

29. Title: Therapeutic Peptides

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Keywords: Marine organisms, Venoms and Toxins, Antimicrobial peptides, Cell penetrating peptides

Domain: Healthcare (Drug delivery)

Summary: Technology relates to an inventory of inhouse invented as well as modified bioactive peptides derived from marine resources as well as venoms and toxins that possess the property to act against variety of pathogens such as Hepatitis B virus, MRSA, Mycobacterium and Leishmania. In vitro studies have been successfully conducted. In vivo studies in mice have been initiated for fungal infection treatment.

Advantages:

- » Biocompatible
- » Non-Cytotoxic
- » Biodegradable
- » Low immunogenic response elicitation
- » Low concentration than existing antibiotics required
- » Broad spectrum antimicrobials
- » Antibiofilm assays have also yielded successful results
- » Low dosage
- » Better performance than the existing Antibiotics

Applications: Lifesciences (Therapeutic drug delivery system)

Scale of Development: In vitro studies done, in vivo studies ongoing

Technology Readiness Level: 4

IP Status: Indian Patent Application 201711012666, US Granted Patent 11254944