Health Canada
Santé Canada

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

Substance: 2alpha-(hydroxymethyl)ethisterone

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 danazol and is captured under item 23 of Schedule IV to the CDSA.

Prepared by: _____ Date: _____
Vincent Marleau

Verified by: _____ Date: _____
Mark Kozlowski

Approved by: _____ Date: _____
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Martin McLean, OCS

Drug Status Report

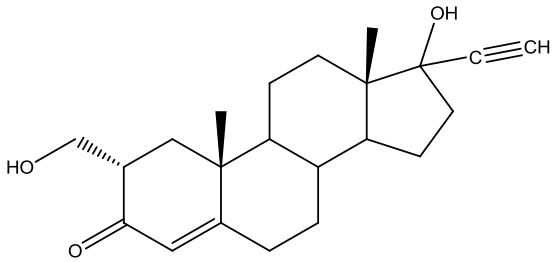
Drug: 2alpha-(hydroxymethyl)ethisterone

Drug Name Status: 2alpha-(hydroxymethyl)ethisterone is the common name.

Chemical Name: (2S,10R,13S)-17-ethynyl-17-hydroxy-2-(hydroxymethyl)-10,13-dimethyl-6,7,8,9,10,11,12,13,14,15,16,17-dodecahydro-1H-cyclopenta[a]phenanthren-3(2H)-one

Other Names: 2-(Hydroxymethyl)ethisterone; Pregn-4-en-20-yn-3-one, 17-hydroxy-2-(hydroxymethyl)-, (2alpha,17alpha)-; 2a-(hydroxymethyl)ethisterone.

Chemical structure:



Molecular Formula: $C_{22}H_{30}O_3$ **CAS-RN:** 2787-03-3

Pharmacological class / Application: Steroid

International status:

US: 2alpha-(hydroxymethyl)ethisterone 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: 2alpha-(hydroxymethyl)ethisterone is not listed in the Schedules to the CDSA. The substance is a urinary metabolite of danazol[1], which was previously reviewed and included as an anabolic steroid in item 23 of Schedule IV of the CDSA under the heading: "Anabolic steroids and their derivatives including". As a metabolite of an anabolic steroid, 2alpha-(hydroxymethyl)ethisterone must be captured in item 23 of Schedule IV to the CDSA

Recommendation: 2alpha-(hydroxymethyl)ethisterone is included in item 23 of Schedule IV to the CDSA and is a controlled substance.

Date: November 19th, 2012.

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[1] Eenoo, P.V. and F.T. Delbeke (2006) Metabolism and excretion of anabolic steroids in doping control – New steroids and new insights. Journal of stroid biochemistry and molecular biology. **101**(4-5): 161-178.