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HGS

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HUMAN GENOME SCIENCES BEGINS DELIVERY OF FIRST-IN-CLASS ANTHRAX TREATMENT TO U.S. STRATEGIC NATIONAL STOCKPILE

- Delivery of 20,000 doses of ABthrax will bring at least \$150 million in revenue to HGS -

ROCKVILLE, Maryland – February 2, 2009 – Human Genome Sciences, Inc. (Nasdaq: HGSI) today announced that it has begun delivery of 20,000 doses of its human monoclonal antibody drug ABthrax™ (raxibacumab) to the U.S. Strategic National Stockpile for use in the treatment of inhalation anthrax.

ABthrax is a first-in-class treatment for anthrax, and the first procurement under Project BioShield of a product discovered and developed after the September 11, 2001 terrorist attacks. It specifically targets the deadly toxins released within the human body by *Bacillus anthracis* that are the real culprits in anthrax-related deaths. ABthrax 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).

“We believe ABthrax offers a significant step forward in the treatment of inhalation anthrax and could play an important role in strengthening America’s arsenal against bioterrorism,” said H. Thomas Watkins, President and Chief Executive Officer, HGS. “From a business perspective, this announcement is strategically important for HGS, because it marks our Company’s first product sales. We expect to receive \$150 million in revenue soon after completion of our delivery to the Strategic National Stockpile. We are pleased with the progress of our partnership with the U.S. Government, which has resulted in this important milestone, and we are hopeful that fulfillment of this initial order will result in a long-term relationship involving additional deliveries of ABthrax to the Stockpile.”

ABthrax 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. ABthrax 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 delighted to have fulfilled this important milestone under our contract with the U.S. Government and we hope we are making a significant contribution to our nation’s security,” said James H. Davis, Ph.D., J.D., Executive Vice President and General Counsel, HGS, and leader of the Company’s ABthrax program with the U.S. Government. “We are particularly pleased with the relationship we have had with BARDA in the development of ABthrax, and we look forward to continuing to work together.”

About Research Findings to Date

In December 2007, HGS announced that the results of two animal studies demonstrated the life-saving potential of ABthrax (raxibacumab). The results showed that a single dose of raxibacumab, administered without concomitant antibiotics, improved survival rates by up to 64 percent when administered after animals were symptomatic for anthrax disease as a result of inhalation exposure to massively lethal doses of anthrax spores. These dramatic and statistically significant findings demonstrated a survival benefit in two animal species, which is the requirement for establishing the efficacy of new drugs used to counter bioterrorism. These data are consistent with the results of previous studies in multiple animal models, which demonstrated that a single dose of raxibacumab given prophylactically provided up to 100% protection against death.

HGS has also completed safety studies of raxibacumab in more than 400 human volunteers. The clinical results to date suggest that raxibacumab was generally safe and well tolerated. In addition, clinical data have demonstrated that co-administration of raxibacumab with the antibiotic Cipro (ciprofloxacin) did not affect the pharmacokinetics of either Cipro or raxibacumab, and suggested that raxibacumab can be administered in combination with antibiotics. This is a key finding given the important role that antibiotics are expected to continue to play in the treatment of anthrax disease.

The Need for New Means to Fight Anthrax Infections

Two options have been available for the prevention or treatment of anthrax infections – a vaccine and antibiotics. Both are essential to dealing with anthrax, but both have limitations. The anthrax vaccine takes several weeks following the initial doses before immunity is detectable, and requires multiple injections over a period of eighteen months, in addition to annual booster vaccination, to maintain protective immunity. Antibiotics are effective in killing anthrax bacteria, but are not effective against the anthrax toxins once those toxins have been released into the blood. Antibiotics also may not be effective against antibiotic-resistant strains of anthrax.

ABthrax is a human monoclonal antibody to *Bacillus anthracis* protective antigen that was discovered and developed by HGS, using technology that HGS has integrated into the Company as part of its collaboration with Cambridge Antibody Technology. Research has shown that protective antigen is 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. ABthrax blocks the binding of protective antigen to cell surfaces and prevents the anthrax toxins from entering and killing the cells.

In contrast to the anthrax vaccine, the protection afforded by a single dose of ABthrax would be immediate following the rapid achievement of appropriate blood levels of ABthrax. In contrast to antibiotics, ABthrax acts against the deadly toxins produced by anthrax bacteria. It may also prevent and treat infections by antibiotic-resistant strains of anthrax. ABthrax was the first investigational agent against anthrax infection to be evaluated in a clinical study following the 2001 anthrax attacks in the United States. In 2003, ABthrax received a Fast Track Product designation from the FDA, as well as an Orphan Drug Designation for its use in the treatment of inhalation anthrax disease.

About the ABthrax Contract with the U.S. Government

In June 2006, the U.S. Government exercised its option to purchase ABthrax for the Strategic National Stockpile (Contract Number HHS010020050006C). HGS expects to receive \$165 million in revenues from this award, with \$150 million to come in the first half of 2009, following delivery of 20,000 doses of ABthrax, and the remainder to come upon FDA licensure of ABthrax. The purchase award was made by the HHS under the Project BioShield Act of 2004, which is designed to accelerate the development, purchase and availability of medical countermeasures for the Strategic National Stockpile. Under the contract, HGS has manufactured and is now delivering 20,000 treatment courses of ABthrax to the Stockpile. Also under the contract, the Company plans to file a Biologics License Application (BLA) with the FDA in the second quarter of 2009. HGS will receive an additional \$15 million from the U.S. Government upon FDA licensure of ABthrax.

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 key lead drugs, Albuferon® (albinterferon alfa-2b) for hepatitis C and LymphoStat-B® (belimumab) for lupus. Phase 3 clinical trials of both drugs are ongoing. ABthrax™ (raxibacumab) is in late-stage development for inhalation anthrax, and HGS also has three drugs in clinical development for the treatment of cancer, including two TRAIL receptor antibodies 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, which GSK has advanced to Phase 3 development as a potential treatment for coronary heart disease.

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.

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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, the Company will continue to face risks related to animal and human testing, to the manufacture of ABthrax and to FDA concurrence that ABthrax meets the requirements of the ABthrax contract. If the Company is unable to meet the product requirements associated with the ABthrax contract, the U.S. government will not be required to reimburse the Company for the costs incurred or to purchase any ABthrax doses. 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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