

Evaluation of different delivery strategies for therapeutic applications of *Klebsiella pneumoniae* phages in burn wound model

- Relates to the novel drug delivery system (NDDS) based Nano-Lipoidal formulation consisting of phage consortium along with other components for treatment of *Klebsiella pneumoniae* mediated wound infection.
- Innovative composition and construction of drug delivery system, providing an innovative bio-therapy solution as an effective alternate to Active Pharmaceuticals Ingredients (APIs).
- The Technology has reached the level of Proof of Concept (P-o-C) after establishing the efficacy of the formulation on lab-scale and process has been validated.
- **Milestones Achieved:**
 - ***IP status:*** An Indian patent application (201711028816) has been filed.
 - ***Validation:*** Preliminary lab scale study has been completed, wherein lab ready product was found to be stable for up to three (3) months at 4° C.
 - ***USP of technology:***
 - i. Bacteriophage Cocktail and unique pharmaceutical composition.
 - ii. Significantly reduced both extracellular and intracellular bacteria.
 - iii. Speedy regeneration of skin and hair follicles on account of presence of functional expedients in the formulation.
 - iv. Results proved upon histopathological examination.
- Technology was developed at Panjab University, Chandigarh with extramural support from Indian Council of Medical Research.