## Drug Status Report

**Drug:** 11-Bromoandrosta-1,4-diene-3,17-dione

**Drug Name Status:** 11-Bromoandrosta-1,4-diene-3,17-dione is the chemical name.

Chemical Name: 11-Bromoandrosta-1,4-diene-3,17-dione

## **Chemical structure:**

**Molecular Formula:** C<sub>19</sub>H<sub>23</sub>BrO<sub>2</sub>

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: 11-Bromoandrosta-1,4-diene-3,17-dione is the 11-bromo analogue of androstadienedione, ADD (1,4-Androstadiene-3,17-dione) which although not specifically listed on Schedule IV to the CDSA as an anabolic steroid has been considered to be an anabolic steroid since 2001.

Two searches of Chemical Abstracts were conducted in order to determine the CAS registry number of this substance. The key words androsta, dien, dione and bromo and androsta, diene, dione and bromo were used in the two searches. A total of 63 different chemical compounds were returned in the searches. There were four in the first and 62 in the second; three of the four repeated in the second search. None of the substances was 11-bromoandrosta-1,4-diene-3,17-dione. This generally means the substances has not yet been reported in the literature.

Four positional isomers of 11-bromoandrosta-1,4-diene-3,17-dione were identified in the searches, namely: 4-bromoandrosta-1,5-diene-3,17-dione, 4-bromoandrosta-4,6-diene-3,17-dione, 6-bromoandrosta-4,6-diene-3,17-dione and 6-bromoandrosta-1,4-diene-3,17-dione.

A closely related substance, 11-hydroxyandrosta-1,4-diene-3,17-dione is a metabolite of

progesterone and testosterone<sup>1</sup>; however, there is no indication in the literature that this substance has anabolic activity. Based on this, there is no information indicating that 11-bromoandrosta-1,4-diene-3,17-dione would have anabolic activity.

Recommendation: 11-Bromoandrosta-1,4-diene-3,17-dione is not included in item 23 of Schedule IV and is not a controlled substance.

June 17, 2008

<sup>&</sup>lt;sup>1</sup> Pokorná J, Kasal A., J Steroid Biochem. 1990 Jan;35(1):155-6