

Drug Status Report

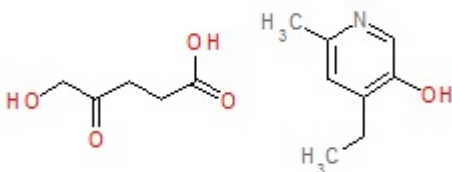
Drug: Mexidol

Drug Name Status: Mexidol is the common name.

Chemical Name: 2-ethyl-6-methyl-3-hydroxypyridine succinate

Other Names: Emoxypine succinate

Chemical structure:



Molecular Formula: $C_8H_{11}NO \cdot C_4H_6O_4$

Pharmacological class / Application: Antioxidant

International status:

US: The drug is not listed on 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: Mexidol is an antioxidant that is used in the treatment of a variety of diseases such as atherosclerosis and coronary heart diseases¹, Parkinson's disease², acute pancreatitis³, and brain lesions⁴. Mexidol exerts its antioxidant effects by inhibiting the initial stage of the free-radical lipid peroxidation (LPO) reaction³. Mexidol is not listed in the CDSA and is not

¹Belayna OL *et al.* (2006) Effect of mexidol and nitroglycerine on iron-sulfur centres, cytochrome P450 and nitric oxide formation. *Bull. Expt. Biol. Med.* **142**:422-424.

²Kucheryanu VG *et al.* (2003). Anty-Parkinsonian activity of mexidol. *Farmaceutski Vestnik*, **54**:547-548.

³Parzyan GR and Geinits AV (2001) Treatment of acute pancreatitis with mexidol and low-intensity laser radiation. *Proc of SPIE - The Int. Soc. for Optical Eng.* **4422**:92-97.

⁴Mering TA. 2003 The action of mexidol on the state of conditioned reflex activity after traumatic brain lesions, *Neurosci Behavioral Physiol* **33**:133-138.

structurally similar to any of the substances listed in the Schedules to the CDSA.

Recommendation: Mexidol is not included in the schedules to the CDSA and is not a controlled substance.

January 7th, 2010