Methods to Use HDACi to Generate Antigen Specific Memory T Cell Responses for Durable Immunotherapy

Title: Methods to Use HDACi to Generate Antigen Specific Memory T-Cell Responses for Durable Immunotherapy

Invention: This invention is a method to induce acquired T-cell differentiation towards the generation of specific memory T-cells for adoptive T cell transfer treatment.

Background: Cancer treatments include chemotherapy, radiation and surgery. While these options are heavily studied, favorable outcomes are difficult to attain as complete remission and cure is not consistently observed and is case-dependent. In recent years, efforts to develop immunotherapies that recover, enhance and/or stimulate the patient’s immune system to fight the chronic condition have become increasingly more attractive due to the treatment's personalization. This invention discloses a method to generate specific memory T-cells that, after infusion, would provide lasting effects to reduce the quantity of treatments that patients receive as well as increases the persistency of the treatment.

Applications:

• Durable immunotherapy pharmaceutical generation
• Generation of a specific memory T-cell population for cancer and/or infections

Advantages:

• More lasting T-cell therapy for chronic challenges (i.e. cancer and/or infections)

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