

Antibacterial 2,4-Diaminoquinazoline Compositions and Methods of Treatment

Researchers at the University of South Florida have developed a method to treat various infections and diseases using a 2,4-diaminoquinazoline antibacterial compound.

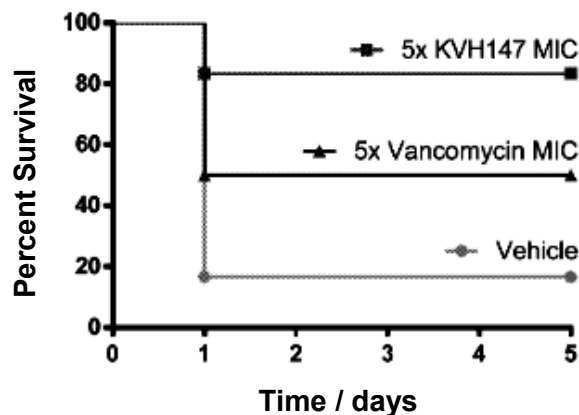
Despite the notable success of antibiotics in the past 70 years, bacterial diseases remain the second-leading cause of mortality worldwide. Bacteria cause 17 million deaths globally, particularly in children and the elderly. In the United States, there are almost 2 million hospital acquired infections each year. This results in approximately 100,000 deaths annually. Perhaps the most significant public health concern regarding bacterial infectious disease is the continued and rapid emergence of drug resistant bacteria. As such, there is an undeniable need to develop new antibacterial therapeutics to fight the infections caused by these virtually untreatable pathogens.

USF researchers have developed novel antibacterial compositions including a 2,4-diaminoquinazoline compound. Further, methods of treatment using the identified compound to combat bacterial infections and related diseases have also been developed. This technology can regulate microbial biofilm growth for both gram-positive and gram-negative bacteria. Moreover, it can also treat infections cause by many types of bacteria such as *Acinetobacter baumannii* and methicillin-resistant *Staphylococcus aureus* (MRSA). As a novel antimicrobial agent, this technology will contribute to the growing problem of antibiotic resistance.

ADVANTAGES:

- Regulates microbial biofilm growth
- Is effective against drug resistant bacteria including MRSA
- Treats a wide variety of bacteria

A Novel Antibacterial Compound



The Compound (KVH147) Treating a Bacterial Infection in Mice

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Patent #s: [8,906,918](#) / [10,081,607](#)