

Archemix and Merck KGaA Sign Strategic Alliance

Collaboration to focus primarily on cancer therapeutics using novel aptamer technology

Cambridge, MA - June 11, 2007 - Archemix Corp. and Merck Serono, a division of Merck KGaA, Darmstadt, Germany, announced today that they have formed a multi-year strategic alliance to discover, develop and commercialize first-in-class aptamer therapeutics with a primary focus on the treatment of cancer. The alliance combines Archemix' proprietary SELEX technology to discover and generate aptamer candidates with Merck's demonstrated oncology drug development and commercialization capabilities.

Under the terms of the agreement, Archemix will receive a \$29.8 million equity investment from Merck KGaA. Merck KGaA also retains an option, under certain circumstances, to acquire additional Archemix common stock upon an initial public offering. Other financial terms were not disclosed. This is the second research agreement this year between the two companies.

The collaboration gives Merck Serono the option to obtain product licenses to certain of Archemix's lead stage aptamer programs in oncology and the right to select and develop aptamers against six additional targets in oncology and other indications, including autoimmune and inflammation disorders. In addition, Merck Serono is granted a license to use Archemix's SELEX(R) technology for internal target validation. Archemix has the option to exercise a co-development and co-promote option on any of the products being developed on a 50:50 cost and profit-sharing basis in the United States.

"The collaboration with Merck Serono represents a key strategic initiative for Archemix and the development of our pipeline, especially in the area of cancer," said Errol De Souza, Ph.D., President and CEO, Archemix. "We will be working with a recognized leader in drug development to discover, develop and commercialize first-in-class aptamer-based therapeutics. With our co-development and co-promote options we can participate in the development and commercialization of certain of the products that come out of the collaboration while simultaneously generating cash flows to fund our proprietary aptamer pipeline."

"Aptamers have the potential to play a key role in the next generation of drugs in our core therapeutic areas," said Dr. Bernhard Kirschbaum, Executive Senior Vice President and Director of Research, Merck Serono. "Archemix is the leader in the discovery of aptamer therapeutics and we believe that, as a class,

aptamers can create a new paradigm of treatment."

About Aptamers

Aptamers are single-stranded nucleic acids that form well-defined three dimensional shapes, allowing them to bind target molecules in a manner that is conceptually similar to antibodies. Aptamers combine the optimal characteristics of small molecules and antibodies, including high specificity and affinity, chemical stability, low immunogenicity and the ability to target protein-protein interactions.

In contrast to monoclonal antibodies, aptamers are chemically synthesized rather than biologically expressed.

About Archemix

Archemix Corp. is a privately-held biopharmaceutical company developing aptamers as a class of directed therapeutics for the prevention and treatment of human disease. The company is leveraging its proprietary drug discovery technology to fuel the growth of its development portfolio, which is primarily focused on acute cardiovascular and hematology diseases and cancer. Archemix's broad product pipeline, being developed both by the company as well as its licensees, includes multiple investigational compounds at various stages of development, several of which are moving into Phase II clinical trials. Archemix's lead proprietary product, ARC1779, a selective platelet inhibitor, is anticipated to start Phase IIa clinical trials before the end of 2007. Archemix' leadership position in intellectual property, technology and expertise relating to aptamers has enabled it to form numerous collaborations with biotechnology and pharmaceutical collaborators, including Merck Serono, Pfizer Inc., Elan Pharma, Nuvelo, Inc., Antisoma plc., and Regado Biosciences. For more information, please visit www.archemix.com.

About Merck

Merck KGaA is a global pharmaceutical and chemical company with sales of EUR 6.3 billion in 2006, a history that began in 1668, and a future shaped by 35,091 employees in 62 countries. Its success is characterized by innovations from entrepreneurial employees. Merck's operating activities come under the umbrella of Merck KGaA, in which the Merck family holds an approximately 70% interest and free shareholders own the remaining approximately 30%. In 1917 the U.S. subsidiary Merck & Co. was expropriated and has been an independent company ever since.