## Drug Status Report

**Drug:** (R,S)-AM1241

**Drug Name Status**: AM1241 is the common name.

Chemical Name: (R,s)-(2-iodo-5-nitrophenyl)-{1-(1-methyl-piperidin-2-yl)methyl)-1H-indol-3-

yl]-methanone

## **Chemical structure:**

Molecular Formula: C<sub>22</sub>H<sub>22</sub>IN<sub>2</sub>O<sub>3</sub>

Pharmacological class / Application: cannabinoid receptor agonist

## **International status:**

**US:** (R,S)-AM1241is not listed in 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: (R,S)-AM1241 is an aminoalkylindole compound and has been shown to produce selective, agonist activity at the CB<sub>2</sub> cannabinoid receptor<sup>1</sup>. 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 the selectivity of (R,S)-AM1241 for the CB2 receptors as well as in vivo evidence of its potent agonist activity, (R,S)-AM1241 should be included in item 1 of Schedule II to the CDSA.

<sup>&</sup>lt;sup>1</sup>Rahn, EJ. *et al.* (2010) Antinociceptive effects of racemic AM1241 and its chirally synthesized enantiomers: lack of dependence on opioid receptor activation, The AAPS J. **12**: 147-157.

Recommendation: (R,S)-AM1241 is included in item 1 of Schedule II to the CDSA and is a controlled substance.

April 6<sup>th</sup>, 2010.