Drug Status Report

Drug: LY320135

Drug Name Status: LY320135 is the common name.

Chemical Name: 4-[6-methoxy-2-(4-methoxyphenyl)benzofuran-3-carbonyl]benzonitrile

Chemical structure:

![Chemical structure of LY320135]

Molecular Formula: C_{17}H_{17}N_{5}O

Pharmacological class / Application: Cannabinoid CB_{1} receptor antagonist

International status:

US: The substance is not listed on the schedules to the CSA and is not mentioned on the DEA website.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control. The drug is not listed on the Green List - List of Psychotropic Substances under International Control.

Canadian Status: LY 320135 was among a number of compounds that were synthesized and evaluated for their efficacy as selective cannabinoid CB1 receptor antagonists\(^1\). The affinity of LY 320135 for the CB_{1} receptor is reported to be 70 times greater than that of the CB_{2} receptor and the substance has been shown in functional assays to display potent CB_{1} receptor antagonist activity. Cannabinoid receptor agonists have been declared to be included within item 1 of Schedule II to the CDSA by virtue of being “similar synthetic preparations.” Cannabinoid receptor antagonists have been declared to fall outside item 1 of Schedule II to the CDSA. Given that LY 320135 is potent cannabinoid receptor antagonist, the substance should not be included in item 1 of Schedule II.

Recommendation: LY 320135 is not included in Schedule II to the CDSA and is a not controlled substance.

January 7\(^{th}\), 2010

\(^{1}\)Felder, CC et al. (1998) LY320135, a novel cannabinoid CB1 receptor antagonist, unmask coupling of the CB1 receptor to stimulation of cAMP accumulation, J. Pharmcol. Expt. Ther. 284: 291-297.