Agenus Reports Positive Follow-on Phase 2 Results for Brain Cancer Vaccine in Newly Diagnosed Patients

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Analysis of patients treated with Prophage Series G-100 (HSPPC-96) show improvement in progression free survival and overall survival versus standard of care

Results support advancement to Phase 3 trial for HSPPC-96

Agenus Inc. (Nasdaq: AGEN) today announced that a recent analysis from a Phase 2 trial in patients with newly diagnosed glioblastoma multiforme (GBM) treated with Prophage Series G-100 (HSPPC-96) in combination with the current standard of care (radiation and temozolomide) showed an almost 18 month median progression free survival (PFS), which represents a 160% increase versus current standard of care alone. This analysis confirms continuation of the positive trends from the Phase 2 HSPPC-96 newly diagnosed GBM trial first reported at the 81st American Association of Neurological Surgeons (AANS) Annual Scientific Meeting in May 2013.

"These additional results from the Phase 2 trial of HSPPC-96 in patients with newly diagnosed GBM are extremely encouraging and certainly justify a definitive randomized study," said Andrew T. Parsa, MD, PhD, Lead Clinical Investigator and Chair of Neurosurgery at Northwestern Memorial Hospital and Northwestern University Feinberg School of Medicine. "The patient-specificity and lack of toxicity, combined with patient selection to optimize immunotherapy efficacy, could position this vaccine as a break-through treatment for newly diagnosed GBM patients in the years ahead."

Based on these findings, Agenus plans to hold an end of Phase 2 meeting with the US Food and Drug Administration to discuss a Phase 3 trial that could potentially lead to marketing approval of the HSPPC-96 vaccine as a treatment for patients with newly diagnosed GBM.

Phase 2 HSPPC-96 Update in Newly Diagnosed GBM Patients

The Phase 2 trial of HSPPC-96 in patients with newly diagnosed GBM includes 46 patients treated at eight centers across the US. Patients were treated with radiation and temozolomide as the standard of care in addition to HSPPC-96 vaccination. Analyses of data collected to date show a median PFS of 17.8 months with 63% of the patients progression free at twelve months and 20% progression free at 24 months. These results indicate considerable improvement when compared to patients treated with the standard of care (radiation plus temozolomide), which is 6.9 months.[1]

Median overall survival (OS), the primary endpoint of the trial, is 23.3 months and remains durable in patients treated with HSPPC-96. In this study, the 12 month survival rate is 85% with 50% of patients still alive and being followed, with many surviving beyond the 24 month study period. For the standard of care alone, median OS survival rate is 14.6 months.[1]

The Phase 2 recurrent and newly diagnosed trials are being sponsored by Dr. Parsa and are primarily supported through funding from the American Brain Tumor Association, Accelerated Brain Cancer Cure, National Brain Tumor Society, and National Cancer Institute Special Programs of Research Excellence. Dr. Parsa has not received any financial support or expense reimbursement for this work or for consulting activities on behalf of Agenus. He does not have an equity interest in Agenus or a financial relationship with the company.

About the Randomized HSPPC-96 ALLIANCE Trial in Recurrent GBM

In addition to the Phase 2 newly diagnosed GBM trial, the Cancer Therapy Evaluation Program (CTEP) of the National Cancer Institute (NCI) is supporting a study of the HSPPC-96 vaccine in a large, randomized Phase 2 trial in combination with bevacizumab (Avastin®) in patients with surgically resectable recurrent GBM. Patients have already been randomized into this trial and active recruitment is underway at multiple centers in the US. The study is being sponsored by the Alliance for Clinical Trials in Oncology (ALLIANCE), a cooperative group of the NCI. This trial is the largest brain tumor trial ever funded by the NCI and the largest vaccine study ever conducted with Avastin.

The ALLIANCE trial is investigating the potential benefits of treatment with a combination of HSPPC-96 and bevacizumab in a three-arm study of approximately 222 patients with surgically resectable recurrent GBM using a primary endpoint of overall survival. The study will compare efficacy of the HSPPC-96 vaccine administered with bevacizumab either concomitantly or at progression, versus treatment with bevacizumab alone. This study design is supported in part by previous research indicating a potential synergistic effect between the mechanisms of action behind both HSPPC-96 and bevacizumab. For additional information about the ALLIANCE trial visit ClinicalTrials.gov using Identifier NCT01814813.

