

3rd International Conference and Exhibition on Clinical & Cellular Immunology

September 29-October 01, 2014 DoubleTree by Hilton Baltimore-BWI Airport, USA

Reversing immunological ignorance in a mouse model of human prostate cancer

Gerardo Rivera Silva

University of Monterrey, Mexico

Cytotoxic T cells have the competence to attack cancer cells and eradicate a complete tumor. However, this mechanism has showed challenging for two motives. First, T cells and other elements of the immune system ignore self-molecules and cells. Second, tumor microenvironment has immunosuppressive elements capable of producing a mechanism called immunological tolerance. CD4+ T cells generate signaling molecules and activate immune cells that deliver efficient CD8+ T cell response. CD70 is essential for dendritic cells-facilitated delay of T cell tolerance initiation. CD80 and CD86 cells are implicated in the refunctionalizing the tolerized T cell. Here, these cells (CD4+, CD8+, CD70, CD80 and CD86) were obtained from a tumor prostate tissue treated with androgen ablation and were applied in a mouse model of human prostate cancer. Count cell number and purity for the particular cell population was realized by flow cytometric analysis. Preliminary results report that the activity of the CD8+T cells persisted for up to 45 days after treatment with CD4, CD70, CD80 and CD86 cells, and resulted in a significant diminution of tumor size. The stimulation of T cell infiltration and other immune cells in cancer tissues could have effects for the immunotherapeutic treatment of other hormone-related malignant tumors.

Biography

Gerardo Rivera Silva has completed his PhD from University of Salamanca, Spain, Diploma in Molecular Biology, Pasteur Institute, Paris, and Postdoctoral studies from Laval University, Quebec and Northwestern University, Chicago. He is the Director of Laboratory for Tissue Engineering and Regenerative Medicine, University of Monterrey. He has published more than 25 papers in reputed journals and has been serving as a technical reviewer - Spanish translation- of Immunology books.

gerardo.rivera@udem.edu

Irrelevancy of a currently popularized concept accompanied by a novel cure method for immune diseases

Kimihiko Okazaki

The Japan Medical Association, Japan

Although it is well established that an equilibrium state exists among antibody molecules in the vicinity of their receptors on the surface of immune cells, namely, cytolytic T lymphocytes and mast cells, it has long been taken for granted that molecular substitutions of antibodies on their receptors never occur. Obviously, these two concepts disagree with each other because existence of equilibrium state itself indicates that every molecule of antibody keeps changing its status being attached to or detached from its receptor. In addition, a certain molecule of antibody does not necessarily keep attaching to one certain receptor. In other words, every receptor of antibody keeps changing antibodies. The alternative concept, namely, molecular substitutions of antibodies on their receptors do occur all the time, is extremely useful. Reason is that the concept can be applied to complete cure of immune diseases; allergic and autoimmune diseases. Still reason, of course, is that pathogenic specific antibodies could be replaced by harmless non-specific antibodies if the latter are accumulated in patients' bodies. The necessary and sufficient condition for the accumulation is to repeat injecting the patient with non-specific antigens.

Biography

Kimihiko Okazaki graduated from Kyoto University, Faculty of Medicine in 1959. He was then engaged in medical chemical research till 1981 and started working as an internist as of July 16, 1981. His main achievements are discoveries of (1) A novel coenzyme in Baker's yeast, (2) Initiator of rat liver regeneration, and (3) A radical cure method of immune diseases.

ma13081x@ma1.seikyoku.ne.jp