Drug Resistant Immunotherapy for the Treatment of Cancer

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Innate Tumor Immunity

Chemotherapy blunts both a natural and therapeutic anti-tumor immunity.
Drug Resistant Immunotherapy

Immune protection retains anti-tumor immunity in combination with chemotherapy
Combined Anti-Tumor Chemotherapy and Immunotherapy

Harvest immune T cells from patient

Chemotherapy

Facility
Improved Anti-Cancer Therapy

- Glioblastoma (GBM) is the most common and most aggressive primary brain tumor of adults, accounting for 52% of all cases
  - Treatment can involve chemotherapy, radiation and surgery
  - Despite treatment, patients typically live less than a year after diagnosis
  - One of the worst 5-year survival rates among all human cancers (5-year survival rate of ~4%)
  - Chemotherapy induced cell toxicity contributes to loss of an effective and robust immune response
Modified Immune T Cells Functionally Equivalent to Unmodified T Cells and Resistant to Chemotherapy
Modified Immune T Cells Kill GBM Cells in the Presence of Chemotherapy
R&D Status and Intellectual Property

• Conduct in-vivo studies to test efficacy and toxicity in mouse model

• Finalize and submit Pre-IND package

• Drug Resistant Immunotherapy for Treatment of a Cancer
  • Pending US and EPO patent applications
  • Claims address system and methods to generating drug-resistant cytotoxic immune cells and uses thereof
Value Proposition

• Platform technology
  – Multiple potential indications
  – Flexibility regarding immune cells and chemotherapeutic agent

• Modified chemotherapeutic-resistant immune cells overcomes cytotoxic side effects

• Combination approach of chemotoxic and immune treatments significantly enhances tumor cell death
Thank You!