Drug Status Report

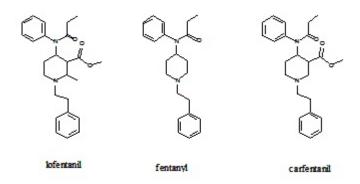
Drug: Lofentanil

Drug Name Status: Lofentanil is the proper name (INN).

Chemical Name: *cis-*(-)-3-methyl-4-[(1-oxopropyl)phenylamino]-1-(2-phenylethyl)-4-piperidinecarboxylic acid methyl ester

Other Names: 4-Piperidinecarboxylic acid, 3-methyl-4-((1-oxopropyl)-phenylamino)-1-(2-phenylethyl)-, methyl ester, *cis*-(-)-

Chemical structure:



 $\textbf{Molecular Formula:} \ C_{25}H_{32}N_2O_3$

Pharmacological class / Application: analgesic

International status:

US: The substance is not currently listed on the US Controlled Substances Act and is not mentioned on the DEA website.

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: Lofentanil is a potent analgesic¹ and contains the root structure common to the fentanyls. The substance is considered an analogue of fentanyl and carfentanil, which are listed as sub-items 3 and 5, respectively, under item 16 of Schedule I to the CDSA. Item 16 of Schedule I is "Fentanyls, their salts, derivatives and analogues and salts of derivatives and analogues." Considering that lofentanil is a structural analogue of fentanyl and carfentanil, the

¹Ben-Zvi, Z., and Hurwitz, A. (1988) Lofentanil: prolonged pharmacological actions and effects on hepatic drug disposition, Res. Comm. Substances of Abuse, **9**:31-44.

substance is included under Item 16 of Schedule I to the CDSA.

Recommendation: Lofentanil is included under Item 16 of Schedule I to the CDSA and is a controlled substance.

April 9th 2010