

## Drug Status Report

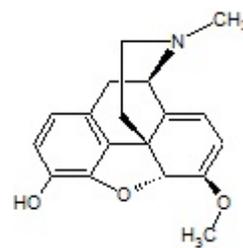
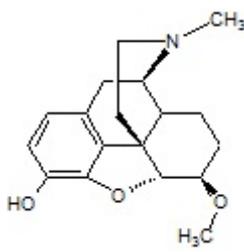
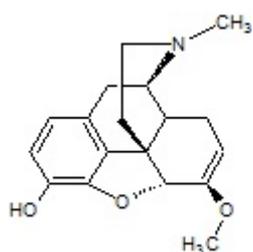
**Drug:** Oripavine related substances

A request was received for the status of 8,14-dihydrooripavine (I) and tetrahydrooripavine (II).

**Drug Name Status:** 8,14-Dihydrooripavine and tetrahydrooripavine are common names.

**Chemical Name:** I - 6,7-Didehydro-4,5-epoxy-6-methoxy-17-methylmorphinan-3-ol  
II - 4,5-Epoxy-6-methoxy-17-methylmorphinan-3-ol

**Chemical structure:**



**Molecular Formula:** I - $C_{18}H_{21}NO_3$ ; II - $C_{18}H_{23}NO_3$

**Pharmacological class / Application:** Opium related substances

**International status:**

US: In 2007, oripavine was added specifically to Schedule II to the CSA. Previously it was controlled in the US as a derivative of thebaine, a schedule II controlled substance, which includes "Opium and opiate, and any salt, compound, derivative, or preparation of opium or opiate"<sup>1</sup>.

Substances I and II are not included specifically in the Schedules to the CSA and are not

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<sup>1</sup> [http://www.deadiversion.usdoj.gov/fed\\_regs/rules/2007/fr0924.htm](http://www.deadiversion.usdoj.gov/fed_regs/rules/2007/fr0924.htm)

mentioned on the DEA website. DEA would need to confirm whether I and II are also included in Schedule II to the CSA.

United Nations: In 2007, the Commission on Narcotic Drugs added oripavine to Schedule I to the Single Convention<sup>2</sup>. Substances I and II are not included in the schedules to the Convention.

Canadian Status: Item 1 of Schedule I to the CDSA is “Opium poppy (*Papaver somniferum*), its preparations, derivatives, alkaloids and salts” and includes morphine and its “salts, derivatives and salts of derivatives”. There follows a list of many opiates. Dihydromorphine (structure above) is subitem 1(12) of Schedule I. Tetrahydrooripavine (II) is the methyl ether derivative of dihydromorphine. Oripavine is a derivative (metabolite) of thebaine and therefore included in item 1 of Schedule I. 8,14-Dihydrooripavine (I) is the dihydro derivative of oripavine.

Both substances I and II can also be considered to be included in item 10 of Schedule I, “Morphinans, their salts, derivatives and salts of derivatives”. Structurally, both I and II are morphinans.

Recommendation: 8,14-Dihydrooripavine (I) and tetrahydrooripavine (II) are included in Item 1 of Schedule I to the CDSA and are controlled substances.

May 30, 2008

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<sup>2</sup> <http://www.incb.org/pdf/annual-report/2007/en/chapter-02.pdf>