Drug Status Report

**Drug:** Org 27569

**Drug Name Status:** Org 27569 is the common name

**Chemical name:** 5-chloro-3-ethyl-1H-indole-2-carboxylic acid [2-(4-piperidin-1-yl-phenyl)-ethyl]-amide

**Chemical structure:**

![Chemical Structure](image)

**Molecular Formula:** $C_{24}H_{28}ClN_3O$

**Pharmacological class / Application:** Allosteric modulator of the CB1 receptor

**International status:**

US: The substance is not listed on the schedules to the CSA.

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: The cannabinoid receptor CB1 is a G-coupled protein receptor and has both an allosteric binding site and an orthosteric binding site. Org 27569 has been reported to bind to the allosteric binding site of CB1 and cause a modulation of the orthosteric binding site, which in turn leads to an increased affinity of CB1 agonists such as CP55940 and WIN 55212 for the orthosteric binding site\(^1\). Status decisions have been made on cannabinoid receptor agonists including CP55940 and WIN 55212, which were included in item 1 of Schedule II to the CDSA by virtue of being “similar synthetic preparations”. While Org 27569 does bind to the CB1 receptor, it does so via the allosteric binding site rather than the orthosteric binding site. In

addition, the pharmacological effects of Org 27569 is the modulation of the CB1 receptor and not its activation. Therefore, on the basis of the modulating activity of Org 27569 and its allosteric binding to the CB1 receptor, Org 27569 is considered to be pharmacologically different to classical CB1 receptor agonists and therefore should not be included in item 1 of Schedule II to the CDSA.

Recommendation: Org 27569 is not included in item 1 of Schedule II to the CDSA and is not a controlled substance.

November 23, 2009.