STATUS DECISION OF CONTROLLED
AND NON-CONTROLLED SUBSTANCE(S)

Substance:   I - Lorazepam glucuronide  
            II - Temazepam glucuronide

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

Controlled  ✓
Not Controlled  □

under the schedules of the *Controlled Drugs and Substances Act* (CDSA) for the following reason(s):

• The substances are metabolites of lorazepam and temazepam and are included under item 18 of Schedule IV to the CDSA.

Prepared by: ____________________________  Date: Oct 20th 2010  
Evelyn Soo

Verified by: ____________________________  Date: __________
Marianne Tang

Approved by: ____________________________  Date: __________
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Wissam Sader
Drug Status Report

Drug: I - Lorazepam glucuronide  
II - Temazepam glucuronide  

Drug Name Status: I - Lorazepam glucuronide  
II - Temazepam glucuronide are the common names  

Chemical Name:  
I - 7-chloro-5-(2-chlorophenyl)-2,3-dihydro-2-oxo-1H-1,4-benzodiazipin-3-yl, Beta-D-Glucopyranosiduronic acid  
II - 7-chloro-2,3-dihydro-1-methyl-2-oxo-5-phenyl-1H-1,4-benzodiazipin-3-yl, beta-D-Glucopyranosiduronic acid  

Other Names:  
I - none  
II - 3-Hydroxydiazepam glucuronide  

Chemical structure:  

Molecular Formula: C21H18Cl2N2O8; II - C22H21ClN2O8  

Pharmacological class / Application: Benzodiazepine metabolites  


International status:  

US: The substances are not listed specifically in the Controlled Substances Act and is not mentioned anywhere on the DEA website.  

United Nations: The substance 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: Lorazepam glucuronide and temazepam glucuronide are metabolites of lorazepam and temazepam, respectively, and are not currently listed in the CDSA. However, as
metabolites of lorazepam and temazepam, the substances are included under item 18 of Schedule IV to the CDSA under the heading “Benzodiazepines, their salts and derivatives including:”. In addition, both substances contain the characteristic core structure of the 1,4-benzodiazepines.

Lorazepam is currently listed as item 18(20) in Schedule IV to the CDSA while temazepam is listed in the same schedule as item 18(30). As such, lorazepam glucuronide is included under item 18(20) of Schedule IV to the CDSA while temazepam glucuronide is included under item 18(30) of Schedule IV.

**Recommendation:** Lorazepam glucuronide and temazepam glucuronide are included under item 18(20) and 18(30), respectively, in Schedule IV to the CDSA and are a controlled substances.

**Date:** 20 October 2010