The ALLIANCE is composed of three NCI funded cooperative groups (American College of Surgeons Oncology Group [ACOSOG], Cancer and Leukemia Group B [CALGB], and North Central Cancer Treatment Group [NCCTG]). These three groups have been integrated in an effort to develop and conduct more efficient clinical research studies to bring clinical trial results to patients more quickly.

In addition to the newly diagnosed GBM study in Prophage Series G-100 and the ALLIANCE trial, a Phase 2 study testing the Prophage Series G-200 in patients with recurrent glioma has been completed. Agenus expects the final trial results of this study to be published in a scientific journal in 2014.

About Glioblastoma Multiforme (GBM)

The incidence rates of primary malignant brain and central nervous system cancers have increased over the last three decades.[2] The American Cancer Society estimates that more than 23,000 malignant tumors of the brain or spinal cord will be diagnosed during 2013 in the US, and that more than 14,000 people will die from these tumors.[3] GBM is the most common primary malignant brain tumor and accounts for the majority of diagnoses. It has been associated with a particularly poor prognosis, with survival rates at one and five years equaling 33.7% and 4.5%, respectively.[4] The current standard of care for patients with newly diagnosed GBM is surgical resection followed by fractionated external beam radiotherapy and systemic

temozolomide[5] resulting in a median OS of 14.6 months[6] based on data from a randomized Phase 3 trial. Although this treatment can prolong survival, it is not curative and the vast majority of patients with GBM experience recurrent disease, with a median time to recurrence of seven months.[7] Currently, there is no standard treatment for patients with recurrent GBM, although additional surgery, chemotherapy (i.e., CCNU, temozolomide), bevacizumab, and radiotherapy are used.

About the Prophage Series (HSPPC-96) Cancer Vaccines

Prophage Series cancer vaccines are autologous therapies derived from cells extracted from the patient's tumor. As a result, Prophage Series vaccines contain a precise antigenic 'fingerprint' of a patient's particular cancer and are designed to reprogram the body's immune system to target only cells bearing this fingerprint, reducing the risk that powerful anti-cancer agents will target healthy tissue and cause debilitating side effects often associated with chemotherapy and radiation therapy. The Prophage Series G vaccines are currently being studied in two different settings of glioblastoma: newly diagnosed and recurrent disease.

About Agenus

Agenus Inc. is a biotechnology company working to develop treatments for cancers and infectious diseases. The company is focused on immunotherapeutic products based on strong platform technologies with multiple product candidates advancing through the clinic, including several product candidates that have advanced into late-stage clinical trials through 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+.

Forward-Looking Statement

This press release contains forward-looking statements, including statements regarding clinical trial activities, the publication of data, and the potential application of the Company's 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 under the Risk Factors section of our Quarterly Report on Form 10-Q filed with the Securities and Exchange Commission for the period ended June 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.

References

1. Stupp, R., et al., Radiotherapy plus concomitant and adjuvant temozolomide for glioblastoma. N Engl J Med, 2005. 352(10): p. 987-96.

2. Maher EA, McKee AC. In: Atlas of diagnostic oncology. 3. Skarin AT, Canellos GP, editor. London: Elsevier Science; 2003. Neoplasms of the central nervous system; pp. 5–10.

3. http://www.cancer.gov/cancertopics/pdq/treatment/adultbrain/HealthProfessional/page1

4. Central Brain Tumor Registry of the United States (CBTRUS) 2010 CBTRUS statistical report: primary brain and central nervous system tumors diagnosed in the United States in 2004-2006.http://www.cbtrus.org/reports/reports.html

5. National Comprhensive Cancer Network clinical practice guidelines in oncology-central nervous system cancers. v.1.2010.

6. Stupp, R., et al., Radiotherapy plus concomitant and adjuvant temozolomide for glioblastoma. N Engl J Med, 2005. 352(10): p. 987-96.

7. Wen PY, DeAngelis LM. Chemotherapy for low-grade gliomas: emerging consensus on its benefits. Neurology. 2007;68(21):1762–1763. doi: 10.1212/01.wnl.0000266866.13748.a9.