Drug Status Report

**Drug:** Naloxone-3-glucuronide

**Drug Name Status:** Naloxone-3-glucuronide is the common name.

**Chemical Name:** (5\(\alpha\))-4,5-Epoxy-3,14-dihydroxy-17-(2-propenyl)morphinan-3-yl beta-D-glucopyranosiduronic acid

**Chemical structure:**

![Chemical structure of Naloxone-3-glucuronide](image)

**Molecular Formula:** \(C_{26}H_{31}NO_9\)

**Pharmacological class / Application:** Derivative of the opioid antagonist, naloxone.

**International status:**

US: The substance is not listed on the schedules to the CSA and is not mentioned on the DEA website. However the definition of narcotic drug in the CSA “(A) Opium, opiates, derivatives of opium and opiates, including their isomers, esters, ethers, salts, and salts of isomers, esters, and ethers, whenever the existence of such isomers, esters, ethers, and salts is possible within the specific chemical designation” may include derivatives of naloxone.

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: Although naloxone and its hydrochloride salt are both excluded from item 1 of Schedule I of the CDSA by the “but not including” part of this item, naloxone-3-glucuronide is a derivative of naloxone and therefore considered to fall under the heading for item 1 of Schedule I: Opium poppy (Papaver somniferum), its preparations, derivatives, alkaloids and salts, including. A number of substances structurally related to naloxone were recently reviewed, for example 7,8-Didehydronaloxone, 2,2’-Binaloxone, 3-O-Methylnaloxone, 3-O-Allylnaloxone, and naloxone benzoxylihydrzone, and were included in item 1. Naloxone-3-glucuronide therefore is not excluded from item 1 of Schedule I.

**Recommendation:** Naloxone-3-glucuronide is included in item 1 of Schedule I to the CDSA and
is a controlled substance.

April 7th 2010.