NiHealth Canada Santé Canada

STATUS DECISION OF CONTROLLED AND NON-CONTROLLED SUBSTANCE(S)

Substance: Squalamine lactate

Based on the current information available to the Office of Controlled Substances, it appears that the above substance is:

Controlled ☐
Not Controlled ✓

under the schedules of the *Controlled Drugs and Substances Act* (CDSA) for the following reason(s):

- The substance does not display any anabolic activity and therefore is not included under item 23 of Schedule IV to the CDSA.

Prepared by: _____ Date: Feb 1st 2011
Evelyn Soo

Verified by: _____ Date: _____
Marianne Tang

Approved by: _____ Date: _____
DIRECTOR, OFFICE OF CONTROLLED SUBSTANCES

This status was requested by: Christine Leckie, Inspectorate

Drug Status Report

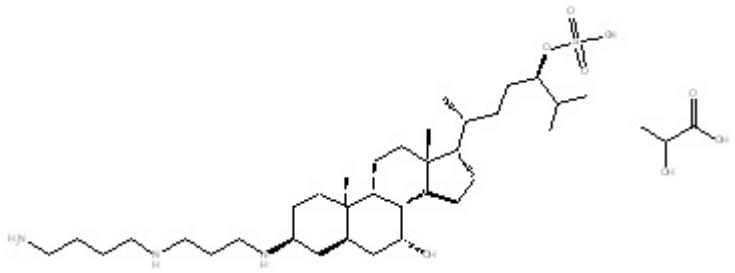
Drug: Squalamine lactate

Drug Name Status: Squalamine lactate is the common name.

Chemical Name: Cholestane-7,24-diol, 3-((3-((4-aminobutyl)amino)propyl)amino), 24-(hydrogen sulfate), (3beta,5alpha,7alpha,24R)-, (2S)-2-hydroxypropanoate (salt)

Other Names: Propanoic acid, 2-hydroxy-, (2S)-, compound with (3beta,5alpha,7alpha,24R)-3-((3-((4-aminobutyl)amino)propyl)amino)-7-hydroxycholestan-24-yl hydrogen sulfate

Chemical structure:



Molecular Formula: $C_{34}H_{65}N_3O_5S.C_3H_6O_3H_2O$

Pharmacological class / Application: Antiangiogenic

CAS-RN: 320725-47-1

International status:

US: Squalamine lactate is not listed specifically in the Schedules to the US *Controlled Substances Act* and is not mentioned anywhere on the DEA website.

United Nations: The substance is not listed specifically on the Yellow List - List of Narcotic Drugs under International Control nor the Green List - List of Psychotropic Substances under International Control.

Canadian Status: Squalamine lactate is not listed specifically in the CDSA. The substance is a aminosterol that displays antineoplastic and antiangiogenic activity[1] and has been reproted to be

[1]Ciulla, TA. (2003) Squalamine lactate reduces choroidal neovascularization in a laser-injury model in the rat, Retina, **23**:808-814.

useful for the treatment of age-related macular degeneration[2]. There are no reports in the scientific literature that squalamine lacate displays any anabolic activity and therefore the substance cannot be included under item 23 of Schedule IV to the CDSA.

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

Date: 1 February 2011

---

[2]Ciulla, T. *et al*. (2007) Squalamine lactate for the treatment of age-related macular degeneration, Exp Rev Ophthalmol. **2**:165-175.