



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

Substance: 3-alpha-hydroxy-5-beta-androstan-17-one (Etiocholanolone)

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

Controlled X
Not Controlled []

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

- The drug is currently not listed specifically on the CDSA.
Item 23 of Schedule IV to the CDSA is, "Anabolic steroids and their derivatives including:" and there follows a list of substances that are examples of anabolic steroids. One of these is testosterone.
As etiocholanolone is a major metabolite of testosterone it must be considered a derivative of that substance and therefore included in the list of anabolic steroids.

Supporting document(s) attached: X

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Verified by: See email MICHAEL LEBELLE Date: 2005-06-23

Approved by: DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES Date:

## Drug Status Report

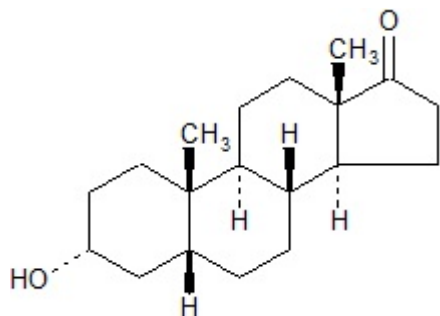
**Drug:** 3-alpha-hydroxy-5-beta-androstan-17-one

**Drug Name Status:** Etiocholanolone is the common name

**Chemical Name:** (3alpha,5beta)-3-hydroxy-androstan-17-one

**Other Names:** etiocholanolone, 5-beta-androsterone,

**Chemical structure:**



**Molecular Formula:** C<sub>19</sub>H<sub>30</sub>O<sub>2</sub>

**Pharmacological class / Application:** Derivative (metabolite) of testosterone<sup>1</sup>

**International status:**

**US:** The drug is not currently listed on the US Controlled Substances Act and is not mentioned on the DEA website. Etiocholanolone may be controlled under the CSA as anabolic steroid is defined in the CSA as, “any drug or hormonal substance, chemically and pharmacologically related to testosterone (other than estrogens, progestins, and corticosteroids) that promotes muscle growth, and includes ...” Anabolic steroids are listed on Schedule III to the CSA. Conclusive determination of the status of the substance under the CSA would need to come from the Drug Enforcement Administration.

**United Nations:** The drug is not listed on the Yellow List - List of Narcotic Drugs under International Control. The drug is not listed on the Green List - List of Psychotropic Substances under International Control

**Canadian Status:** The drug is currently not listed specifically on the CDSA. Item 23 of Schedule IV to the CDSA is, “Anabolic steroids and their derivatives including:” and there follows a list of substances that are examples of anabolic steroids. One of these is testosterone. As etiocholanolone is a major metabolite of testosterone it must be considered a derivative of that substance and therefore included in the list of anabolic steroids.

**Recommendation:** Etiocholanolone is included in item 23 of Schedule IV to the CDSA and is a controlled substance. It also follows using the above reasoning that etiocholanolone glucuronide and etiocholanolone sulfate being derivatives of etiocholanolone are also included in item 23 of Schedule IV to the CDSA and are controlled substances.

June 22, 2005

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<sup>1</sup> Kaminski, RM, Marini, H, Kim WJ and Rogawski, MA, *Epilepsia*, 46, 819 (2005)