Status Decision of Controlled and Non-Controlled Substance(s)

Substance: Dermorphin

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

- Controlled ☐
- Not Controlled X

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

- The substance is not structurally similar to any of those included in the Schedules to the CDSA.

Prepared by: _______________________________________ Date: _______________

Vincent Marleau

Verified by: _______________________________________ Date: _______________

Manager, NCED, OCS

Approved by: _______________________________________ Date: _______________

DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Finola Francis, HPFB
Drug Status Report

Drug: Dermorphin

Drug Name Status: Dermorphin is the common name.

Chemical Name: H-Tyr-D-al-a-phe-gly-tyr-pro-ser-NH₂

Other Names: (S)-N-((S)-1-Amino-3-hydroxy-1-oxopropan-2-yl)-1-((2S,8S,11R,14S)-14-amino-8-benzyl-2-(4-hydroxybenzyl)-15-(4-hydroxyphenyl)-11-methyl-4,7,10,13-tetraoxo-3,6,9,12-tetraazapentadecan-1-oyl)pyrrolidine-2-carboxamide; Tyrosyl-D-alanyl-phenylalanyl-glycyl-tyrosyl-prolyl-serinamide; H-Tyr-D-Ala-Phe-Gly-Tyr-Pro-Ser-NH₂.

Chemical structure:

![Chemical structure of Dermorphin]

Molecular Formula: C₄₀H₅₀N₈O₁₀  CAS-RN: 77614-16-5

Pharmacological class / Application: Analgesic

International status:
US: Dermorphin 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: Dermorphin is not listed in the Schedules to the CDSA. The substance, isolated from frog skin, is a peptide that has shown to display opioid-like activity. This substance is not structurally similar to any of the substances listed in the Schedules to the CDSA.

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

Date: January 8th, 2014.

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