



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

Substance: 16alpha,17beta-Dihydroxy-17alpha-methyl-5alpha-androstan-3-one; and 16beta,17beta-Dihydroxy-17alpha-methyl-5alpha-androstan-3-one

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 drug is currently not listed specifically on the CDSA.
A closely related substance, mestanolone, is considered a controlled substance due to its anabolic characteristics; as indicated by a prior status decision.
These two substances are 16alpha- and 16-beta-hydroxymestanolone.
Despite the close structural relationship between 16alpha,17beta-dihydroxy-17alpha-methyl- 5alpha-androstan-3-one and 16beta,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one and mestanolone, there are no reports indicating that 16alpha,17beta-dihydroxy-17alpha- methyl-5alpha-androstan-3-one and 16beta,17beta-dihydroxy-17alpha-methyl-5alpha- androstan-3-one are derivatives of mestanolone or any other anabolic steroid or that the title substances have anabolic activity.

Supporting document(s) attached: X

Prepared by: TIANA BRANCH Date: 2005-07-12

Verified by: See email MICHAEL LEBELLE Date: 2005-07-07

Approved by: DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES Date:

Drug: 16alpha,17beta-Dihydroxy-17alpha-methyl-5alpha-androstan-3-one;
16beta,17beta-Dihydroxy-17alpha-methyl-5alpha-androstan-3-one

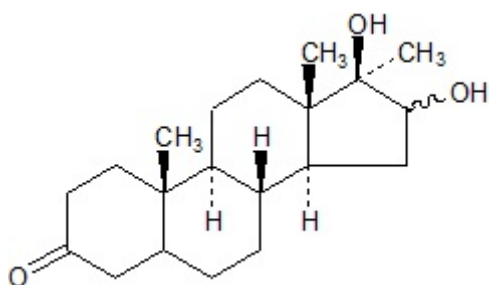
Drug Name Status:

16alpha,17beta-Dihydroxy-17alpha-methyl-5alpha-androstan-3-one and
16beta,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one are the
chemical names.

Chemical Names:

16alpha,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one;
16beta,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one

Chemical structure:



The difference between
16alpha,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one and
16beta,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one is the
configuration of the 16-hydroxyl. The wiggly line indicates the hydroxyl may be
either alpha or beta.

Molecular Formula: C₂₀H₃₂O₃

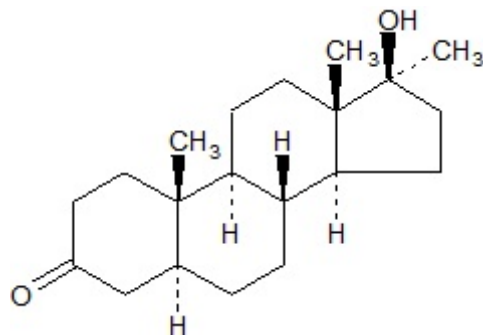
Pharmacological class / Application: steroid

International status:

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

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. A closely related substance, mestanolone, is considered a controlled substance due to its anabolic characteristics. It is not listed specifically on Schedule IV to the CDSA but it can be found on the list of controlled substances maintained by OCS. The two substances which are the subject of this report are 16alpha- and 16beta-hydroxymestanolone. The structure of mestanolone is shown below.



Despite the close structural relationship between 16alpha,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one and 16beta,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one and mestanolone, there are no reports indicating that 16alpha,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one and 16beta,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one are derivatives of mestanolone or any other anabolic steroid or that the title substances have anabolic activity..

Recommendation: Based on the information available 16alpha,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one and 16beta,17beta-dihydroxy-17alpha-methyl-5alpha-androstan-3-one are not included in the schedules to the CDSA and are not controlled substances.

