

Liquid precursor composition that upon solidification forms a sustained release varnish (Yissum)

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[Doron Steinberg](#), HUJI, Faculty of Dental Medicine, Oral Medicine

[Michael Friedman](#), HUJI, School of Pharmacy, Pharmaceutics

[Michael Friedman](#), HUJI, School of Pharmacy, Pharmaceutics

Delivers treatment in response to pH conditions in mouth

Categories	Coatings, Biomaterials, Polymers, Composites, Dental Care
Development Stage	Successful clinical trials – ready for commercialization
Patent Status	Patent pending
Market	The oral drug delivery market, the largest segment of the drug delivery market, is a \$35 billion industry expected to grow up to 10% per year

Highlights

- Novel dental coating that delivers therapeutics over time, as required, in response to sensed changes in acidic/basic conditions in the oral cavity
- Dental disorders occur when there are changes in oral hygiene, diet, medicaments or age
- The main advantage of current therapeutic agents and drug delivery systems is their high substantivity in the target organ, in contrast to the applications currently used.
- Application-targeted reagent is suitable for oral disorders as: tooth decay, periodontal diseases, implantitis, halitosis, tooth whitening, hypersensitivity, cancer, fungal infection, repair and regeneration of bone, cartilage, tendon and ligament defects.

Our Innovation

The application is a pharmaceutical platform that various types of drugs can be incorporated into.

Key Features

- Increases exposure time to medication, preventing infections even in procedures in the root canal
- Enables sustained release treatment effective against bacteria, yeasts, viruses and fungi
- Reduces amount of drugs required, minimizing side effects. These advantages result in better clinical improvement and better patient compliance.
- Built-in pH sensor increases the rate of release of medication in response to changes in pH that occur in many pathological oral disorders such as infections, caries, inflammations, dry mouth, halitosis, candidiasis, delivering medication as required
- Simple production process; straightforward scale-up

Development Milestones

Seeking industry cooperation for commercialization

The Opportunity

Additional applications in medicine in human or in animals

Contact for more information:

Shoshana Keynan , VP, Head of Business Development, Healthcare, +972-2-6586683

Yissum Research Development Company of the Hebrew University of Jerusalem
Hi-Tech Park, Edmond J. Safra Campus, Givat-Ram, Jerusalem P.O. Box 39135, Jerusalem 91390
Israel Telephone: 972-2-658-6688, Fax: 972-2-658-6689