



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

Substance: 4-(2-oxo-2-piperazin-1-yl-ethyl)acetamide-5alpha-androstane-3alpha,17beta-diol

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

- Controlled []
Not Controlled [x]

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

- The substance is a synthesized from a ten-step process from epiandrosterone and has not been reported in the literature to display any anabolic activity.

Prepared by: Evelyn Soo Date: Sept 22th 2010

Verified by: Marianne Tang Date:

Approved by: DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES Date:

This status was requested by: Nacer Silarbi

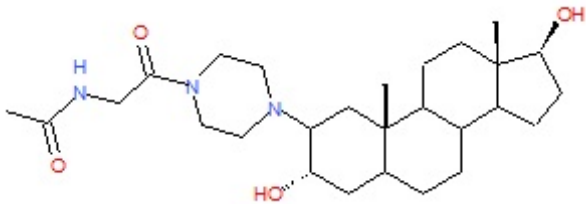
Drug Status Report

Drug: 4-(2-oxo-2-piperazin-1-yl-ethyl)acetamide-5alpha-androstane-3alpha,17beta-diol

Drug Name Status: 4-(2-oxo-2-piperazin-1-yl-ethyl)acetamide-5alpha-androstane-3alpha,17beta-diol is the common name.

Chemical Name: N-{2-[4-(3,17-Dihydroxy-10,13-dimethyl-hexadecahydro-cyclopenta[a]phenanthren-2-yl)-piperazin-1-yl]-2-oxo-ethyl}-acetamide

Chemical structure:



Molecular Formula: $C_{27}H_{45}N_3O_4$

Pharmacological class / Application: Steroid derivative

CAS-RN: NONE

International status:

US: The substance is not Schedules to the CSA 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, nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: 4-(2-oxo-2-piperazin-1-yl-ethyl)acetamide-5alpha-androstane-3alpha,17beta-diol is one of several steroids that is believed to provide antiproliferative effects on the Human promyelocytic leukemia cells (HL-60 cells) and potentially be useful in the treatment of cancer. The substance is synthesized through a ten-step synthetic route from epiandrosterone.

Currently, epiandrosterone is controlled under item 23 of Schedule IV to the CDSA but there is no evidence in the scientific literature that 4-(2-oxo-2-piperazin-1-yl-ethyl)acetamide-5alpha-androstane-3alpha,17beta-diol displays any anabolic activity. Furthermore, while the heading of item 23 in Schedule IV to the CDSA states "Anabolic steroids and their derivatives" the substance is not a metabolite of epiandrosterone and considering its complex synthetic route, the

substance is not considered a true synthetic derivative of epiandrosterone for the purpose of forming status decisions. Accordingly, 4-(2-oxo-2-piperazin-1-yl-ethyl)acetamide-5alpha-androstane-3alpha,17beta-diol is not included under item 23 of Schedule IV to the CDSA.

Recommendation: 4-(2-oxo-2-piperazin-1-yl-ethyl)acetamide-5alpha-androstane-3alpha,17beta-diol is not included under item 23 of Schedule IV to the CDSA and is not a controlled substance.

Date: 22 September 2010