## Drug Status Report

Drug: JZL184 hydrate

**Drug Name Status**: JZL184 is the common name.

**Chemical Name:** 4-nitrophenyl 4-(dibenzo[d] [1,3]dioxol-5-yl(hydroxy)methyl) piperidine-1-carboxylate

## **Chemical structure:**

$$\begin{array}{c} \text{O}_2\text{N} \\ \text{OH} \\ \text{OH} \end{array} \text{. } \text{xH}_2\text{O}$$

Molecular Formula: C<sub>27</sub>H<sub>24</sub>N<sub>2</sub>O<sub>9</sub>.xH<sub>2</sub>O

Pharmacological class / Application: Monoacylglycerol lipase inhibitor

## **International status:**

**US:** JZL184 is not listed on any of the schedules to the CSA and is not mentioned on the DEA website.

**United Nations:** JZL184 is not listed on the Yellow List - List of Narcotic Drugs under International Control. The substance is not listed on the Green List - List of Psychotropic Substances under International Control.

**Canadian Status:** JZL184 is a selective monoacylglycerol lipase (MAGL) inhibitor that has been shown in *in vivo* studies to block 2-arachidonoylglycerol (2-AG) hydrolysis and cause an increase 2-AG concentrations in the brain<sup>1</sup>. The substance is not similar to any of the substances listed in the Schedules to the CDSA.

Recommendation: JZL184 is not included in any of the Schedules to the CDSA and is not considered a controlled substance.

April 7<sup>th</sup>, 2010.

<sup>&</sup>lt;sup>1</sup>Long, JZ. *et al.* (2009) Selective blockade of 2-arachidonoylglycerol hydrolysis produces cannabinoid behavioral effects. Nat Chem Biol. **5**:37–44.