Antigen Specific T Cells for Treating Cancer

DESCRIPTION
Adoptive immune therapy, consisting of different immune cells, represents an emerging area of cancer treatment. T cells are appealing in adoptive immunotherapy process as they enables control of specificity and function, facilitates evaluation of persistence, toxicity and efficacy and avoids graft vs. host disease. This technology covers different methods and composition of administering Cytotoxic T Lymphocytes in a treatment effective amount in non human primate models. The experimental results confirm the response elicited against abnormal antigen expressed on the surface of the cells. This method when coupled with cell signaling protein molecules like IL-15 enhances proliferation of central memory T-cells in the subject, thereby boosting anti-cancer activity. Such method could be used to treat wide range of malignancies and different infectious diseases as future research identifies immunogenic tumor antigens for different cell types.

KEY ASPECTS
- Primate animal model data available
- Applicable to the treatment of different cancer types due to advancement in the discovery of immunogenic tumor antigens.
- A potential approach towards treating infectious diseases, expressing specific surface antigens.
- Embodiments consisting of genetic modification of at least one gene that enhances specificity to cancer or other pathogenic cells in the subject.

INTELLECTUAL PROPERTY

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CONTACT
Ryan Kelly, Ph.D.
Manager, Office of Technology Licensing
Telephone: (626) 471-9359 | Email: rykelly@coh.org

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