ImmunAid

Treatment for Cancers and HIV/AIDS

The ImmunAid project, in which GTG holds a 65% interest, is seeking ways to improve the efficiency of treatments in cancer and chronic diseases, such as AIDS, by focusing on the human immune system. The immune system has immense capability to beneficially and effectively assist in curing a wide range of disease types. The research is being funded by the Company and is challenging some currently held concepts in the treatment of major diseases such as cancer.

The research undertaken suggests that the immune system switches itself 'on and off' in a continuous and repetitive cycle in cancer patients. The 'off' switch is controlled by a group of cells called T-Regulatory cells which can be killed by chemotherapy. Once removed, the immune system is free to attack the cancer. In those rare cases where the disease disappears, the ImmunAid researchers believe that chemotherapy may actually be having a greater effect on the immune system than on the cancer. This is a major paradigm shift in the fields of cancer and immunology. The project concepts have been confirmed for HIV/AIDS in a model system for this disease in mice.

Mounting evidence in the scientific literature now supports the ImmunAid concept in humans. In addition, clinical studies suggest that the failure rate of chemotherapy treatment in late stage disease may be the result of the indiscriminate timing of therapy. By applying a personalised approach to treatment, ImmunAid aims to increase the number of therapeutic successes in late stage cancer patients. The knowledge obtained from the Company's cancer research also has direct application in treatment strategies for other diseases involving the immune system.

The project has attracted the interest of a number of eminent scientists and clinicians throughout the world and various collaborations have been established. One of these is an ovarian cancer monitoring trial which has detected regular changes in the immune system of all the participating patients, and which has led to calls for a Phase II timed intervention trial. This could involve a 'personalised medicine' approach to the treatment of cancer which would aim to accurately time the application of therapy to release a patient's immune system from regulation and enable it eradicate the cancer. Other collaborations have resulted in the monitoring of melanoma patients, with similar regular changes in the immune system having been detected in patients with late stage disease.
Significant milestones in the project have already been reached, with intellectual property relating to cancer, infectious diseases, autoimmune and degenerative diseases having been secured.

The project is looking forward to more associations and trials, adding to the results obtained to date.

Possible outcomes of the current research include the development of new treatment strategies using current therapeutic agents and the development of new drugs and diagnostic tests. The era of personalised medicine is expected to impact upon several areas including patient management, pathology services, hospital services and associated support facilities.

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