Drug Status Report

Drug: 2,2'-Bishydromorphone dihydrochloride

Drug Name Status: 2,2'-Bishydromorphone dihydrochloride is the common name.

Chemical Name: (5alpha,6alpha)-(5'alpha,6'alpha)-4,5:4',5'-Diepoxy-3,3'-dihydroxy-17,17'-dimethyl-2,2'-bimorphinanyl-6,6'-dione, dihydrochloride

Chemical structure:

Molecular Formula: C₃₄H₃₆N₂O₆.2HCl

Pharmacological class / Application: Hydromorphone related substance

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 2,2'-bishydromorphone and its dihydrochloride salt.

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: 2,2'-Bishydromorphone is not listed on the schedules to the CDSA. However, hydromorphone is listed as sub-item 17 of item 1 in Schedule I to the CDSA "Opium poppy (Papaver somniferum), its preparations, derivatives, alkaloids and salts, including opium, codeine, morphine and thebaine" and the salts, derivatives and salts of derivatives of these four opium alkaloids. Several "dimeric" substances related to opiates were reviewed and considered to be included in item 1 of Schedule I. These include bis-hydromorphone, 7,8'-bishydromorphone, pseudomorphine (2,2'-bimorphine), bis-naloxone, bis-nalbuphine, and bis-naltrexone.

Recommendation: 2,2'-Bishydromorphone is included in item 1 of Schedule I to the CDSA and is a controlled substance.

February 1st 2010.