

Drug Status Report

Drug: Alprazolam analogues

A client asked for the status of the two following alprazolam analogues.

(I) 4-Hydroxyalprazolam

(II) alpha-Hydroxyalprazolam

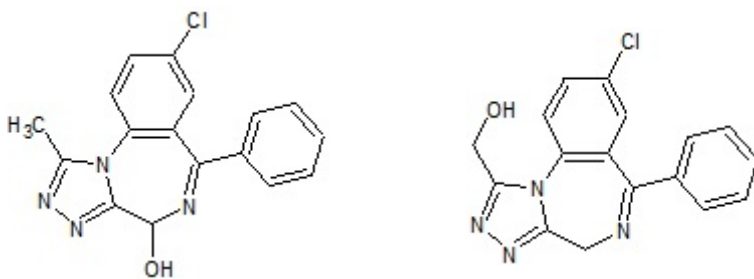
Drug Name Status: (I) 4-Hydroxyalprazolam is the common name

(II) alpha-Hydroxyalprazolam is the common name

Chemical Name: (I) 8-Chloro-1-methyl-4-hydroxy-6-phenyl-4H-s-triazolo[4,3-a][1,4]benzodiazepine)

(II) 8-Chloro-1-hydroxymethyl-6-phenyl-4H-s-triazolo[4,3-a][1,4]benzodiazepine

Chemical structure:



Molecular Formula: (I) $C_{17}H_{13}ClN_4O$

(II) $C_{17}H_{13}ClN_4O$

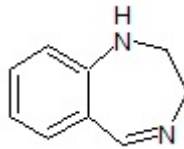
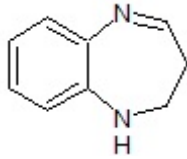
Pharmacological class / Application: benzodiazepine

International status:

US: The alprazolam analogues are not currently listed explicitly 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: 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 two alprazolam analogues, they are benzodiazepines and therefore included in item 18 of Schedule IV.

Recommendation: (I) 4-Hydroxyalprazolam and (II) alpha-hydroxyalprazolam are included in item 18 of Schedule IV to the CDSA and are controlled substances.

August 22, 2007