Drug Status Report

**Drug:** Androsta-1,4,6-triene-3,17-dione (I)

**Drug Name Status:** Androsta-1,4,6-triene-3,17-dione is the chemical name.

**Chemical Name:** Androsta-1,4,6-triene-3,17-dione

**Chemical structure:**

![Chemical structure](image)

**Molecular Formula:** C₁₉H₂₂O₂

**Pharmacological class / Application:** steroid

**International status:**

US: The substance is not currently listed on the schedules to the US Controlled Substances Act and is not mentioned 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: A status decision on this substance was recorded on 2004-12-03 under the name, 3,17-Diketo-androst-1,4,6-tiene. An electronic copy (unsigned, undated) of the report is appended. That report recommended that it be considered a controlled substance because it was a derivative of testosterone acetate which itself is a derivative of testosterone (item 23(40) of Schedule IV). The recommendation was not supported by scientific reports. This status report is written to address this.

A new review of the scientific literature was conducted. This review identified a recent report by Kim and Ma¹ wherein they describe the direct one-step conversion of prasterone to androsta-1,4,6-triene-3,17-dione with DDQ (2,3-dichloro-5,6-dicyano-1,4-benzoquinone). Therefore androsta-1,4,6-triene-3,17-dione is a derivative of prasterone which is subitem 23(36)

of Schedule IV to the CDSA and is included in item 23 of Schedule IV, “Anabolic steroids and their derivatives”.

This one-step conversion of prasterone to androsta-1,4,6-triene-3,17-dione is a simpler basis on which to declare that the latter is a derivative of an anabolic steroid in comparison to a conversion beginning with testosterone acetate.

Recommendation: Androsta-1,4,6-triene-3,17-dione is included in item 23 of Schedule IV and is a controlled substance.

March 3, 2009