Agenus Announces Phase 2 Checkpoint inhibitor Combination Trial with Prophage Cancer Vaccine for Melanoma

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Phase 2 randomized trial will study Yervoy® and Prophage combination for metastatic melanoma

First checkpoint inhibitor combination trial with Prophage vaccine

Agenus Inc. (Nasdaq: AGEN), a biotechnology company developing novel immune system activating treatments for cancers and infectious diseases, today announced initiation of a randomized Phase 2 trial with Prophage for melanoma, and Bristol-Myers Squibb's Yervoy® (ipilimumab) for the treatment of Stage III and IV metastatic melanoma. The combination has the potential to trigger a more effective immune response against the tumor than Yervoy alone.

“Agenus’ Prophage vaccines are designed to help patients mount a stronger anti-cancer immune response, while checkpoint antibodies, like Yervoy, have the ability to increase cancer cells’ exposure to immune attack. We are excited about this study and the potential opportunity to improve outcomes for patients when the two approaches are combined,” said Garo Armen, Ph.D., CEO and chairman of Agenus. “Checkpoint antibodies represent a new paradigm in the treatment of cancer. Our definitive agreement to acquire 4-Antibody, a checkpoint antibody company, will uniquely position us to pursue cancer immunotherapy with a broad portfolio of innovative approaches.”

The Phase 2, randomized, open label, single-center, investigator-sponsored trial is designed to evaluate the safety, feasibility and immunogenicity of the combination of Prophage vaccine and Yervoy with or without low dose cyclophosphamide (a chemotherapy agent used in this study as an immunomodulator of regulatory cells) in 25 patients with unresectable Stage III or IV metastatic melanoma. The trial will be conducted at the University of Texas Health Science Center at Houston and led by clinical investigator Jorge Quesada, M.D.

In order to fully understand the effects of Prophage vaccine and Yervoy, the study will include translational studies characterizing anti-cancer immune responses, in addition to clinical outcomes.

“The combination may improve the prospects for patients who do not respond to ipilimumab alone, which is approximately 70% of the metastatic melanoma patients,” said Jorge Quesada, M.D., Associate Professor, Department of Internal Medicine, Division of Oncology at The University of Texas Health Science Center in Houston and Principal Investigator of the study.

About Checkpoint Inhibitors

Agenus announced on January 13, 2014 that it entered into a definitive agreement to acquire 4-Antibody AG, a private European-based biopharmaceutical company. 4-Antibody has a technology platform for the rapid discovery and optimization of fully- human antibodies against a wide array of molecular targets of interest. These targets include checkpoint molecules that regulate immune response to cancers and other diseases. The company has multiple preclinical immune checkpoint antibody programs targeting numerous checkpoint molecules, including GITR and OX40, as well as four additional undisclosed checkpoint programs. These checkpoint programs are being pursued through a strategic collaboration with the Ludwig Institute for Cancer Research and Memorial Sloan-Kettering Cancer Center (MSKCC) in New York. The transaction is expected to be completed by the end of February 2014, subject to customary closing conditions.

Considerable recent interest in the field of cancer immunotherapy has been generated by promising clinical data with monoclonal antibodies that bind to checkpoint molecules, such as cytotoxic T lymphocyte antigen-4 (CTLA-4) and programmed death receptor-1 (PD-1). Blocking these checkpoint molecules unlocks breaking mechanisms that get in the way of immune cells attacking cancer cells. Other checkpoint molecules, such as GITR and OX40, act to stimulate immune function.

About Melanoma

Melanoma is the most aggressive form of all skin cancers and its incidence is rising at a rate exceeding most other cancers.[1,2] Worldwide, it is believed that approximately 160,000 people will be diagnosed with melanoma each year[3]and an estimated 9,480 people will die of melanoma in 2013.[4] If detected in its earliest stages and treated properly, melanoma is often curable; however, melanoma is more likely than other skin tumors to spread to other parts of the body. There are limited options for patients with advanced melanoma,[5] highlighting an area of high unmet medical need. Yervoy has been shown to prolong median overall survival and provide benefit (tumor response or stability) for about 30% of patients with advanced melanoma.[6]

About Prophage Series Vaccines

Agenus’ Prophage Series vaccines are tailor-made for each patient by processing tumor removed from the patient. Malignant cells express proteins, which can be recognized as non-self by the immune system. This recognition by T-lymphocytes can trigger the immune system to attack the cancerous tissue, and under favorable circumstances help the patient fight the cancer. Because each patient’s cancer cells contains their own set of genetic changes, the best chance to mount an effective immune attack on the cancer resides in stimulating the immune response to the abnormal proteins expressed in that patient’s cancer. Agenus’ heat shock protein vaccines are processed by the company and then re-introduced into the patient as a vaccine which is intended to stimulate a targeted immune attack on their cancer cells.

Prophage Series vaccines are based on Agenus’ heat shock protein platform technology. Prophage Series G-100 and G-200 vaccines are currently in Phase 2 programs for the treatment of newly diagnosed and recurrent glioblastoma multiforme. For more information about Prophage Series vaccines and Agenus’ heat shock protein platform, please visit http://agenusbio.com/science/prophage.php.

About Agenus

Agenus Inc. is a biotechnology company developing treatments for cancers and infectious diseases. The company has multiple immunotherapeutic products based on strong technology platforms that are advancing through the clinic. Agenus' technology is further validated through partnerships with major pharmaceutical companies, with several product candidates in late-stage clinical trials with corporate partners. Between Agenus and its partners, 23 programs are in clinical development. For more information, please visit www.agenusbio.com, or connect with the company on Facebook, LinkedIn, Twitter and Google+. For more information, please visit www.agenusbio.com.

Forward-Looking Statement

This press release contains forward-looking statements, including statements regarding clinical trial activities, the publication of data, the proposed acquisition of 4-Antibody, and the potential application of the two companies' technologies and product candidates in the prevention and treatment of diseases. These forward-looking statements are subject to risks and uncertainties that could cause actual results to differ materially. These risks and uncertainties include, among others, the factors described in our periodic report on Form 8-K filed with the Securities and Exchange Commission ("SEC") on January 13, 2014 and under the Risk Factors section of our Quarterly Report on Form 10-Q filed with the SEC for the period ended September 30, 2013. Agenus cautions investors not to place considerable reliance on the forward-looking statements contained in this release. These statements speak only as of the date of this document, and Agenus undertakes no obligation to update or revise the statements. All forward-looking statements are expressly qualified in their entirety by this cautionary statement. Agenus' business is subject to substantial risks and uncertainties, including those identified above. When evaluating Agenus' business and securities, investors should give careful consideration to these risks and uncertainties.

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