

AVEO PHARMACEUTICALS AND MERCK SIGN COLLABORATION FOR CLINICAL DRUG
RESPONSE PREDICTION

- Agreement Marks First Application of Novel Platform for Predicting
Clinical Response Based on Genetic Profiles -

CAMBRIDGE, MA November 2, 2005 - AVEO Pharmaceuticals, Inc., a biopharmaceutical company focused on the discovery and development of novel cancer medicines, today announced that it has signed a second oncology-focused collaborative agreement with Merck & Co., Inc. The parties will use AVEO's Human Response Prediction platform to identify patient populations likely to be responsive to a number of investigational cancer drugs currently being developed by Merck. The collaboration is focused on identifying genetic profiles that correlate with drug response to more effectively guide the clinical and market development of Merck's cancer compounds.

AVEO's first collaboration with Merck, which began in November 2003, focused on the use of AVEO's genetically-defined cancer models for new target discovery and validation. The first milestone from this ongoing collaboration was achieved earlier this year when Merck exercised its option rights to the first novel small molecule target discovered and validated in AVEO's models and comprehensive cancer biology program.

"Merck is committed to bringing targeted cancer therapeutics to market," said Stephen H. Friend, MD, Ph.D., Executive Vice President, Advanced Technology and Oncology at Merck Research Laboratories. "AVEO's Human Response Prediction platform represents a potentially significant advancement for identifying those subgroups of cancer patients who will likely respond to specific drugs, and could improve the efficiency and productivity of oncology drug development."

Under the terms of this most recent agreement, Merck and AVEO have established a two-year alliance to conduct preclinical studies on select cancer compounds using AVEO's Human Response Prediction platform. Merck has exclusive rights to the data generated from the studies that relate to its proprietary compounds. Financial terms include an equity investment by Merck in AVEO, annual research funding for AVEO and the potential for milestone payments to AVEO.

"While recent successes in targeted therapies are promising for cancer patients, we have not yet reached the point where we can match these drugs to those patients who will respond most appropriately," said Tuan Ha-Ngoc, President and CEO of AVEO. "For the first time, AVEO's platform affords the cancer drug development community with a preclinical system in which the genetic profile of such responsive and non-responsive populations can be studied. This knowledge has the potential to increase the efficiency and probability of success of drug development in oncology and, ultimately, to bring the right drugs to the right patients. We are very pleased to be working with Merck in this expanded relationship to build value in their current and future drug development programs."

About AVEO's Human Response Prediction Platform AVEO's Human Response Prediction platform is based on AVEO's proprietary, genetically-defined mouse models of human cancer. Each of these models is engineered to

contain signature genetic mutations that are present in human disease. Beyond these cancer-initiating engineered mutations, the resultant tumors acquire common and distinct spontaneous mutations during tumor progression, providing additional natural genetic variation more akin to the range of genetic heterogeneity encountered across different primary human tumors. The tumor-to-tumor genetic variation in the system provides the opportunity to identify genetic correlations between responding and non-responding tumor populations, and to apply such genetic profiles in clinical development. Consequently, compared with traditional xenograft models that have proven to be non-predictive of efficacy, often leading to expensive and time consuming hit or miss outcomes in clinical trials, AVEO's cancer models are improved predictors of human response.

About the 2003 AVEO-Merck Target Collaboration In November 2003, AVEO Pharmaceuticals (formerly known as GenPath Pharmaceuticals, Inc.) began a multi-year agreement with Merck & Co., Inc. to use AVEO's proprietary cancer models to collaboratively identify and validate novel targets for the development of small molecule cancer drugs. Under the terms of the agreement, AVEO received a significant upfront cash payment, subsequent equity investment, annual research funding, as well as the potential to receive milestone and royalty payments from Merck. The first such milestone was achieved this year when Merck exercised its rights to a novel small molecule target discovered and validated in AVEO's models. Total payments to AVEO by Merck based on the successful commercialization of multiple products resulting from the collaboration, exclusive of royalties, could exceed \$100 million.

About AVEO

AVEO is a private biopharmaceutical company focused on the discovery and development of novel cancer therapeutics. The Company utilizes its proprietary, genetically-defined cancer models for the identification and validation of novel cancer targets, and has begun to build an impressive portfolio of drug discovery programs around these high-value targets. AVEO also leverages its Human Response Prediction platform to allow for the identification of genetic profiles that correspond with patient responsiveness.

AVEO is located in Cambridge, Massachusetts. For more information, please visit the company's website at www.aveopharma.com.

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