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**HGS**

**FOR IMMEDIATE RELEASE**

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**TAKEDA EXERCISES OPTION TO DEVELOP NOVEL**

**HUMAN GENOME SCIENCES ANTIBODY DRUG IN JAPAN**

- Human monoclonal antibody to TRAIL Receptor-1  
to be developed for use in treating cancer -

ROCKVILLE, Maryland – August 12, 2002 – Human Genome Sciences, Inc. (Nasdaq: HGSI) announced today that Takeda Chemical Industries, Ltd., has exercised its option to develop and commercialize TRAIL receptor-1 human monoclonal antibody (TRAIL-R1 mAb) in Japan. Human Genome Sciences retains development and commercialization rights to TRAIL-R1 mAb in North America, Europe, and the rest of the world.

Human Genome Sciences is currently enrolling patients in a Phase 1 clinical trial in the United States to evaluate the safety and pharmacology of TRAIL-R1 mAb in patients with advanced tumors.<sup>1</sup> TRAIL-R1 mAb is an agonistic antibody that specifically recognizes the TRAIL receptor-1 protein, found on the surface of a number of solid and hematopoietic cancer cells. In preclinical studies, TRAIL-R1 mAb has demonstrated the ability to reduce or

prevent the growth of certain tumors in animal models.<sup>2</sup> The TRAIL receptor-1 protein was discovered by Human Genome Sciences.

According to the terms of a June 1995 agreement, Takeda was granted an exclusive option to license a limited number of Human Genome Sciences products for development and sale in Japan. Takeda has paid Human Genome Sciences an option fee for these rights, and will pay milestone and royalty payments to Human Genome Sciences for each product developed and brought to market in Japan. TRAIL-R1 mAb is the second Human Genome Sciences product licensed by Takeda for development in Japan. The first, announced in February 1998, is mirostipen (myeloid progenitor inhibitory factor 1, MPIF-1), a protein that inhibits proliferation and differentiation of hematopoietic progenitor cells.<sup>3</sup>

In addition to Human Genome Sciences and Takeda, the Human Gene Therapeutic Consortium included GlaxoSmithKline, Schering-Plough, Merck KGaA, and Sanofi-Synthelabo. The initial term of the Human Gene Therapeutic Consortium agreements expired on June 30, 2001.<sup>4</sup> Under the Consortium agreements, work already initiated prior to the expiration can be continued if consortium members provide evidence of continued diligence, but no new use of Human Genome Sciences' technology is permitted. Consortium members have identified approximately 460 research programs for the creation of small molecule, protein, and antibody drugs, involving about 280 different genes.

Binding of TRAIL-R1 mAb to TRAIL receptor-1 triggers cell death. Human Genome Sciences scientists have demonstrated that tumors expressing TRAIL receptor-1 are sensitive to killing by apoptosis induced by binding to TRAIL-R1 mAb. In animal models, TRAIL-R1 mAb has demonstrated effectiveness in treating human breast, colon and uterine cancers.<sup>2</sup>

The TRAIL-R1 human monoclonal antibody was made in a collaboration between Human Genome Sciences and Cambridge Antibody Technology. The drug will be produced in the Human Genome Sciences clinical manufacturing facility located in Rockville, Maryland.

Ellen S. Baron, Ph.D., Senior Vice President, Business Development, said, "We welcome Takeda's decision to exercise their exclusive option to select TRAIL-R1 mAb for development in Japan. We continue to see substantial near- and long-term value in product opportunities and technology advancements with Takeda and our other Consortium partners."

William A. Haseltine, Ph.D., Chairman and Chief Executive Officer, said, "TRAIL-R1 mAb is one of several novel and exciting anticancer drug candidates

in development at Human Genome Sciences. TRAIL-R1 mAb binds to a 'cell death' receptor that is expressed in a number of tumors, including tumors of the colon, breast, stomach, cervix and uterus, in addition to cancers of hematopoietic origin. With Takeda's exercise of its exclusive option, we hope to see progress toward unlocking the therapeutic potential of TRAIL-R1 mAb in Japan."

For additional information on Human Genome Sciences, please visit our web site at [www.hgsi.com](http://www.hgsi.com). For more information on TRAIL-R1 mAb, see [www.hgsi.com/products/TRAIL-R1\\_mAb.html](http://www.hgsi.com/products/TRAIL-R1_mAb.html).

Health professionals interested in the TRAIL-R1 mAb trial or any other study involving HGS products are encouraged to inquire via the Contact Us section of the Human Genome Sciences web site, [www.hgsi.com/products/request.html](http://www.hgsi.com/products/request.html), or by calling us at (301) 610-5790, extension 3550.

Human Genome Sciences is a company with the mission to treat and cure disease by bringing new gene-based drugs to patients.

HGS and Human Genome Sciences are trademarks of Human Genome Sciences, Inc.

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, dependence on new technologies, uncertainty and timing of clinical trials, ability to develop and commercialize products, dependence on collaborators for services and revenue, substantial indebtedness, intense competition, uncertainty of patent and intellectual property protection, dependence on key management, uncertainty of regulation of products, dependence on key suppliers, the impact of future alliances or transactions and other risks that may be described in the company's filings with the Securities and Exchange Commission. 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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#### References

1. Human Genome Sciences Initiates Clinical Development of a Novel Anticancer Drug, April 30, 2002 (press release).
2. Salcedo, Alderson, Basu, et al. TRM-1, a fully human TRAIL-R1 agonistic monoclonal antibody, displays in vitro and in vivo anti-tumor activity, American Association for Cancer Research 93<sup>rd</sup> Annual Meeting, April 2002. Abstract 4240.
3. Takeda Exercises Option to Develop Human Genome Sciences Therapeutic Protein, February 25, 1998 (press release).
4. Human Genome Sciences Announces New Product and Partnership Opportunities, July 2, 2001 (press release).