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

Substance: Olanzapine-N-oxide

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):

- Olanzapine-N-oxide is a metabolite of olanzapine and is included under item 18 of Schedule IV to the CDSA.

Prepared by: ___________________________ Date: __________
Vincent Marleau

Verified by: ___________________________ Date: __________
Mark Kozlowski

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

This status was requested by: Eva Roig, OCS
Drug Status Report

Drug: Olanzapine-N-oxide

Drug Name Status: Olanzapine-N-oxide is the common name.

Chemical Name: 2-Methyl-4-(4-methyl-4-oxido-1-piperazinyl)-10H-thieno[2,3-β][1,5]benzodiazepine; 2-Methyl-4-(4-methyl-4-oxido-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine; 2-Methyl-4-(4-Methylpiperazin-1-yl)-10H-benzo[b]thieno[2,3-e][1,4]diazepine 4'-N-oxide; Olanzapine Related Compound C; LY 170238.

Chemical structure:

![Chemical Structure Image]

Molecular Formula: C\textsubscript{17}H\textsubscript{20}N\textsubscript{4}OS

CAS-RN: 174794-02-6

Pharmacological class / Application: Pharmaceutical-related substance

International status:

US: Olanzapine-N-oxide is not listed specifically in the Schedules to the US Controlled Substances Act and is not mentioned anywhere on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor the Red List - List of Precursors and Chemicals Frequently Used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances under International Control.

Canadian Status: Olanzapine-N-oxide is not specifically listed in the Schedules to the CDSA. The substance is a metabolite of olanzapine\textsuperscript{1}, which is excluded specifically from the CDSA and listed as sub-item 18(34) “Olanzapine (2-methyl-4-(4-methyl-1-piperazinyl)-10H-thieno[2,3-b][1,5]benzodiazepine) and its salts” in Schedule VI to the CDSA. However, the derivatives of olanzapine are captured under the “but not including” provision and therefore, olanzapine-N-oxide is included under item 18 of Schedule IV to the CDSA under the heading: “Benzodiazepines, their salts and derivatives, including;”.

Recommendation: Olanzapine-N-oxide is included under item 18 of Schedule IV to the CDSA and is a controlled substance.

Date: August 22\textsuperscript{nd}, 2013.