

## **Bayer and CuraGen Enter into Two Landmark Agreements**

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**Leverkusen, Germany; New Haven, CT and West Haven, CT, USA** – Jan. 16, 2001 - Bayer and CuraGen Corporation (Nasdaq: CRGN), an integrated genomics-based drug discovery and development company, announced today two landmark biotechnology agreements. The first agreement is a comprehensive alliance to discover, develop, and jointly commercialize small molecule drugs to treat obesity and adult onset diabetes. The second agreement is a broad collaboration to apply CuraGen's functional genomic technologies and pharmacogenomic expertise to evaluate Bayer's developmental and preclinical pipeline of pharmaceutical compounds across all disease areas.

### **Obesity and Diabetes Alliance to Deliver 12 innovative genomics-derived development candidates**

The obesity and diabetes agreement enables each company to leverage the recognized strengths of the other in order to systematically develop breakthrough medications from the human genome. CuraGen is to provide 80 drug targets over the first five years of the collaboration as well as access to its comprehensive suite of functional genomic technologies, bioinformatics and pharmacogenomic expertise to select, prioritize and ensure the resulting drugs are administered to the appropriate patients. Bayer will utilize its high-throughput screening, combinatorial chemistry, medicinal chemistry, pharmacology, and development expertise to develop small molecule compounds against the targets supplied by CuraGen. The Companies also will share expenses related to later stage preclinical and clinical compound development. Bayer and CuraGen have committed to bring 12 candidates in Obesity and Diabetes to clinical development. Both will jointly fund the relevant Research, Development and Commercialization activities up to \$1.34 billion over a 15 years period. The research and development costs will be split 56 % to 44 % between both Bayer and CuraGen.

Ultimately, the Companies will jointly commercialize drugs resulting from this alliance, and then share profits according to their respective contributions.

Curagen has co-promotion rights for drugs commercialized from this alliance.

“We are partnering with the best biotechnology companies in the world thus building one of the most productive research platforms in the global pharmaceutical industry. We expect this collaboration to enhance the development pipeline for our metabolics

franchise and bring novel therapies using gene-based targets to patients,” said Dr. David Ebsworth, global head of Bayer AG’s worldwide pharmaceutical business.

“Bayer expertise in developing small molecule drugs in an industrialized manner is unprecedented in the pharmaceutical industry and is a perfect fit for CuraGen,” stated Jonathan M. Rothberg, Ph.D., Founder, Chairman, and CEO of CuraGen Corporation. “CuraGen has an established, high-throughput infrastructure for developing protein, and antibody therapeutics to treat major, unmet medical needs. Through this unprecedented collaboration with Bayer, CuraGen is now able to participate in the development and commercialization of small molecule drugs to treat diabetes and obesity,” added Dr. Rothberg.

### **Pharmacogenomic and Toxicogenomic Collaboration to Improve Drug Development**

This expandable, five-year pharmacogenomic and toxicogenomic collaboration is valued at \$124 million and includes an \$85 million equity investment in CuraGen by Bayer AG and \$39 million in committed funding to CuraGen.

By applying genomics to evaluate Bayer’s developmental and preclinical pipeline of pharmaceutical compounds early in development, the Companies expect to reduce drug development costs, reduce the time to market, and create safer and more efficacious drugs. In addition to these efforts, the Companies intend to compile a database of gene-based markers and information that will enable scientists to predict potential drug toxicities, understand how a particular drug works, and identify new disease indications. CuraGen and Bayer both have exclusive rights to use and market the established database.

“Through access to CuraGen’s genomic technologies, we hope to improve the probability for success in the clinical stages of development by selecting the highest potential drug candidates early in the process,” said Wolfgang Hartwig, Head of Global Research for Bayer.

