

# Overview and Future Potential of Buccal Mucoadhesive Films as Drug Delivery Systems for Biologics

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© 2016, American Association of Pharmaceutical Scientists. The main route of administration for drug products is the oral route, yet biologics are initially developed as injectables due to their limited stability through the gastrointestinal tract and solubility issues. In order to avoid injections, a myriad of investigations on alternative administration routes that can bypass enzymatic degradation and the first-pass effect are found in the literature. As an alternative site for biologics absorption, the buccal route presents with a number of advantages. The buccal mucosa is a barrier, providing protection to underlying tissue, but is more permeable than other alternative routes such as the skin. Buccal films are polymeric matrices designed to be mucoadhesive properties and usually formulated with permeability enhancers to improve bioavailability. Conventionally, buccal films for biologics are manufactured by solvent casting, yet recent developments have shown the potential of hot melt