Drug Status Report

**Drug:** Exemestane and related substances

This report covers several structurally related substances. A client requested the status of these substances for a research project.

**Drug Name Status:** Exemestane is the proper (INN and USAN) name

**Chemical Name:** 6-Methyleneandrosta-1,4-diene-3,17-dione

**Chemical structure:**

1. Exemestane
2. 1,3-Dipyrrrolidinyl-3,5-androstadiene-17-one
3. 6-Hydroxymethyl-1,4-androstadiene-3,17-dione
4. 6-Methylene-4-androstene-3-17-dione
5. 4,6-Androstadiene-3,17-dione
6. 6-Isopropoxymethyl-1,4-androstadiene-3,17-dione
7. 6,16-Dimethylene-1,4-androstadiene-3,17-dione
8. 6-(p-Toluene-sulfonyloxymethyl)-1,4-androstadiene-3,17-dione
Molecular Formula: $C_{20}H_{24}O_2$

Pharmacological class / Application: steroid

International status:

US: The substances are not currently listed on the US Controlled Substances Act and are not mentioned on the DEA website.

United Nations: The substances are 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: Item 23 of Schedule IV to the CDSA is “23 Anabolic steroids and their derivatives.” On September 19, 2001 OCS made a decision that 1,4-androstadien-3,17-dione was an anabolic steroid by inclusion in item 23. Substance 10 above, 1,4-androstadiene-3,17-dione 17-ethylene ketal is a derivative of this substance and therefore must also be considered to be included in item 23 of Schedule IV. None of the other substances shown above is a derivative of an anabolic steroid and none is known to have anabolic activity.

Recommendation: 1,4-androstadiene-3,17-dione 17-ethylene ketal is included in item 23 of Schedule IV and is a controlled substance. The other substances shown above are not included in the schedules to the CDSA.

June 8, 2007