Drug Status Report

**Drug:** Pregnanes

A client requested the status of the following substances.

I- Isopregnanolone (5α-pregnan-3β-ol-20-one; 5α,3β-tetrahydroprogesterone)
II- Epipregnanolone (5β-pregnan-3β-ol-20-one; 5β,3β-tetrahydroprogesterone)
III- Allopregnanolone (5α-pregnan-3α-ol-20-one; 5α,3α-tetrahydroprogesterone)
IV- 5α, 3α-tetrahydrodeoxycorticosterone (5α-pregnan-3α,21-diol-20-one)

**Drug Name Status:** The following are common names.

I- Isopregnanolone (5α-pregnan-3β-ol-20-one; 5α,3β-tetrahydroprogesterone)
II- Epipregnanolone (5β-pregnan-3β-ol-20-one; 5β,3β-tetrahydroprogesterone)
III- Allopregnanolone (5α-pregnan-3α-ol-20-one; 5α,3α-tetrahydroprogesterone)
IV- 5α, 3α-tetrahydrodeoxycorticosterone (5α-pregnan-3α,21-diol-20-one)

**Chemical Name:**
I- (3β,5α)-3-hydroxy-pregnan-20-one
II- (3β,5β)-3-hydroxy-pregnan-20-one
III- (3α,5α)-3-hydroxy-pregnan-20-one
IV- 3α,21-Dihydroxy-5α-pregnan-20-one

**Chemical structure:**

- [Chemical structure image for 3-hydroxy-pregnan-20-one I, II, and III]
- [Chemical structure image for IV]

**Molecular Formula:** I, II, and III - C<sub>21</sub>H<sub>34</sub>O<sub>2</sub>
IV- C<sub>21</sub>H<sub>34</sub>O<sub>3</sub>

**Pharmacological class / Application:** neurosteroids

**International status:**

US: The substances are currently listed on the schedules to 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: Substances I to IV are not structurally similar to the anabolic steroids listed in item 23 of Schedule IV. There are no reports that I to IV have anabolic activity.

Recommendation: Substances I to IV are not included in the schedules to the CDSA and are not controlled substances.

January 21, 2008