Drug Status Report

Drugs: I - 5-Nitroanthranilic acid  
II - 3-Chloroanthranilic acid  
III - 4-Chloroanthranilic acid  
IV - 4-Nitroanthranilic acid  
V - 3-Hydroxyanthranilic acid

Drug Name Status: I - 5-Nitroanthranilic acid  
II - 3-Chloroanthranilic acid  
III - 4-Chloroanthranilic acid  
IV - 4-Nitroanthranilic acid  
V - 3-Hydroxyanthranilic acid are the common names.

Chemical Name: I - 2-Amino-5-nitrobenzoic acid  
II - 2-Amino-3-chlorobenzoic acid  
III - 2-Amino-4-chlorobenzoic acid  
IV - 2-Amino-4-nitrobenzoic acid  
V - 2-Amino-3-hydroxybenzoic acid

Chemical structure:

Molecular Formula: I - C\textsubscript{7}H\textsubscript{6}N\textsubscript{2}O\textsubscript{2}; II - C\textsubscript{7}H\textsubscript{6}ClNO\textsubscript{2}; III - C\textsubscript{7}H\textsubscript{6}ClNO\textsubscript{2}; IV - C\textsubscript{7}H\textsubscript{6}N\textsubscript{2}O\textsubscript{4};  
V - C\textsubscript{7}H\textsubscript{7}NO\textsubscript{3}

CAS-RN: I - 616-79-5; II - 6388-47-2; III - 89-77-0; IV - 619-17-0; V - 548-93-6

Pharmacological class / Application: Anthranilic acids

International status:

US: The substance are not currently listed on the schedules to the US Controlled Substances Act and are not mentioned on the DEA website.
United Nations: The substances are not listed on the Yellow List - List of Narcotic Drugs under International Control, the Green List - List of Psychotropic Substances under International Control, nor the Red List - List of Precursors and Chemicals Frequently used in the Illicit Manufacture of Narcotic Drugs and Psychotropic Substances Under International Control.

Canadian Status: The above-named substances belong to a class of compounds known as the anthranilic acids and have a range of applications including their use as intermediates in the synthesis of pharmaceuticals and dyes\textsuperscript{1-4}. 3-hydroxyanthranilic acid is also a metabolite of tryptophan and has been shown to inhibit T-cell proliferation and also a potential carcinogen\textsuperscript{5,6}.

The substances are not listed in any of the Schedules to the CDSA. “Anthranilic acid and its salts” are listed as item 3 in Part 1 of Schedule VI to the CDSA and is considered to be a Class A Precursor. However, since 5-nitroanthranilic acid, 3-chloroanthranilic acid, 4-chloroanthranilic acid, 4-nitroanthranilic acid and 3-hydroxyanthranilic acid are not salts of anthranilic acid, the substances cannot be included under item 3 of Part 1 of Schedule VI to the CDSA.

Recommendation: 5-nitroanthranilic acid, 3-chloroanthranilic acid, 4-chloroanthranilic acid, 4-nitroanthranilic acid and 3-hydroxyanthranilic acid are not included in the schedules CDSA and are not controlled substances.

July 9\textsuperscript{th}, 2010.


\textsuperscript{4}Thomas, LW. \textit{et al}. (1978) Bioassay of 4-nitroanthranilic acid for possible carcinogenicity, DHEW Publication No 78-1364.


\textsuperscript{6}Umeda, M. \textit{et al}. (1989) Promotional effect of lithocholic acid and 3-hydroxyanthranilic acid on transformation of X-ray-initiated BALB/3T3 Cells, Carcinogenicity, 10:1665-1668.