



TECHNOLOGY

Improved Antifungal Peptides for Candida Infections

OVERVIEW

Background

Oral thrush is an infection with a high incidence in patients with a suppressed or not fully developed immune system (e.g., HIV-infected, cancer, and newborns). A common cause of oral thrush is *Candida albicans*, which colonizes mucosal surfaces in healthy people, but can cause oral thrush and other infections in immunocompromised patients. The United States Department of Health estimates there are 46000 cases of *Candida* in the country annually. Growing resistance of fungal pathogens to current antifungal treatments and host defense responses necessitates an alternative therapy that is safe, effective, and, ideally, preventive.

Innovative Technology

Researchers at the University of Maryland, College Park and University of Maryland, Baltimore have developed synthetic and natural compositions that can effectively act as oral and topical anti-fungal treatments against Thrush. These anti-fungal compositions have peptide based bio-adhesive gel formulations. The bio-adhesive characteristic enables the anti-fungal therapeutics to persist and contain the fungal infection without being dissolved easily compared to previously developed liquid based formulations.

Advantages

- Improved efficacy against Thrush
- Persistent gel-based formulation allows therapeutic to have a longer half-life

Applications

- Oral topical treatment for Thrush (especially associated with cancer, HIV and other diseases)
- Platform technology that can be used to target broader fungal species

CONTACT INFO

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Additional Information

INSTITUTION

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EXTERNAL RESOURCES

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