

Accepted Manuscript

Title: Time-Dependent Mucoadhesion of Conjugated Bioadhesive Polymers

Authors: Kenneth M. Estrellas, Mark Fiecas, Aharon Azagury, Bryan Laulicht, Daniel Y. Cho, Alexis Mancini, Joshua Reineke, Stacia Furtado, Edith Mathiowitz



PII: S0927-7765(18)30704-5
DOI: <https://doi.org/10.1016/j.colsurfb.2018.10.011>
Reference: COLSUB 9695

To appear in: *Colloids and Surfaces B: Biointerfaces*

Received date: 19-6-2018
Revised date: 1-10-2018
Accepted date: 4-10-2018

Please cite this article as: Estrellas KM, Fiecas M, Azagury A, Laulicht B, Cho DY, Mancini A, Reineke J, Furtado S, Mathiowitz E, Time-Dependent Mucoadhesion of Conjugated Bioadhesive Polymers, *Colloids and Surfaces B: Biointerfaces* (2018), <https://doi.org/10.1016/j.colsurfb.2018.10.011>

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

Time-Dependent Mucoadhesion of Conjugated Bioadhesive Polymers

Kenneth M. Estrellas^a, Mark Fiecas^b, Aharon Azagury^a, Bryan Laulicht^a, Daniel Y. Cho^a, Alexis Mancini^a, Joshua Reineke^c, Stacia Furtado^a, and Edith Mathiowitz^{*a}

^a Department of Molecular Pharmacology, Physiology and Biotechnology. Brown University. Providence, RI 02912 USA.

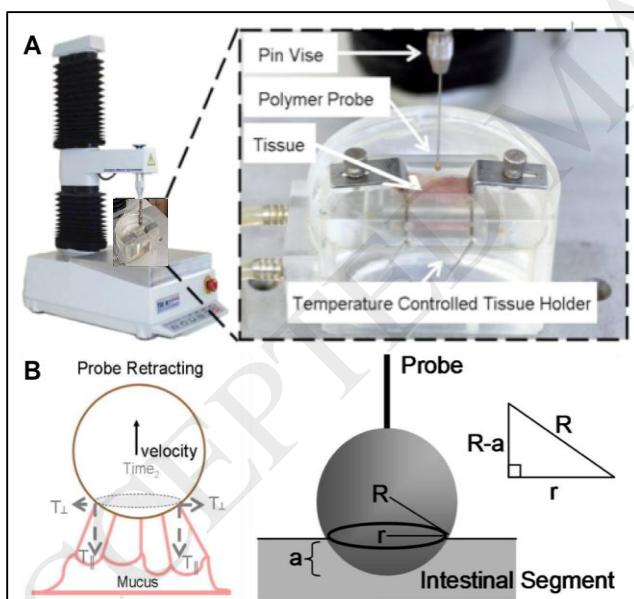
^b Department of Statistics. University of Warwick. Coventry, CV4 7AL United Kingdom.

^c Pharmaceutical Sciences Faculty Research, South Dakota State University, Box 2202C, Brookings, SD 57007, USA.

*Corresponding Author:

Box G-B393
Brown University
Providence, RI 02912
401-863-1358 (phone)
401-863-1595 (fax)
Edith_Mathiowitz@brown.edu

Graphical abstract



Highlights

- Polycarbophil showed a rapid and significant loss of bioadhesion over time
- The novel synthetic polymers maintained their bioadhesive performance over time
- Increased hydroxyl groups increase bioadhesive forces with intestinal mucosa

Download English Version:

<https://daneshyari.com/en/article/11263387>

Download Persian Version:

<https://daneshyari.com/article/11263387>

[Daneshyari.com](https://daneshyari.com)