

BIOFLOSS

A NOVEL NANO-ENFORCED
BIOACTIVE DENTAL FLOSS.

UA
0030

MARKET

The growing interest in preventive health care will drive the growth of the dental floss market, which is expected to reach a size of 4,169 million dollars by 2021, at a CAGR of 5.02%. Over 3 million miles of dental floss is purchased each year in North America, and it is estimated that an average person uses 122 yards of dental floss annually. About 30% of the population floss daily.

UNMET NEED

Dental plaque control and removal is a key element in the prevention of dental and gum diseases. If untreated, both conditions contribute to tooth decay and eventually to tooth loss; affecting not only the quality of life of patients but also their esthetic and psycho-logical health status. Oral hygiene via tooth brushing removes only the dental plaque on the surface and it does not reach the area in-between teeth. Different products have been developed to achieve this goal, including: dental flosses, wood tooth-picks, interproximal brushes and oral irrigators. The dental floss has been historically/traditionally the most frequently recommended/advertised method. However, patient's compliance with a regular use continues to be low due to lack of (a) motivation and (b) ability for its correct use.



Universidad de

los Andes



**DIRECCIÓN
DE INNOVACIÓN**

SOLUTION

UANDES researchers propose that the efficiency of dental flossing and patient compliance may be improved with the coating of regular dental flosses with a customized, mouth-dissolving, biodegradable, tooth/muco-adhesive nano-formulation.

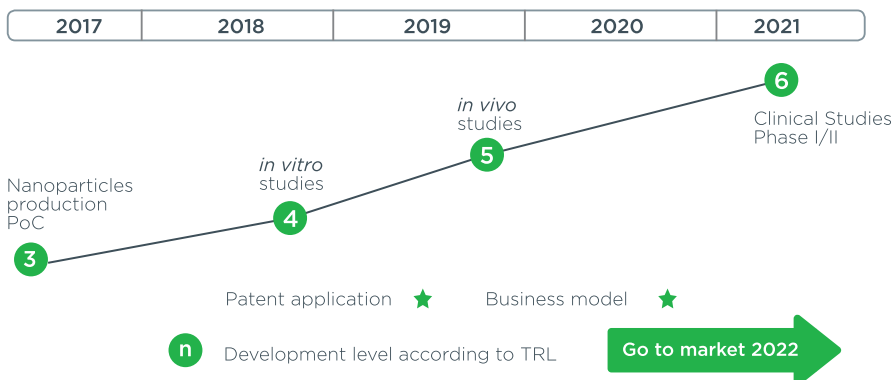
ADVANTAGES

The manufacturing process is simple, rapid, reproducible and scalable.
The drug delivery system and device are cost-effective, easy-to-use, customizable and it has a synergistic effect of antibacterial and immunomodulatory properties.
Long-term prevention of dental caries and periodontal diseases.

INTELLECTUAL PROPERTY

Provisional patent filed.

STATE OF DEVELOPMENT



BUSINESS SUMMARY DEPARTMENT OF INNOVATION

The Dirección de Innovación of the Universidad de los Andes seeks to support, canalize and efficiently manage the results from research conducted at the University to the public and private sector, both national and international. This is done in order to promote the transfer and application of the knowledge generated in the University so as to benefit the society and contribute to the economic development.

> INNOVACION.UANDES.CL

PROJECT DIRECTOR

Ziyad Haidar, DDS, masters in research in dental sciences, Ph.D. in biomaterials, bioengineering and nanotechnology and MBA.

> His area of expertise is the design of devices and biomaterials for regenerative therapy.

CONTACT

Anil Sadarangani, MBA, Ph.D.
T: +56 2 2618 2102
E: anils@uandes.cl

