Drug Status Report

Drug: Pregnanes

A client requested the status of the following substances.

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

Drug Name Status: The following are common names.

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

Chemical Name:
I- (3beta,5alpha)-3-hydroxy-pregnan-20-one
II- (3beta,5beta)-3-hydroxy-pregnan-20-one
III- (3alpha,5alpha)-3-hydroxy-pregnan-20-one
IV- 3alpha,21-Dihydroxy-5alpha-pregnan-20-one

Chemical structure:

![Chemical structure of 3-hydroxy-pregnan-20-one](image1)

![Chemical structure of IV](image2)

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