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

Substance: Otenabant hydrochloride

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 a synthetic cannabinoid and shows cannabinoid receptor antagonist activity.

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: Otenabant hydrochloride

Drug Name Status: Otenabant hydrochloride is the proper (USAN) name.

Chemical Name: 1-(8-(2-Chlorophenyl)-9-(4-chlorophenyl)-9H-purin-6-yl)-4-(ethylamino)piperidine-4-carboxamide monohydrochloride

Other Names: CP 945598

Chemical structure:

\[ \text{Molecular Formula: } C_{25}H_{25}Cl_2N_7O.Cl-H \]

Pharmacological class / Application: Synthetic cannabinoid

CAS-RN: 686347-12-6

International status:

US: Otenabant hydrochloride 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: Otenabant hydrochloride is not listed in the schedules to the CDSA. The substance is a synthetic cannabinoid and in studies evaluating its potential use in the treatment of obesity, otenabant hydrochloride has been found to demonstrate potent CB1 cannabinoid receptor antagonist activity\(^1\). Cannabinoid receptor agonists are currently included under the heading “Cannabis, its preparations, derivatives and similar synthetic preparations” of item 1 in Schedule II to the CDSA, whereas cannabinoid receptor antagonists are specifically excluded. Given that otenabant hydrochloride is a cannabinoid receptor antagonist, it cannot be included under item 1 of Schedule II to the CDSA.

\(^1\)Hadcock, JR et al. (2010) In vitro and in vivo pharmacology of CP-945,598, a potent and selective cannabinoid CB1 receptor antagonist for the management of obesity, Biochem Biophys Res Commun 394: 366-371
**Recommendation:** Otenabant hydrochloride is not included in the Schedules to the CDSA and is not a controlled substance.

**Date:** May 24th, 2012.