NEW MEXICO TECH
OFFICE OF INNOVATION COMMERCIALIZATION

Anti-Protozoan Compounds for Infection Treatment

Challenge

Protozoa are microscopic, one-celled organisms that are free-living or parasitic in nature. Protozoa can multiply inside human cells, leading to serious infections that are especially difficult to eradicate. Protozoan parasitic infections afflict large numbers of people in over 90 countries worldwide; these infections are most common among poor countries where the patients have additionally limited treatment options. Very few drugs for treating these protozoan diseases exist and drug-resistance is emerging rapidly.

Solution

The innovation is a novel compound which can be orally delivered to treat these intracellular protozoan infections.

Benefits and Features

- Applicable to all mammals (human and animal)
- Inhibits the proliferation of the protozoa; Leishmania (*L. major* and *donovani*), *Trypanosoma cruzi,* and *Toxoplasma gondii*.
- Works against a broad spectrum of protozoan species compared to vaccines, which tend to target specific surface antigens
- Treats pre-existing infection while vaccines prevent an infection
- Orally bioavailable to aid in drug injection, delivery, storage, and transportation

Compound	*T. cruzi* death @ 100 µM
Compound 1	100%
Compound 3	0%
Compound 4	0%
Compound 6	0%
Compound 7	100%
Compound 8	100%
Compound 9	100%
Compound 10	> 50%
Compound 11	100%

Market Potential / Applications

- Broad-spectrum treatment of protozoan infectious diseases
- Research and Clinical studies

Developments and Licensing Status

Status: Available

Commercial sponsor sought? Yes

Patent Status

US Patent Pending

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