



School of Pharmacy PhD Projects 2014

Project Title The Design, Development and Characterisation of Antifungal Denture Adhesive Films

Supervisors Dr Gavin Andrews and Prof David Jones

Description Denture-related stomatitis is an inflammatory process that mainly involves the palatal mucosa when it is covered by complete or partial dentures. The cause of stomatitis appears to be multi-parametric; old age and the concomitant decline of the immune system, systemic diseases, smoking, wearing dentures at night, and poor oral hygiene have all been proposed as predisposing factors. It is well accepted that the presence of *Candida albicans* in denture plaque is considered an important factor in the development of denture-related stomatitis. Therefore eradication of the opportunistic pathogen via delivery of a suitable antifungal will significantly reduce inflammation and occurrence of stomatitis. Current antifungal treatment strategies are sub-optimal and include oral suspensions, mouth rinses, dentifrices and solutions. These delivery systems offer limited residence time at the site of infection thus providing only a short-acting therapy that requires frequent dosing. Therefore, there is an urgent need to manufacture suitable delivery platforms that increase the duration of action of incorporated antifungal agent(s) whilst also improving drug efficacy. This project will focus on developing novel bio-adhesive films to address this current deficit and will offer training in pharmaceutical product manufacture, a range of physicochemical testing and microbiological techniques

Start Date Oct 2014

Keywords Oral Candidiasis, Denture Adhesive films, Melt Extrusion, Antifungal Agents

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How to Apply

Postgraduate applications should be made using Queen's Online:

<http://go.qub.ac.uk/pgapply>

Please note that there are two application processes: one for admission to the university and another for postgraduate awards.

Further Information

Additional information for prospective postgraduate students can be found on the School of Pharmacy website:

<http://www.qub.ac.uk/pha>

and the Queen's Postgraduate website:

<http://www.qub.ac.uk/home/ProspectiveStudents/PostgraduateStudents/>