class / Application:** Steroids

**CAS-RN:** I, II - NONE

**International status:**

US: 4-Estren-3alpha,17alpha-diol and 4-estren-3beta,17alpha-diol are not listed specifically in the Schedules to the US *Controlled Substances Act* and are not mentioned anywhere on the DEA website.

United Nations: The substances are 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: 4-Estren-3alpha,17alpha-diol and 4-estren-3beta,17alpha-diol are not currently listed in the CDSA. The substances are steroids but have not been reported in the scientific literature to display any anabolic activity nor are they derived from an anabolic steroid. “Anabolic steroids and their derivatives:” are currently listed under item 23 of Schedule IV to the CSDSA. Since 4-estren-3alpha,17alpha-diol and 4-estren-3beta,17alpha-diol do not display any anabolic activity and are not derivatives of an anabolic steroid, the substances cannot be included under item 23 of Schedule IV to the CSDA.
**Recommendation:** 4-Estren-3alpha,17alpha-diol and 4-estren-3beta,17alpha-diol are not included in the schedules to the CDSA and are not controlled substances.

**Date:** 14 March 2011