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

Substance: N-Arachidonylglycine

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 an endocannabinoid showing no cannabinoid receptor agonist activity and cannot be included under the Schedules to the CDSA.

Prepared by: _____________________________________________ Date: _______________

Zack Li

Verified by: _____________________________________________ Date: _______________

Mark Kozlowski

Approved by: _____________________________________________ Date: _______________

DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: “third party information removed as per agreement with applicant”
Drug Status Report

**Drug:** N-Arachidonoylglycine

**Drug Name Status:** N-Arachidonoylglycine is the common name.

**Chemical Name:** N-[(1-oxo-5Z,8Z,11Z,14Z-eicosatetraenyl)glycine

**Other Names:** NAGly

**Chemical structure:**

![Chemical structure diagram]

**Molecular Formula:** C_{22}H_{35}NO_{3}

**Pharmacological class / Application:** Endocannabinoid

**CAS-RN:** 179113-91-8

**International status:**

US: N-Arachidonoylglycine 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: N-Arachidonoylglycine is not listed specifically in the CDSA. The substance is an endocannabinoid and in studies evaluating its analgesic effects, N-Arachidonoylglycine has been found to demonstrate no activity at the CB1 or CB2 receptors. “Cannabis, its preparations, derivatives and similar synthetic preparations” are currently listed as item 1 in Schedule II to the CDSA. Given that N-Arachidonoylglycine does not demonstrate any cannabinoid receptor agonist activity, it cannot be included under item 1 of Schedule II to the CDSA.

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

**Date:** May 28th, 2012.

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1 Huang, SM et al. (2001) Identification of a new class of molecules, the arachidonyl amino acids, and characterization of one member that inhibits pain, J. Biol. Chem. 276: 42639-42644