



NOVEL TECHNOLOGY ADDRESSING “TOPICAL” DRUG RESISTANT INFECTIONS

Domain: Healthcare Drug

Unmet Need & Opportunity

Drug Resistance / Antimicrobial Resistance (AMR) is one of the top global health threats. Misuse and overuse of antimicrobials is the key driver of AMR. Per WHO, AMR make infections harder to treat and medical procedures / treatments such as surgeries, chemotherapies – riskier. AMR has led to 1.27 million global deaths and contributed to 4.95 million deaths in 2019. In addition, it would lead to at least US\$1 trillion in additional healthcare costs and GDP losses per year by 2030. AMR crisis is further compounded due to antibiotic pipeline and access crisis. Per Centers for Disease Control (CDC), strategies to address AMR involves - implementing evidence-based infection control practices and developing novel drugs / therapies. However, both strategies face limitations i.e. developing nations lack infrastructure and training to implement infection control practices while novel drug / therapies' development is prohibitive due to cost (~\$1Billion / drug) and low returns.

Stage of Development

TRL: 4

The sanitizing spray has been tested in a laboratory setting, and its ability to neutralize or deactivate viruses has been validated under controlled conditions. The technology is refined, and data on its performance is gathered.

Applications / Use case

The technology has substantial potential for use in difficult to treat / drug resistant dermal/topical infections as:

- Prescription (Rx) medications
- Over the Counter (OTC) medications
- Medical device (in drug eluting bandages)

Technology Description

The technology is infection agnostic and offers broad-spectrum efficacy against super bugs / drug resistant bacteria, fungi and viruses. It comprises of synergistically acting ingredients offering multi-mode mechanism of action. Generally Recognized As Safe (GRAS) categorization of the utilized ingredients make the composition highly safe and suitable for difficult to treat / drug resistant dermal / topical infections.

Market Scope

Applications addressing drug resistant / AMR infections, makes the developed technology highly valuable. Based on certain published reports the skin treatment is about 6,500 crores (2023) and is expected to reach about 10,625 crores by 2029 (Note: This value is for reference only. Detailed market research needs to be conducted to assess the true potential).

Value Proposition

- Utilizes FDA approved generally regarded as safe (GRAS) molecules thereby reducing both the development cost and time in excess of 90%.
- Rapid acting thereby reducing the treatment duration
- Infection agnostic and broad-spectrum antimicrobial i.e. effective against drug resistant bacteria, drug resistant fungus and viruses – thereby catering to complex / multi species dermal/topical infections.
- Easy to manufacture, store and ship

IP Status

Indian Patent: **IN487298** (Priority date/Filing Date: 07/03/2016)

European Union: EP3426313B1

Canadian Patent: CA3017097

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Transaction Opportunity

Exclusive, Non-Exclusive Licensing & Option License Agreement (co-develop or collaboration for further validation)

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