Novel strategy for targeting glycosylated patterns on cancer cells using CAR T-cells (BIRAD)

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The Problem

Immunotherapy has become a revolution in the area of cancer treatment. Compared to the traditional methods, such as invasive surgeries, radiation and chemotherapy, immunotherapy is more specific and less toxic to patients. Chimeric antigen receptor (CAR)-engineered T cell therapy is considered a promising approach since it has shown remarkable ability to eliminate tumors and durable complete remission. However, CAR T-cell therapy has two major limitations. First, to bind with their targeted antigen they usually need to be directed to defined antigens. Second, its success is mainly limited to hematological malignancies.

The Solution

This ground-breaking strategy derives benefit from the expression of abnormal glycosylation patterns in cancer cells to retarget engineered T-cells.

The Commercial Benefit

Our unique glycosylation specific CAR T-cells can target efficiently not only hematological malignancies but also solid tumors.

Market Potential

Global Cancer Immunotherapy Market is accounted for USD 45.5 Billion in 2015, and is estimated to reach USD117 Billion by 2022, growing at a CAGR of 14.5% during the analysis period (2016-2022). The global population witnessed an extensive rise in diagnosed cancer cases. For instance 14.1 million new cancer cases were diagnosed worldwide in 2012. The growth in cancer incidence is expected to increase by 70% over the next two decades with 22 million new cancer cases.

Target Markets/Industries

Oncology/Cancer Drugs market
Cancer immunotherapy market
Biotech companies

Intellectual Property

Patent pending

Team: Primary Investor

Prof. Cyrille Cohen

Prof. Cyrille Cohen is world-renowned in cancer immunotherapy with 20 years' experience in the field.

Prof. Cohen is developing antibodies and TCR/CAR -T cells strategies to target cancer cells and neoantigens.

Cyrille published more than 70 research papers which were quoted almost 5,000 times.

He authored patents in the field T-cell immunotherapy.

Prof. Cyrille Cohen is a member of Israel regulatory agencies for approval of clinical trials based on gene and cell therapy.

Future Research

Developing novel strategies to target cancer based on engineered T-cells
Improving T-cell survival and biological activity in the tumor microenvironment.
Developing neoantigens specific therapies to minimize side effects.

The Opportunity

We are looking for investors that are willing to support the research and commercialize this novel invention.

Contact for more information:

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