

MicuRx to receive funds from CARB-X for Innovative Antibiotic

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Polymyxin E and Polymyxin B, are important antibiotics for Gram-negative bacteria



MicuRx Pharmaceuticals announced the Global Partnership Program "Combating Antibiotic Resistant Bacteria Accelerator" ("CARB-X")) Committed to unused \$5.2 million in undetermined funding for new drug clinical research applications (IND) and phase 1 clinical studies for MRX-8 (or "PMX-8").

MRX-8 is a new antibiotic polymyxin, intended for the treatment of *Escherichia coli* (*E. coli*) , *Pseudomonas aeruginosa* (*P. aeruginosa*) , *Klebsiella pneumoniae* (*K. pneumoniae*) and *Bowman Acinetobacter* (*A. baumannii*) and other infections caused by multidrug-resistant Gram-negative bacteria.

Polymyxins, including polymyxin E and polymyxin B, are important antibiotics for Gram-negative bacteria. Despite the excellent efficacy of existing polymyxins, polymyxins have only been used as the final treatment option due to the high incidence of nephrotoxicity (up to 60%).

In addition to nephrotoxicity, polymyxins also show neurotoxicity. In recent years, because of the lack of effective drugs for the treatment of multiple drug-resistant bacteria, although polymyxins have a large number of toxic and side effects, physicians are increasingly using this drug.

For more than 60 years, no new polymyxin has been approved for marketing.

The new drug, MRX-8, is designed to address the nephrotoxicity problems of existing polymyxins.

Preclinical data available indicate that MRX-8 is highly effective compared to existing polymyxins, which can reduce nephrotoxicity and can reduce acute or neuromuscular toxicity.