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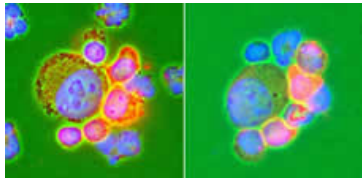


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A Potential Breakthrough:

Treatment or Cure for Many Types of Cancers



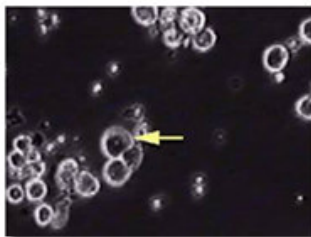
We have an exciting collaboration / licensing opportunity for potential treatment (or possibly a cure) for cancer. This invention has had 100% success in studies in mice, very promising results in pre-clinical, in vitro human studies. If this can be translated in human therapy, then the treatment or cure for many cancers will be not that far off in the future.

ACCIDENTAL DISCOVERY – CANCER RESISTANT MICE

About ten years ago, a cancer researcher was doing routine research on harvesting antibodies by injecting a very potent type of cancer cells in the peritoneal cavity of mice. She noticed that one mouse did not develop ascites (fluid accumulation). Ascites result from proliferation of injected cancer cells in the body. Thinking it must be a mistake, researchers then repeatedly injected that mouse, first doubling the dose then multiplying it tenfold and repeating the tenfold increase two more times. Even after several injections, with the last dose at 1,000 times the normal, the mouse showed no symptoms of cancer cells and did not die. At this point the researchers felt that they were on to something.



TRANSMITTING CANCER RESISTANCE – MAJOR MILESTONE



A major milestone was reached when researchers realized that this resistance was found to be genetic in nature (rather than response to some external factors), and researchers were able to create a cancer-resistant mouse line via breeding. Additionally, they discovered two related events in these mice – cancer resistance and spontaneous regression. Mice with this particular characteristic which were exposed to cancer cells at an early stage would not develop cancer at all, and were cancer resistant (CR). Those with cancer killing activity but were first exposed to cancer causing cells at a later stage (when they were a bit older), may develop cancer, but in which cancer would show spontaneously regression (SR).

However, even more dramatic than this was the fact that when granulocytes (a type of white cells) from CR / SR types of mice were infused in those which had cancer, the cancer cells died and cancer simply went away. This was a major milestone, raising hope that granulocyte infusion from those with CR/SR characteristics could eradicate cancer from those which do have cancer. In mice, the cancer cure by this treatment showed 100% effectiveness in tests on thousands of mice.

Moreover, the researchers had earlier proved that the cancer killing activity was not due to T-cells, widely known to provide some cancer resistance, and subject to extensive studies in the past. This was done by

developing a colony of cancer resistant nude mice which lacked thymus and hence T-cells. (T-cells mean Thymus-derived cells).

Will it Work in Humans? The Next Big Leap

The next major leap would be to see whether this would work in humans. If it does, and preliminary indications look promising, this would be the biggest breakthrough in cancer treatment and / or cure. More importantly, this breakthrough will not take decades, but could happen fairly quickly as it involves granulocyte infusion via apheresis from cancer-resistant people to those afflicted with cancer. Granulocyte infusion via apheresis process is a safe, well-proven, and US FDA approved procedure for treatment of chemotherapy-related neutropenia and other infections.

Two major pre-clinical findings provide hope that this could work in humans.

- Treatments using white blood cells from cancer-resistant human donors have completely cured lethal sarcoma, leukemia and prostate cancers in mice. These types of mouse cancer have never been treated successfully by any existing cancer therapy. So human cancer-killing cells were shown to cure cancer in mice.
- The human cancer killing cells have also worked well against leukemia, prostate and breast cancer cells from humans in vitro.

Thus, there is a strong possibility that infusing these granulocytes can provide much better efficacy than conventional cancer therapies. Because the therapeutic agents are granulocytes that are present to protect healthy humans, the adverse side effect is known to be rare, no more than expected rare adverse reactions to routine blood transfusion.

Core Technologies of Company's Approach

Existing cancer immunotherapies, such as cancer vaccines and other T cell-based immunotherapies, are all based on the philosophy of repairing or reviving defective immunity in cancer patients. However, the major problem for this philosophy is that these attempts have been made without knowing what the defects are with the patients' immune system. It is almost like trying to repair a car without knowing what the problem might be. Thus far, there has not been a successful cancer immunotherapy that gives meaningful clinical benefit.

In contrast, the Company's therapy is simply to replace an inadequate immune system that may have caused cancer in the first place with a validated, highly functional immune system transferred from healthy donors.

Infusion therapy consists of 4 major new components

Next Step – Human Trials

Company is seeking strategic partners to support human trials. Because of the well-proven nature of the apheresis process for treatment of other conditions, US FDA in the past had allowed the company to proceed with phase II studies on 22 patients. Company is currently seeking funding to initiate some trials in the USA and abroad..



After initial safety and efficacy of this treatment is validated in a small number of patients, the trials will be expanded to cover a wider range of cancers.

MARKET OPPORTUNITY AND NEED

The company's approach, if successful, can lead to very effective treatment (or even cure) of a wide-ranging types of cancer – including leukemia, breast cancer, cervical cancer, and prostate cancer.

There are 10 million cancer patients in the US and 100 million worldwide. The current spending on cancer treatment in the US alone is about \$200 billion annually. Sarcomas, leukemia and prostate cancers account for about 40% of all cancers in the US. The pre-clinical testing gives hope that GIFT can offer meaningful clinical benefits to at least one half of the patients with sarcomas, leukemia and prostate cancers, or 20% of all cancer treatment market.

More encouragingly, if trials are successful, these treatments could be available in years and not decades.

OPPORTUNITY FOR PARTNERING

The company is looking to partner with companies and organizations to conduct initial trials and ultimately to commercialize GIFT as therapy for wide-ranging types of cancers. It also aims to develop a quicker and cheaper diagnostic test to measure Cancer-Killing Ability of individuals.

For more information, please contact:

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