Open Peer Review on Qeios

Lamellar Body Mimetic Mouth Spray LMS-611

National Cancer Institute

Source

National Cancer Institute. <u>Lamellar Body Mimetic Mouth Spray LMS-611</u>. NCI Thesaurus. Code C126333.

A suspension-based oral spray containing multilamellar lipid vesicles in which the lipids mimic the lipidic composition of endogenous extra-alveolar lamellar bodies, with muco-restorative and protective activity against radiotherapy (RT)-induced xerostomia (RIX). Upon sublingual administration of the lamellar body mimetic LMS-611 using a spray, the lipids in this agent mimic the natural secretions of endogenous lamellar bodies. This makes mucus more fluid and may prevent dryness of the mouth. This restores saliva functions and makes it easier to chew, swallow and talk, and also prevents xerostomia-induced infections, tooth decay and tooth enamel decay. RT decreases saliva secretion by causing the destruction of the parotid and submandibular serous salivary glands and lamellar bodies. This results in thicker and more visco-adhesive saliva, which causes various xerostomia-induced symptoms; intact lamellar bodies maintain the fluidity of mucus and lubricate the mouth.