



DATA PUBLISHED IN THE NEW ENGLAND JOURNAL OF MEDICINE SUPPORT USE OF RAXIBACUMAB (ABTHRAX™) FOR THE TREATMENT OF INHALATION ANTHRAX

- Biologics License Application pending for first-in-class treatment for inhalation anthrax -

- HGS has delivered 20,000 doses of raxibacumab to the U.S. Strategic National Stockpile for emergency use under a contract with BARDA -

ROCKVILLE, Maryland – July 9, 2009 – Human Genome Sciences, Inc. (Nasdaq: HGSI) today announced publication by The New England Journal of Medicine of the results of two pivotal animal efficacy studies, which showed the life-saving potential of the Company's human monoclonal antibody drug raxibacumab (ABthrax™), as well as the results of human safety studies, which supported the use of raxibacumab in the event of life-threatening inhalation anthrax disease.

"The results published today showed that a single dose of raxibacumab was highly effective as a treatment for inhalation anthrax in both rabbits and monkeys," said Sally D. Bolmer, Ph.D., R.A.C, lead author and Senior Vice President, Development and Regulatory Affairs, HGS. "Raxibacumab acted quickly to provide a significant survival benefit to animals showing clinical signs of disease caused by exposure to a dose of aerosolized anthrax spores that was approximately 200 times the median lethal dose. We also note that the safety profile shown in healthy human volunteers provides support for use of raxibacumab in the clinical setting of immediately life-threatening inhalation anthrax disease."

Raxibacumab represents a new way to address the anthrax threat. While antibiotics can kill the anthrax bacteria, they are not effective against the deadly toxins that the bacteria produce. Raxibacumab targets anthrax toxins after they are released by the bacteria into the blood and tissues. In an inhalation anthrax attack, people may not know they are infected with anthrax until the toxins already are circulating in their blood, and it may be too late for antibiotics alone to be effective.

"We are very proud that the importance of these data and the rigor and high quality of our scientists' work have led to publication in The New England Journal of Medicine," said David C. Stump, M.D., Executive Vice President, Research and Development, HGS. "Based on these results, we believe raxibacumab has the potential to be a significant step forward in the treatment of inhalation anthrax."

To access the full manuscript of "Raxibacumab for the Treatment of Inhalation Anthrax", please visit: www.NEJM.org and click on "Current Issue."

About the Raxibacumab Contract with the U.S. Government

Raxibacumab is being developed under a contract entered into in 2006 with the Biomedical Advanced Research and Development Authority (BARDA) of the Office of the Assistant Secretary for Preparedness and Response (ASPR), U.S. Department of Health and Human Services (HHS). In April 2009, HGS fulfilled its commitment to deliver the first 20,000 doses of raxibacumab to the Strategic National Stockpile for emergency use in the treatment of inhalation anthrax. The purchase was made under the Project BioShield Act of 2004, which is designed to accelerate the development, purchase and availability of medical countermeasures. In May 2009, HGS submitted a Biologics License Application (BLA) to the U.S. Food and Drug Administration (FDA) for raxibacumab for the treatment of inhalation anthrax. The BLA was also filed under the BARDA contract, and HGS will receive \$10 million from the U.S. Government upon FDA licensure of raxibacumab.

About Anthrax

Anthrax infection is caused by a spore-forming bacterium, *Bacillus anthracis*, which multiplies in the body and produces lethal toxins. Most anthrax fatalities are caused by the irreversible effects of the anthrax toxins. Research has shown that the bacteria produce protective antigen, the key facilitator in the progression of anthrax infection at the cellular level. After protective antigen and the anthrax toxins are produced by the bacteria, protective antigen binds to the anthrax toxin receptor on cell surfaces and forms a protein-receptor complex that makes it possible for the anthrax toxins to enter the cells. Raxibacumab blocks the binding of protective antigen to cell surfaces and prevents the anthrax toxins from entering and killing the cells.

About Human Genome Sciences

The mission of HGS is to apply great science and great medicine to bring innovative drugs to patients with unmet medical needs. The HGS clinical development pipeline includes novel drugs to treat hepatitis C, lupus, inhalation anthrax and cancer.

The Company's primary focus is rapid progress toward the commercialization of its two lead drugs, Albuferon® (albinterferon alfa-2b) for hepatitis C and BENLYSTA™ (belimumab, formerly LymphoStat-B®) for lupus. Albuferon has now completed Phase 3 development, and the filing of global marketing applications is expected in fall 2009. Two Phase 3 trials of BENLYSTA are ongoing, with results expected in July and November 2009.

In April 2009, HGS completed delivery of 20,000 doses of raxibacumab (ABthrax™) to the U.S. Strategic National Stockpile for use in an emergency for the treatment of inhalation anthrax. The Company also has several drugs in earlier stages of clinical development for the treatment of cancer, led by the TRAIL receptor antibody HGS-ETR1 and a small-molecule antagonist of IAP (inhibitor of apoptosis) proteins. In addition, HGS has substantial financial rights to certain products in the GSK clinical pipeline including darapladib, currently in Phase 3 development as a potential treatment for coronary heart disease, and Syncria® (albiglutide), currently in Phase 3 development as a potential treatment for type 2 diabetes.

For more information about HGS, please visit the Company's web site at www.hgsi.com. Health professionals and patients interested in clinical trials of HGS products may inquire via e-mail to clinical_trials@hgsi.com or by calling HGS at (301) 610-5790, extension 3550.

[For an Electronic Press Kit on this announcement, please click here.](#)

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Safe Harbor Statement

This announcement contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended. The forward-looking statements are based on Human Genome Sciences' current intent, belief and expectations. These statements are not guarantees of future performance and are subject to certain risks and uncertainties that are difficult to predict. Actual results may differ materially from these forward-looking statements because of the Company's unproven business model, its dependence on new technologies, the uncertainty and timing of clinical trials, the Company's ability to develop and commercialize products, its dependence on collaborators for services and revenue, its substantial indebtedness and lease obligations, its changing requirements and costs associated with facilities, intense competition, the uncertainty of patent and intellectual property protection, the Company's dependence on key management and key suppliers, the uncertainty of regulation of products, the impact of future alliances or transactions and other risks described in the Company's filings with the Securities and Exchange Commission. In addition, while the Company has completed delivery of ABthrax to the U.S. Strategic National Stockpile, the Company will continue to face risks related to FDA's approval of the Company's Biologics License Application for ABthrax. If the Company is unable to meet requirements associated with the ABthrax contract, future revenues from the sale of ABthrax to the U.S. Government will not occur.

Existing and prospective investors are cautioned not to place undue reliance on these forward-looking statements, which speak only as of today's date. Human Genome Sciences undertakes no obligation to update or revise the information contained in this announcement whether as a result of new information, future events or circumstances or otherwise.

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