## Drug Status Report

Drug: JWH-250

**Drug Name Status**: JWH-250 is the common name.

Other Names: 1-Pentyl-3-(2-methoxyphenylacetyl)indole

Chemical Name: 2-(2-Methoxyphenyl)-1-(1-pentylindol-3-yl)ethanone

## **Chemical structure:**

Molecular Formula:  $C_{22}H_{25}NO_2$ 

Pharmacological class / Application: cannabinoid receptor ligand

## **International status:**

US: The substance is not listed on the schedules to the US Controlled Substances Act.

United Nations: The substance is not listed on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: JWH-250 is one of several series of synthetic cannabimimetic substances that was prepared to assess its affinity for the CB1 and CB2 receptors<sup>1</sup>. It has been shown to have moderate affinity for both receptors. Its efficacy as an agonist or antagonist has not yet been

<sup>&</sup>lt;sup>1</sup> JW Huffman, Cannabimimetic Indoles, Pyrroles, and Indenes: Structure–Activity Relationships and Receptor Interactions in <u>The Cannabinoid Receptors</u>, 2009 Patricia H. Reggio (editor).

assessed<sup>2</sup>.

Status decisions have been made on several other cannabinoid receptor agonists and antagonists. See decisions for anandamide; methanandamide; WIN 555212; JWH 015; O-2050, CP55940, AM630, AM251 and SR 141716A. 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. Without evidence that JWH-250 is a cannabinoid receptor agonist, it should be considered to be not included in item 1 of Schedule II.

Recommendation: JWH-250 is not included in item 1 of Schedule II to the CDSA and is not a controlled substance.

October 14, 2009

<sup>&</sup>lt;sup>2</sup> JW Huffman et al. Bioorg Med Chem Lett. 2005 Sep 15;15(18):4110-3.