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 of I, II, and III](image)

![Chemical structure of IV](image)

**Molecular Formula**: I, II, and III - C_{21}H_{34}O_{2}
IV- C_{21}H_{34}O_{3}

**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