

A Solution to Drug-sensitive and Multi-drug resistant Bacterial and Fungal Pathogens

Challenge

Bacterial and fungal pathogenic infections are universally common and start on the skin of animals, potentially spreading into tissue and circulation which makes them particularly difficult to eradicate. They are additionally hard to eradicate due to their ability to rapidly mutate and become tolerant to treatments and eventually become multi-drug resistant. 700,000 people die each year world-wide due to drug-resistant infections. The World Health Organization (WHO) estimates that by 2050, 10 million people will die every year. In the US, Methicillin-Resistant Staphylococcus Aureus (MRSA) kills 30,000 people each year and results in double costs for hospitalization. Reducing antibiotic resistant infections by 20% would save > \$5 billion in the U.S. alone.

Solution

This invention is a combinatorial formulation of ubiquitously used materials that displays rapid 100% killing efficiency against all drug-sensitive and multidrug-resistant bacterial and fungal pathogens. It can be applied to the skin or to inorganic environmental surfaces where it sterilizes surfaces inoculated with a dense population of mixed pathogens within two minutes.



Benefits and Features

- Non-toxic, non-corrosive, odorless; non-oxidizing chemical and does not contain either hydrogen peroxide or alcohol
- Contains active ingredients each FDA approved for use either in/on humans.
- Actively treats bacterial and fungal activity on undisturbed inanimate surfaces exceeding two months and safe to use in body cavities (ears, nose, mouth, vagina)

Market Potential / Applications

This invention has application as an anti-bacterial and anti-fungal disinfectant on human and animal skin as well as on inanimate surfaces.

Developments and Licensing Status

Status: Available

Commercial sponsor sought? Yes

Patent Status

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US Patent Continuation pending

Japan and EP Patent Pending

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