# Drug Status Report

#### Drug: Nimetazepam related substances

#### **Drug Name Status:**

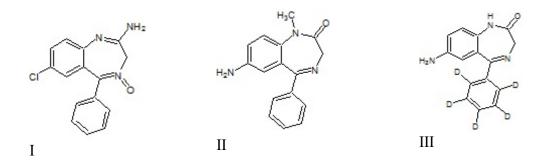
(I) Desmethyl Chlordiazepoxide(II) 7-Amino Nimetazepam(III) 7-Amino Nitrazepam-d5

The above names are all common names.

## **Chemical Name:**

(I) 2-(Amino)-7-chloro-5-phenyl-3H-1,4-benzodiazepine-4-oxide
(II) 1,3-Dihydro-1-methyl-7-nitro-5-phenyl-2H-1,4-benzodiazepin-2-one
(III) 1,3-Dihydro-1-methyl-7-nitro-5-(phenyl-d5)-2H-1,4-benzodiazepin-2-one

## **Chemical structure:**



 $\begin{array}{l} \textbf{Molecular Formula:} (I) \ C_{15}H_{12}ClN_{3}O \\ (II) \ C_{16}H_{15}ClN_{3}O \\ (III) \ C_{15}D_{5}H_{8}N_{3}O \end{array}$ 

Pharmacological class / Application: pharmaceutical related substance

### International status:

US: The substances are not currently listed on the schedules to the CSA and are not mentioned on the DEA website. However, because of their similarity to listed benzodiazepines, they may be considered to be controlled under the CSA.

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: The substances are not currently listed specifically on the CDSA. Item 18 of Schedule IV to the CDSA is, "Benzodiazepines, their salts and derivatives". With the exception of brotizolam, the benzodiazepines have a characteristic core structural feature. Two variations of the characteristic feature are shown below.



Based on the molecular structure of the three benzodiazepine related substances, they are benzodiadepines and therefore included in item 18 of Schedule IV.

This rationale was previously used in recommending that two alprazolan analogues (report - Alprazolam analogues, August 22, 2007), three triazolam related substances (Triazolam related substances, September 23, 2007) and another series of benzodiazepine related compounds (report - 5-Phenyl-7-chloro-1,3-dihydro-1,4-benzodiazepine-2H-2-one N, July 28, 2005) be considered to be included in item 18 of Schedule IV.

Recommendation: Substances 1-III are included in item 18 of Schedule IV to the CDSA and are controlled substances.

May 23, 2008