28. Title: Peptide mediated ocular drug delivery (Natamycin and Ribloflavin)

Inventor: Prof. Archana Chugh, Kusuma School of Biological Sciences

Keywords: Cell penetrating peptides, Drug delivery, Therapeutic peptides, Keratoconus, Fungal keratitis

Domain: Healthcare (Drug delivery)

Summary: Novel cell penetrating peptides that have been conjugated to natamycin for the treatment of Fungal Keratitis. Improved delivery of Riboflavin is also shown by covalent conjugation of cell penetrating peptides for efficient treatment of keratoconus. The present technology improves the therapeutic effect.

Advantages:

» Treatment of Fungal keratitis and Keratoconus with reduced dosage as well as frequency than the current line of treatments

» Enhanced solubility of the drug

» Low immunogenicity of the Novel Drug conjugate

Applications: therapeutic drug delivery (Biologics)

Scale of Development: Invitro and in vivo studies done on mice

Technology Readiness Level: 5

IP Status: Know-how