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

Substance: Indirubin

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 substance is found in Qing Dai (*Indigo naturalis*) and used in traditional Chinese medicine for the treatment of chronic myelocytic leukemia. Indirubin is not similar to any of the substances in the CDSA.

Prepared by: _______________________________ Date: October 13th 2010

Evelyn C Soo

Verified by: _______________________________ Date: ________________

Marianne Tang

Approved by: _______________________________ Date: ________________

DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Inspectorate
Drug Status Report

Drug: Indirubin

Drug Name Status: Indirubin is the common name.

Chemical Name: (delta(sup 2,3')-Biindoline)-2',3-dione

Other Names: (delta2,3'-Biindoline)-2',3-dione (8CI); 3-(1,3-dihydro-3-oxo-2H-indol-2-ylidene); 1,3-dihydro-2H-Indol-2-one (9CI); Courouptine B; Indigo Red; Indigopurpurin

Chemical Structure:

![Chemical Structure Image]

Molecular Formula: C_{16}H_{10}N_{2}O_{2}

CAS-RN: 479-41-4

Pharmacological class / Application: Anti-angiogenic agent

International status:

US: The substance is not listed specifically in the CSA 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: Indirubin is not listed specifically in the CDSA. The substance is found in Qing Dai (Indigo naturalis) and used in traditional Chinese medicine for the treatment of chronic myelocytic leukemia\(^1\). The substance also has been reported in recent scientific

literature to display anti-angiogenic\textsuperscript{2} activity. Indirubin is not structurally similar to any of those listed in the Schedules CDSA.

**Recommendation:** Indirubin is not included in the Schedules to the CDSA and is not a controlled substance.

**Date:** October 13\textsuperscript{th} 2010