



Technology CTC21: DENTOXOL

Market need

Due to the severe impact of oral problems in patients with chronic diseases, cancer, diabetes, and heart disease, and especially as a result of the high incidence rate of periodontal disease around the world, the oral health industry has been searching for years for an effective treatment without side effects.

There are two major types of oral complementary products available on the market today:

- **Cosmetic mouthwashes** are intended to mask halitosis, remove debris from the teeth and gums and contain whiteners to help whiten the teeth. These products are cosmetic and provide limited protection against periodontal disease.
- **Therapeutic mouthwashes** are designed to treat and prevent excessive buildup of dental plaque and to help prevent gum disease. They require medical prescription and typically have some side effects, like staining.

DENTOXOL was developed to create products that exert a dual therapeutic-cosmetic action. It is a line of products for the oral treatment and prevention of periodontal disease that provides an effective action comparable to chlorhexidine against bacteria and does not require medical prescription.

Benefits

In the field of oral problems related to chronic diseases, the global oral care market does not currently offer specific products for the control and treatment of oral bacteria that provided a high level of efficacy without side effects. DENTOXOL is a new segment of products that offer results in as little as 5 days for the treatment of complex periodontal diseases. DENTOXOL is an Over-the-Counter (OTC) product with prescription benefits.

The solution does not contain alcohol, and the ingredients are low-cost and readily available. The simple OTC format provides the same results as chlorhexidine, but without the negative side effects like staining of teeth, changes in sense of taste, or required limited usage.

Technology description

DENTOXOL is a composition of active ingredients in solution, gel, paste, spray and mouthwash forms for oral hygiene, which has an effective anti-bacterial action combating mutans streptococcus (the main cause of tooth decay) and porphyromonas gingivalis (principal cause of gingivitis). This effectiveness has been validated by scientific studies performed at the Faculty of Dentistry at Universidad de Chile and demonstrates more than 50% reduction in the count of oral bacteria.

The active components do not exist in any other oral hygiene product in this unique combination.

The fact that DENTOXOL is made up of 100% commonly-used dentistry compounds permits easy access to the active substances in order to produce at industrial scale and allows it to be sold as an OTC product, rather than under medical prescription, as compared with chlorhexidine-based mouthwashes, which are sold as controlled substances requiring medical prescription.





IC² INSTITUTE—GLOBAL COMMERCIALIZATION GROUP
THE UNIVERSITY OF TEXAS AT AUSTIN

3925 West Braker Lane ▪ Austin, Texas U.S.A 78759 ▪ (512) 305-0331 ▪ www.ic2.utexas.edu

Development status

DENTOXOL is currently made at laboratory scale in multiple delivery formats and three different flavors. The technology is fully implemented in field trials, with small-scale customers in Chile, and significant results have been observed after five days of use in the clinical treatment of patients with serious oral health problems. Given that the DENTOXOL formulation is conformed of substances commonly used in the dentistry industry, scalability is easily achieved.

The DENTOXOL formulation and its oral use are protected by two patent applications. In Chile, the patent has been granted for 15 years, and in the United States the patent is pending.

For additional information, please contact:

Glenn E. Robinson

Program Manager, Chile Technology Commercialization Program

Tel. 512-232-8090

e-mail: grobinson@ic2.utexas.edu



Global Commercialization Group

WHAT STARTS HERE CHANGES THE WORLD