### **About the Obesity and Diabetes Alliance**

The first agreement represents a comprehensive alliance for discovering, developing, and commercializing small molecule drugs to treat obesity and late onset diabetes. Over the initial five-years of this alliance, CuraGen will deliver to Bayer 80 highly qualified and validated genomic-based drug targets for screening and early-stage developmental work. CuraGen scientists will apply its suite of functional genomic technologies and bioinformatics systems to discover obesity and diabetes related drug targets through the systematic study of disease models, drug response models, large-scale data mining of the human genome, as well as human genetics. Further characterization will result from extensive *in vitro* and *in vivo* characterization of the targets in relation to human disease. CuraGen will also apply its industrialized

PathCalling proteomic technology to identify protein interactions and related pathways, which in turn, may prove to generate additional suitable drug targets. Upon delivery of these targets, Bayer will conduct high-throughput screening, combinatorial chemistry, medicinal chemistry, and other development stage activities, including early stage preclinical work. Throughout the collaboration, CuraGen scientists will conduct pharmacogenomic and toxicogenomic evaluations to select and prioritize the most promising drug candidates, identify possible side effects and elucidate alternate indications. Once the compounds are optimized for clinical development, CuraGen will then apply its SNPCalling genotyping technology to study genetic variations within appropriate clinical patient populations to aid in selecting the most appropriate patients for treatment. Bayer's extensive experience in the clinical development of small molecule drugs will ultimately enable the Companies to jointly commercialize innovative obesity and diabetes medications. The agreement may be subject to further regulatory review.

### **About the Pharmacogenomic and Toxicogenomic Collaboration**

Under the second agreement, CuraGen will apply its pharmacogenomic, toxicogenomic, and pharmacogenetic technologies and expertise to assist Bayer scientists in evaluating Bayer's early stage drug candidates and preclinical compounds across all disease areas. This information will be useful in determining which candidates to prioritize and which preclinical candidates will have the highest likelihood for success in the clinical phases of drug development. In addition, the Companies will develop a toxicogenomic database consisting of expression profiles of genes identified as indicators of toxic side effects. Once established, CuraGen and Bayer have exclusive rights to the database and will integrate this new technology in their individual drug discovery processes and also market this toxicogenomic database to other pharmaceutical and biopharmaceutical companies for use in toxicogenomic screening of their preclinical drug pipelines. CuraGen will pay royalties to Bayer based upon revenues generated from these future partners.

### **About Bayer**

Bayer is an international, research-based group with major businesses in health care, agriculture, polymers and specialty chemicals. With some 120,000 employees worldwide, the group recorded a net income of 2 billion euros on sales of 27.3 billion euros in 1999. A record euro 2.4 billion is budgeted in 2001 for research and development, attesting to the company's quest for innovation. Additional Company information is available at [www.bayer.com](http://www.bayer.com).

### **About CuraGen Corporation**

CuraGen Corporation is advancing the discovery and development of pharmaceutical and life science products through the systematic application of genomics. CuraGen's fully integrated, Internet-based functional genomic technologies, services, and information systems are designed to rapidly generate comprehensive information about genes, human genetic variations, gene expression, protein expression, protein pathways, and potential drugs that affect these pathways.

The Company is applying this comprehensive functional genomic platform to develop protein, antibody, and small molecule therapeutics. CuraGen employs over 300 people and is headquartered in New Haven, CT. Additional Company information is available at [www.curagen.com](http://www.curagen.com).

*This release may contain forward-looking statements that are subject to certain risks and uncertainties, including the future growth of CuraGen's collaboration revenues, the therapeutic and clinical potential of antibody drug targets, the scale and speed at which antibody candidates can be turned into drugs, and CuraGen's continued ability to rapidly deliver high quality, novel drug targets. Such statements are based on management's current expectations and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. The Company cautions investors that there can be no assurance that actual results or business conditions will not differ materially from those projected or suggested in such forward-looking statements as a result of various factors, including, but not limited to, the following: CuraGen Corporation's early stage of development, technological uncertainties and product development risks, uncertainties surrounding the availability of additional funding, reliance on research collaborations, competition, ability to protect its patents and proprietary rights, and uncertainties relating to commercialization rights.*

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**A WebCast/conference Call** with executives from Bayer and CuraGen has been arranged to discuss this pioneering collaboration:

Time: January 16, 2001, 4:00 p.m. CET / 10:00 a.m. EST

To participate in the conference please dial : USA:+1 800 482 2239; Non US: +44 (0) 20 8781 0598. Ask for Bayer Conference Call.

**The conference call will be accompanied by a chart presentation that will be available via Internet** at [www.investor.bayer.com](http://www.investor.bayer.com). Please refer to Events / Live Channel; or [www.curagen.com](http://www.curagen.com). **It is recommended to check the internet connection in advance**