Broad Spectrum Antiviral Agent

TECHNOLOGY:
This therapeutic discovery platform has identified an agent under development that shown compelling results as a broad-spectrum antiviral agent. Proof of concept has demonstrated positive results against Influenza, HIV, Zika, and Dengue. Results show the antiviral agent disrupts viral capsids effectively inhibiting the propagation of infections.

The technology leverages the use of synthesized peptides modified from the original amphibian host defense peptides. Due to the peptide’s unique mechanism of action, the antiviral medication is expected to overcome the drug resistance challenges seen in currently marketed therapies.

MARKET NEED:
Annually 3-5M severe cases of influenza, 36M HIV infections, 200K Zika, and 100M Dengue infections occur. Broadly, the prevention and treatment of these viruses have become increasingly challenging as medical options are either limited in effectiveness or nonexistent.

We have used the flu virus as a predicate model for our preclinical studies. We recognize that Roche’s Xofluza (baloxavir marboxil) is likely to be the market leader for some time. Virus mutations and the development and transmission of drug-resistant HIV pose a threat despite advancements in treating AIDS. In regard to Zika and Dengue, there is no gold standard for medical care or successful antiviral medication.

Ultimately current vaccination strategies and available antivirals have shown to be minimally effective, and the emerging threat of Influenza, HIV, Zika, and Dengue mandates a quick response.

STATUS:
Marpe Therapeutics LLC is developing a novel class of antiviral agents. Proof of principle has been demonstrated in vitro and in murine models. Current preclinical studies focus on lead optimization & delivery of the drug candidate for the prophylactic treatment of influenza & other viruses.

For more information on this technology contact:
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