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

Substance: 5beta-Androstan-3alpha,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):

- The substance is a metabolite of androstenedione and is included under item 23 of Schedule IV to the CDSA on the basis that it is a derivative of an anabolic steroid.

Prepared by: ___________________________ Date: April 14th 2011

Evelyn Soo

Verified by: ___________________________ Date: __________

Kim Barber

Approved by: ___________________________ Date: __________

DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Marnie Bewer
Drug Status Report

**Drug:** 5beta-Androstan-3alpha,17alpha-diol

**Drug Name Status:** 5beta-Androstan-3alpha,17alpha-diol is the common name.

**Chemical Name:** (3alpha,17alpha)-Dihydroxy-5beta-androstan-3alpha,17alpha-diol

**Other Names:** Etiocholan-3alpha,17alpha-diol

**Chemical structure:**

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H
 H
 H
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**Molecular Formula:** $C_{19}H_{32}O_2$

**Pharmacological class / Application:** Steroid

**CAS-RN:** 5856-10-0

**International status:**

**US:** 5beta-Androstan-3alpha,17alpha-diol 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:** 5beta-Androstan-3alpha,17alpha-diol is not currently listed in the CDSA. The substance has been reported in the literature to be a minor metabolite of androstenedione\(^1\), which is an anabolic steroid that was reviewed in 2001 and included under item 23 of Schedule IV to the CDSA. “Anabolic steroids and their derivatives” are currently controlled under item 23 of Schedule IV to the CSDA. As a metabolite of androstenedione, the substance is considered to be a derivative of androstenedione and therefore must be included under item 23 of Schedule IV to the CSDA.

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\(^1\) Kochakian, CD., Conversion of testosterone and androstenedione to 5beta-androstanes by adult male hamster liver cytosol, J. Steroid Biochem. 19:1521-1526.
**Recommendation:** 5beta-Androstan-3alpha,17alpha-diol is included under item 23 of Schedule IV to the CDSA and is a controlled substance.

**Date:** 14 April 2011