Cell Therapy Vaccine Approved for Prostate Cancer

We’re thrilled to report that the FDA approved in April the first therapeutic vaccine for the treatment of prostate cancer. Developed by the Dendreon Corporation, Provenge® marks a major advance for immune-mediated treatment. What makes this vaccine different is: it is not preventive, it is therapeutic, and the first of the new, active cellular immunotherapies.

Immunotherapy has been a focus of genetic scientists for many years, as there is a shared belief that the power of the individual’s own immune system can be harnessed to combat disease. However, because cancer is the result of an organic misfiring or mutation of genes, the body does not recognize the threat and has to be triggered to realize the danger and react. Many institutions conducting gene therapy research include immunotherapy in their arsenal and, thus far, nearly half of the 33 grants awards by ACGT are focused on immune therapy research.

Provenge, like other cell and gene therapies, is personalized for each patient. The patient’s white blood cells are collected through a simple blood draw, and select immune cells are extracted. The cells are then infused with a protein often found on prostate tumors, combined with an immune system booster. These treated cells are infused back into the patient three times over the course of a month. Cell and gene therapies target only the cancer without harm to other parts of the body, and have mild side effects compared to the debilitating effects of chemotherapy, radiation and surgery.

Provenge is the first approved product for Dendreon, founded in 1992 by two Stanford University professors. It has been reported that $1 billion was spent on research and development for the drug and plans are underway to develop similar cancer vaccines. The first 2,000 patients are expected to be treated this year, although initially it will only be available where clinical trials were conducted. The company reports greater accessibility is planned for 2011. For more information, visit www.dendreon.com.
Guided by Barbara Netter, ACGT Co-Founder and Special Events Chair, and fellow Board member Sharon Walsted Phillips, our gala event in April raised more than $500,000 to support cancer cell and gene therapy research, and raised awareness for the incredible science of molecular medicine.

The reception at the Bruce Museum in Greenwich, CT was a celebration of progress with some of the most accomplished researchers in the field of cancer cell and gene therapies. Guests also had the opportunity to learn more about the outstanding contributions of the ACGT Scientific Council members and Research Fellows in attendance.

Joining him was Dr. John Nemunaitis, who has been exploring novel therapies for treating cancer for over 20 years. He has established more than 300 clinical trials with 3,000+ cancer patients. An unparalleled expert in the field, he is also a member of the ACGT Scientific Advisory Council. He presented the latest results of trials in the areas of prostate, melanoma and lung cancers, with a report on patients with as much as 15 years survival following treatment using gene therapy. “The future of oncology is to use gene therapy to create ways to stop cancer signals and cells from creating cancer,” said Dr. Nemunaitis, who also has been instrumental in developing personalized vaccines based on cancer cells from patients.

Dr. Robert Vonderheide has successfully advanced a promising cancer vaccine that awakens the body’s immune response to kill tumor cells. His team at the University of Pennsylvania School of Veterinary Medicine has been testing the safety and potential efficacy of this approach with privately owned canines suffering from lymphoma, a treatment that is adaptable to humans. Many of the pets are now in remission and these results have accelerated efforts for a clinical trial for the treatment of childhood cancer. “The technology is available today to stop cancer,” said Dr. Vonderheide. “What is needed is funding behind the technology to forward the progress from the laboratory into the doctor’s office.” Dr. Vonderheide credited the grant he received from ACGT for “bringing a bright idea to reality.”
Making Waves for Cancer Research
4th Annual Swim Across America June 26, 2010

Like Olympians, cancer researchers keep moving and never give up. As a result, cell and gene therapy is no longer swimming against the tide. The 4th Annual Swim Across America Greenwich-Stamford Swim benefiting ACGT is aiming for the ultimate gold medal – an end to cancer. The event is bigger and better than ever:

- An exuberant kick-off event at the Delamar Hotel in Greenwich, CT.
- A long swim and a short swim in the warm waters of Long Island Sound, between Greenwich Point in Old Greenwich and Cummings Point in Stamford, CT.
- A pool swim at Rocky Point Club in Old Greenwich.
- Brunch following the Swim on the lawn overlooking the Sound at the Alliance for Cancer Gene Therapy headquarters in Stamford.
- A parade through Old Greenwich in honor of the event.

The first recipient of event proceeds, Dr. Khalid Shah of Harvard Medical School, Massachusetts General Hospital, is making extraordinary progress towards eradicating brain cancer. His laboratory is committed to developing innovative therapies for malignant brain tumors, which have virtually defied all therapeutic treatments to date. Specifically, his focus is on the delivery of drugs that will stop tumor cells from proliferating and simultaneously kill them, all while leaving normal brain cells intact. This is based on previous research that suggests that stem cells track tumor cells in the brain and thus can be used to deliver therapeutic drugs to tumor cells. “With these exciting observations, in the next 3-5 years, we envision a therapeutic modality in which the main tumor mass in the brains of patients will be removed at the time of surgery and therapeutic stem cells will be introduced near the remaining tumor cells, thus eliminating the risk of recurrence. This will have a major impact in developing more efficient means of eradicating gliomas and saving the lives of many brain cancer patients,” according to Dr. Shah.

All expenses have been underwritten by a generous supporter, so that all sponsorships and donations will go directly to fund research that will move the science even closer to practice. Swimmers and sponsors make this research possible. Volunteers also play a very special part. We welcome all participants.

3rd Annual Bridge in Memory of Sibyl Shirley

The 3rd annual Social Bridge was held at the Women’s Club of Greenwich on May 19, 2010, in memory of the late Sibyl Shirley. Sibyl, a great supporter of ACGT, inaugurated the afternoon event on the occasion of her 90th birthday. In honor of Sibyl’s commitment to ACGT, many of her friends and former bridge students put foursomes together and enjoyed this fund raiser. 100% of the proceeds raised go to support ACGT medical researchers.

SPECIAL THANKS TO OUR “CELEBRATING PROGRESS” SPONSORS INCLUDING:


ACGT by the Numbers

More than 150 universities and research institutions are now engaged in the investigation of cell and gene therapies for cancer.

ACGT has awarded 33 grants thus far.

$20 million dollars has been granted to support both discovery and translation.

ACGT Fellows conduct studies at 25 prestigious research institutions.

ACGT research implemented in 10 of the top 12 NCI designated cancer centers.

2010 grant applications are under review and several will be announced soon!

MAKE A DONATION Visit www.acgtfoundation.org or call Betty Condon at 203.358.8000 ext 497

100% of donations to ACGT go directly to research. Separate funding is provided to cover all administrative and fundraising expenses.

Alliance for Cancer Gene Therapy: Celebrating Progress
Research Fellows Making Medical History
View the video at www.acgtfoundation.org

ACGT National grants for cell and gene therapy cancer research

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