Drug Status Report

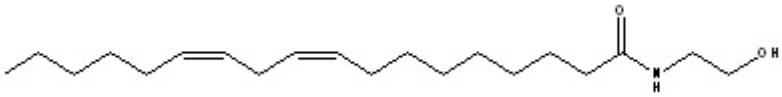
Drug: Linoleyl ethanolamide

Drug Name Status: N-(2-Hydroxyethyl)linoleamide

Chemical Name: (9Z,12Z)-N-(2-Hydroxyethyl)octadeca-9,12-dien-1-amide

Other Names: 9,12-Octadecadienamide, N-(2-hydroxyethyl)-, (9Z, 12Z)-; linoleamide MEA; linoleoyl ethanolamide; linoleoyl monoethanolamide; monoethanolamine linoleic acid amide; N-(2-Hydroxyethyl)-9,12-octadecadienamide; linoleic ethanolamide;

Chemical structure:



Molecular Formula: $C_{20}H_{37}NO_2$

Pharmacological class / Application: Fatty-acid amide hydrolase (FAAH) inhibitor

International status:

US: Linoleyl ethanolamide is not listed in the Schedules to the CSA 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. The drug is not listed on the Green List - List of Psychotropic Substances under International Control.

Canadian Status: Linoleyl ethanolamide is a naturally-occuring lipid which has been shown to inhibit the activity of fatty-acid amide hydrolase (FAAH)[1], an enzyme which is involved in the degradation of anandamide. While linoleyl ethanolamide is structurally similar to some cannabinoid related substances, the substance has not been shown in the scientific literature to demonstrate any agonist activity at cannabinoid receptors. Accordingly, linoleyl ethanolamide is not included within item 1 of Schedule II to the CDSA by virtue of being "similar synthetic preparations".

Recommendation: Linoleyl ethanolamide is not included in item 1 of Schedule II to the CDSA and is not a controlled substance.

April 8th, 2010.

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[1]Maccarrone, M. *et al*. (1998) Anandamide hydrolysis by human cells in culture and brain, J. Biol. Chem. **273**:32332-32339.