
**MILLENNIUM AND BAYER INDUSTRIALIZING DRUG DISCOVERY
PROCESS THROUGH ONGOING SUCCESSFUL RESEARCH
ALLIANCE**

**More Than 70 Disease-Relevant Validated Drug Targets Moving into or Beyond
Screening in First Two Years of Collaboration**

CAMBRIDGE, Mass. and LEVERKUSEN, Germany, October 24, 2000

Millennium Pharmaceuticals, Inc. (Nasdaq: MLNM) and Bayer AG today announced that they are currently moving more than 70 disease-relevant validated drug targets toward high-throughput screening or into lead identification in the first two years of the five-year research alliance. The alliance achieved these extraordinary advances through joint efforts. The two companies collaborated to streamline the drug discovery process with Millennium industrializing the rapid identification, characterization and validation of target proteins and Bayer conducting large-scale high-throughput screening. This innovative approach to target discovery allows for the categorization of genes with disease relevance and is a key step in the process to enhance the productivity of drug discovery.

The alliance is centered on genomics research that identifies the composition and function of thousands of genes which carry instructions to make proteins the body needs to function. By integrating large-scale genetics, genomics, automation, informatics and drug discovery technologies, Millennium can rapidly search for disease-relevant targets that are promising for drug development. This resulting drug discovery platform, which effectively meets the needs of the research alliance with Bayer, serves all of Millennium's research programs, both internally and with other partners, and contributes validated targets to the Company's own drug discovery pipeline.

With the aid of Bayer's high-throughput robotic screening technology, the selected targets are incorporated into test systems to search for compounds that show promise for drug development. This screening process can test more than 200,000 such compounds daily.

"The progress of the Millennium and Bayer alliance in its first two years has been extraordinary, particularly given the usual three-year timeframe for the processing of targets, chemistry and pharmacology necessary to yield a developmental drug candidate," said Professor Wolfgang Hartwig, executive vice president of pharmaceu-

ticals research at Bayer. “As we celebrate our second anniversary with Millennium, we anticipate that in addition to our screening pipeline of more than 70 targets, we will have several preclinical compounds and potentially one chemical compound nearing IND status by year-end.”

In May 2000, the two companies expanded the initial objectives of the alliance, based on the success of their efforts. Millennium and Bayer collectively accelerated the second year goal of 50 new identified targets to 100 by the end of 2000. As of September 30, 2000 more than 70 targets have been identified since the alliance began.

“Bayer and Millennium have created the world’s leading platform for biologically annotating targets and moving them into drug discovery,” said Mark Levin, chief executive officer of Millennium. “Our joint efforts exemplify the power of Millennium’s genomics-based approach to drug discovery and development and Bayer’s cutting-edge screening and chemistry capabilities and expertise, and the extraordinary success which we created through ‘over-the-top alliances’”

Alliance Background

The alliance, which began in September 1998, was the largest to date in the field of pharmaceutical drug discovery. In return for a total investment of up to \$465 million, including approximately a 14 percent equity investment in Millennium over a five-year period, Bayer receives access to key technologies in modern genome research and a flow of new genomics-based targets for drug development.

The primary goal of the alliance is for Millennium to supply 225 important new drug targets identified as relevant for cardiovascular disease, cancer, pain, hematology and viral infections. From those identified by the alliance, Bayer will select drug targets for its exclusive use and the remainder will be available to Millennium to use in its proprietary drug development efforts.

Drug targets are proteins expressed by human genes that can be used to discover and develop small molecule drugs. In the last 100 years of pharmaceutical research, some 500 drug targets based on human genes (of which there are approximately 100,000) have been identified worldwide for use in the development of medical therapies, leaving a considerable number of potential targets still to be discovered.

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. For the current year 2.4 billion euros are budgeted for capital expenditures and 2.2 billion euros for research and development.

Millennium, a leading biopharmaceutical company, applies its comprehensive and integrated science and technology platform for the discovery and development of breakthrough therapeutic and predictive medicine products, with a goal of delivering personalized medicine. Through the industrialization of this gene-to-patient platform, Millennium also strives to accelerate the process of drug discovery and development. Headquartered in Cambridge, Mass., Millennium and its affiliates currently employ more than 1,200 people.

This press release contains "forward-looking statements." These statements include descriptions of Millennium's operational plans, expectations about future earnings and other results of operations, views of future industry or market conditions and other statements that include words like "may," "expects," "believes," and "intends," and that describe opinions about future events. Known and unknown risks may cause Millennium's actual results and performances to be materially different from those expressed or implied by these statements. Some of these risks are: uncertainties relating to unanticipated difficulties and delays relating to gene identification, drug discovery and clinical development processes; changes in relationships with strategic partners and dependence upon strategic partners for the performance of critical activities under collaborative agreements; the impact of competitive products and technological changes; uncertainties relating to patent protection and regulatory approval; and uncertainties relating to the ability of Millennium and its affiliates to obtain substantial additional funds required for progress in drug discovery and development. These and other factors are identified and more fully explained in Exhibit 99.1 (entitled "Risk Factors") to the quarterly report on Form 10-Q filed by Millennium with the Securities and Exchange Commission on July 26, 2000.

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