



THERION

B I O L O G I C S

A LEADER IN NOVEL IMMUNE THERAPIES FOR CANCER

Headquartered in Cambridge, MA, Therion Biologics Corporation develops therapeutic vaccines for cancer. The Company is currently conducting 13 clinical studies in its three lead programs: PROSTVAC®-VF/TRICOM™ for prostate cancer; CEA/MUC-1-VF/TRICOM for pancreatic cancer; and VF/TRICOM for melanoma. Therion is also applying its technology platform to develop vaccines to treat breast cancer and other solid tumors. The Company's strategic partners include Aventis Pasteur, which is developing a clinical candidate for colon cancer, ALVAC-CEA/B7.1, the National Cancer Institute (NCI) and a network of leading clinical institutions.

THERION'S APPROACH TO TREATING CANCER

Therion has established a powerful technology, based on its proprietary pox virus vectors, that allows simultaneous *in vivo* expression of key components known to stimulate and sustain potent immune responses against cancer cells. The Company's unique development approach enables rapid generation and clinical evaluation of multiple product candidates for a variety of disease indications. Leveraging its collaborations with world-renowned scientists, clinicians and institutions, including Aventis Pasteur and the NCI, Therion has gained extensive early stage clinical experience in the treatment of cancer. To date, Therion's vaccine candidates have been evaluated in over 30 clinical trials and in more than 700 patients.

TECHNOLOGY PLATFORM

Therion's therapeutic vaccines are based on three key elements that can be combined through genetic engineering to generate multiple products:

- Pox virus vectors that have an established safety profile in humans and can simultaneously express multiple proteins to stimulate the body's own immune system to fight cancer.
- Genes encoding tumor-specific antigens that stimulate and direct the immune system to specifically target cancer cells.
- Genes encoding co-stimulatory molecules and immune-modulating proteins that enhance immune responses.

RECENT HIGHLIGHTS

- Presented results confirming safety and demonstrating the first evidence of clinical activity. In this study of 58 patients, 40% of the patients achieved disease stabilization and one person demonstrated a complete response (ASCO 2003).
- Concluded two Phase I studies in prostate and pancreatic cancer demonstrating the safety of Therion's vaccine technology.
- Expanded the manufacturing facility to meet product needs for Phase III clinical trials and commercial launch.
- Strengthened management team with the addition of Tom Schuetz, M.D., Ph.D., formerly of Transkaryotic Therapies, Inc., as Chief Medical Officer.
- Initiated Phase II trial evaluating Therion's vaccine in prostate cancer.

Optimizing immunotherapies by employing elements of traditional vaccine strategies and modern genetic engineering techniques, Therion is creating viral vectors that are highly recognizable to the immune system. Specifically, the Company's product candidates are comprised of priming and boosting components to stimulate (prime) and sustain (boost) a strong, cancer-targeted immune response. Therion's vaccine programs utilize recombinant vaccines to target cancers by incorporating known tumor-associated antigens and TRICOM, Therion's co-stimulatory system. TRICOM delivers multiple co-stimulatory molecules to optimize antigen presentation and activation of cytotoxic T-cells critical for tumor destruction.

THERAPEUTIC VACCINE PROGRAMS

PROGRAMS	PRECLINICAL	PHASE I	PHASE II	PHASE III
PANVAC-VF				2004
CEA Cancers				2004
Melanoma				
Direct Tumor Modification				

INTELLECTUAL PROPERTY

Therion's technology and clinical portfolios are protected by more than 70 issued U.S. and foreign patents that are either owned or licensed, including the rights to pox virus vectors and genes employed in its vaccines. The Company also has over 70 patent applications filed worldwide.

THERION'S PRODUCT CANDIDATES

Therion's extensive clinical experience has yielded three optimized lead product candidates: PROSTVAC®-VF/TRICOM™ for prostate cancer; CEA/MUC-1-VF/TRICOM for pancreatic cancer; and VF/TRICOM for melanoma.

CANCER IN AMERICA

Each year:

- Prostate cancer affects over 189,000 men.
- Over 29,000 people suffer from pancreatic cancer.
- Colorectal cancer cases total over 148,000.

PROSTATE CANCER PROGRAM

Based on data generated from multiple clinical trials, Therion is developing PROSTVAC-VF/TRICOM as its next-generation lead prostate cancer vaccine to target prostate specific antigen (PSA), a protein produced by prostate cancer cells. This integrated vaccine, which incorporates TRICOM, builds from the clinical promise shown in a Phase II clinical trial of its precursor, PROSTVAC-VF. The study demonstrated that the vaccine stabilized PSA levels in 52% of prostate cancer patients evaluated with no significant adverse events reported. These results confirm the safety of the vaccine and validate Therion's prime/boost vaccine regimen. PROSTVAC-VF/TRICOM will enter Phase II clinical trials in 2003.

PANCREATIC AND BREAST CANCER PROGRAM

Therion is developing CEA/MUC-1-VF/TRICOM as a lead candidate to treat pancreatic and breast cancers by targeting antigens commonly expressed by both diseases. CEA/MUC-1-VF/TRICOM incorporates both the CEA and MUC-1 tumor antigens, found on a majority of pancreatic and breast cancers, to stimulate and sustain an immune response against tumor cells. In addition to antigens, this vaccine also includes TRICOM to enhance and optimize immune response. This lead product candidate builds from previous clinical results of a prototype CEA vaccine that in Phase I/II clinical trials demonstrated encouraging survival data in late stage

cancer patients. Specifically, patients who received the prototype vaccine or the prototype vaccine plus a locally administered cytokine saw 60-80% survival, respectively, at two years, compared to 0% survival in the comparison group. CEA/MUC-1-VF/TRICOM will enter Phase II clinical trials to treat pancreatic cancer in 2003.

MELANOMA PROGRAM - Direct Tumor Modification

Therion's DTM candidates are designed to treat a wide variety of solid tumors by modifying the patient's own cancer cells to act as antigen presenting cells in the generation of a tumor-specific immune response. This modification is initiated by injecting the DTM immunotherapeutic directly into solid tumors, such as melanoma and head and neck. Systemic cell-mediated immune responses can then be activated by these modified tumor cells to cause tumor destruction. Therion's lead DTM candidate, VF/TRICOM, began Phase I clinical evaluation to treat melanoma in 2002.

COLORECTAL CANCER PROGRAM

Through a collaboration with Aventis Pasteur Limited, Therion is developing pox virus-based vaccines for the treatment of colorectal cancer and melanoma. The collaboration's lead product candidate, ALVAC-CEA/B7.1, a vaccine for the treatment of colorectal cancer, is currently in Phase II clinical investigation. ALVAC-CEA/B7.1 was found to be safe and well-tolerated in Phase I clinical trials in 57 patients, most of whom had late-stage colorectal cancer. Furthermore, these early clinical studies demonstrated the vaccine's ability to elicit critical cell-mediated immune responses to CEA, an antigen found on 90% of colorectal cancers, and to stabilize disease in a subset of patients. ALVAC-CEA/B7.1 is expected to enter Phase III trials in 2004.

SENIOR MANAGEMENT TEAM

Mark W. Leuchtenberger
President, Chief Executive Officer

George A. Eldridge
Chief Financial Officer

Dennis L. Panicali, Ph.D.
Chief Scientific Officer

Thomas J. Schuetz, M.D., Ph.D.
Chief Medical Officer

Richard H. Woodrich
Senior Vice President, Business Development

Michael S. Wyand, D.V.M., Ph.D.
Senior Vice President, Research and Development



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