PURDUE INNOVATES | Office of Technology Commercialization

Liposomal Formulation of Combinational Antibiotics

A new liposomal formulation of synergistic combinational antibiotics enables maximum bacteria killing against resistant respiratory pathogens while minimizing respiratory tract irritation.

Liposomal formulations have been developed for single drugs such as ciprofloxacin but not for combinational antibiotics. Liposomal formulations have shown significant less irritation to the respiratory tract and much better safety in previous clinical trials. Developing liposomal formulations for combinational antibiotics might be beneficial for the treatment of respiratory infections.

Researchers at Purdue University have developed a new liposomal formulation of combinational antibiotics for the treatment of respiratory infections. This new formulation incorporates two synergistic antibiotics to enable maximum bacteria killing against resistant pathogens while significantly reducing irritation to the respiratory tract.

Advantages:

-Maximum bacteria killing against resistant pathogens

-Reduce resistance development

Potential Applications:

-Treatment of respiratory infections

-Eradication of Pseudomonas aeruginosa

TRL: 3

Intellectual Property:

Provisional-Patent, 2018-04-30, United States | NATL-Patent, 2019-04-13, Europe | PCT-Patent, 2019-04-30, WO | NATL-Patent, 2020-10-30, United

Technology ID
2018-ZHOU-68205

Category
Pharmaceuticals/Drug Delivery & Formulations

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Keywords: Liposomal formulations, combinational antibiotics, respiratory infections treatment, synergistic antibiotics, bacteria killing, resistant pathogens, reduce resistance development, Pseudomonas aeruginosa eradication, drug delivery, ciprofloxacin