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Organized By

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(Degree and Diploma),

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Theme:

**"Invigorating Research in
Pharmaceuticals:
Reasonable Industrial Approach"**

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CENTRAL Nagpur.
Jagnade Square,
Nandanvan, Nagpur,
Maharashtra, India.

Souvenir and Abstract Book

*"An event that is full of potentials to learn the latest trends in the
Pharma industry and to learn about the business culture."*



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MUCOSAL DRUG DELIVERY SYSTEM FOR CANDIDA ALBICANS

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ABSTRACT

Oral candidiasis frequently occurs in individual with dry mouth syndrome (xerostomia) in immune compromised patient and in denture wearers. The aim of this study is to developed a formulation which will prolong the retention time of antimicrobial agents at the site of application the activity against Candida albicans of a synthetic cationic peptide base on human fungicidal silvery peptide histatin-5 was tested either in mixture with bio adhesive polymer Xanthun of after covalent coupling to this polymer. The presence of xanthun resulted in an increase of LC-50 value of peptide from 2.6 (SD =0.6) to 5.8(SD=4.0) covalent coupling cause an additional increase of the LC50 value to 18.4(SD=6.7). coupling cause are duction of viscosity elasticity of xanthun solution related to the applied concentration of the coupling agent. Incubation of the peptide with clarified human whole saliva resulted in proteolytic degradation of peptide. In the presence of xanthun the degradation occurs more slowly. It was concluded that xanthun is an appropriate vehicle for antimicrobial peptide in retention increase in formulation.

Keywords Xerostomia, Candida albicans, Xanthun.

DEVELOPMENT AND OPTIMIZATION OF METOPROLOL SUCCINATE EXTENDED RELEASE MATRIX TABLET

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ABSTRACT

This research aimed at development and optimization of extended release matrix tablets of Metoprolol Succinate using hydrophilic polymers. Primary objective was to formulate and evaluate an extended release dosage form of Metoprolol Succinate. using HPMC, K100M, HPMCK15M, Gaur gum. Characterization of drug was done by determining its melting point, λ max and recording its IR spectrum. The drug-excipients compatibility study was done by IR spectroscopy. The Metoprolol succinate extended release matrix tablet was prepared by using both HPMC, K100M, HPMCK15M and hydrophobic natural polymer Gaur gum by direct compression technique. Total 16 batches were prepared form that 8 batches were consider for evaluation (B1-B8) which shows optimize results for pre and post compression. Accelerated stability testing was done at 40/75±5%. Extended release tablet formulation of Metoprolol succinate shows good results in which B8 shows 87% drug release in 20hrs and B3 shows 92% drug release at 18hrs in in-vitro dissolution study. From pre and post compression results it is concluded that excipients showed good compatibility with drug. The accelerated stability testing of B8 batch showed no significant changes. Form all the data it was concluded that the process adopted for the manufacturing provides a product meets all the predetermine specification and quality characteristics.

Keywords Metoprolol succinate, Matrix tablet, Extended Release.