

Table 1 Now you see it, now you don't: the pipeline of Esperion 1.0 and 2.0

Compound	Mechanism	Investors
Pre-Pfizer (1998–2004) Esperion 1.0		
ETC 216 (mutant Apo A-I protein)	Reverse lipid transport	Oak Investment Partners, TL Partners, HealthCap AB, Alta Partners, Canaan, Domain Associates, Investor, Swedish Industrial Development Fund
ETC 588 (large, unilamellar vesicle)	Reverse lipid transport	
ETC 642 (22-amino acid peptidomimetic of Apo A-I)	Reverse lipid transport	
ETC 1001 (small molecule)	Lipid regulation	
ETC 1002 (small molecule)	Lipid regulation	
Post-Pfizer (2008–present) Esperion 2.0		
ETC 1001	Lipid regulation	Alta Partners, Domain Associates, Aisling Capital, Arboretum Ventures
ETC 1002	Lipid regulation	

Pfizer retains an undisclosed stake in the new Esperion, and it is once again headed by Roger Newton.

For the new Esperion, Pfizer took the unusual step of divesting a portion of Esperion's original patent estate (see **Table 1**), something the company has never done before. It has retained ETC 216 and the other two biopharmaceuticals, ETC 588 and ETC 642, but assigned the small-molecule drugs ETC 1001 and ETC 1002 to Esperion. At an analysts' meeting March 5, Pfizer announced that it was cutting back its development programs to just six—oncology, pain, inflammation and immunology, diabetes and obesity, Alzheimer's, and schizophrenia—and its published pipeline update indicated that cardiovascular and atherosclerosis compounds ETC 216, 588 and 642 were discontinued.

Esperion will be moving forward with ETC 1002, which is showing promise in preclinical development. There are also plans to acquire new technology, and Esperion is evaluating several opportunities, including biopharmaceuticals and small molecules. The company remains a focused franchise in lipid regulation and atherosclerosis.

It had raised more than \$200 million in venture capital and equity financing as an independent firm before Pfizer bought it, but it has been spun back out with \$22.75 million in venture funding from four firms: Alta Partners in San Diego, Aisling Capital in New York, Domain Associates in Princeton, New Jersey, and Arboretum Ventures in Ann Arbor, Michigan, which is contributing a smaller share. Domain and Alta are second-time investors, both having earned successful exits from Esperion 1.0. Domain invested when Esperion was already a public company, by a pipe transaction through its fund, Domain Public Equity Partners, and the group received a 3.5-fold return on investment when Pfizer

acquired it. Representatives from Domain, Alta and Aisling sit on Esperion's new board.

The nice return under the original acquisition is a compelling reason to invest again, but having Newton—whom Vitullo calls “a luminary and visionary in field”—at the helm doesn't hurt. Also helping to attract venture capitalists are the early-stage pipeline and the IP portfolio Pfizer returned. Jan Garfinkle, managing director of Arboretum Ventures, notes that the “patent coming to Esperion [ETC 1002] is one of its original patents. It's been ‘diligenced’ extensively... It's very early and has a long patent life.”

The \$22.75 million is enough to get Esperion started again, and Domain, Aisling and Arboretum all say they will invest further as the company grows. Some might look at Newton's prior success and have high expectations, but Domain isn't necessarily looking for another \$1.3 billion buyout. “Our philosophy at Domain has always been to build good companies with good management,” says Vitullo. “We have found that when we focus on that a good outcome is highly likely whether it be an IPO or an acquisition.”

Catherine Shaffer Ann Arbor, Michigan

IN their words



“It is time to extricate marketing practices from medical education.”

American Medical Students Association (AMSA) national president Brian Hurley commenting on an AMSA survey revealing that 60 out of 150 US medical schools either have no adequate

policy or failed to fully disclose their policy on gifts to their doctors and trainees from drug companies.

IN brief

Genetically modified mosquitoes

Malaysia is considering the release of genetically engineered mosquitoes as a solution to dengue fever. The Malaysian Academy of Sciences is likely to advise the government to press on with field trials of genetically modified male *Aedes aegypti* mosquitoes created by Oxitec of Oxford. Oxitec uses the RIDL (release of insects carrying a dominant lethal gene) approach to insert the LA 513 transposon into the mosquito's DNA to produce offspring that die in the larval stage unless fed tetracycline. In the factory, the RIDL mosquitoes breed normally when fed a tetracycline supplement; in the wild, the genetic modification kills the offspring of the released males. If enough sterile males were released, the wild-type *A. aegypti* population would eventually crash. Oxitec presented their technology to the Academy on May 16, following an evaluation by the Malaysian Ministry of Health in contained-field house trials. Oxitec cofounder Luke Alphey explains that these three-room house trials are “sophisticated and realistic” experiments that test how well these insects compete for mates. Oxitec's technology needs to undergo further regulatory scrutiny and approval, but their approach is nearer term than a dengue vaccine or replacing wild mosquito populations with genetically engineered virus-resistant strains. There are over 50 million cases of dengue each year, and no treatment. “I think this is a very exciting development,” says John Mumford of Imperial College, who also works for the World Health Organization.

—Susan Aldridge

Pan-EU Biobanks

Plans for linking Europe's existing biobanks were unveiled at the European Parliament on May 28. The announcement took stock of the progress made so far toward creating a pan-European Biobanking and Biomolecular Resources Research Infrastructure (BBMRI), a project that one BBMRI coordinator, Kurt Zatloukal of the Medical University of Graz in Austria, describes as “the biggest initiative in the life sciences in Europe.” The EU is providing €5 million for the BBMRI's preparatory phase, which focuses on technical harmonization as well as the legal, governance and financial resources necessary for building on existing biobanks. As Zatloukal describes: “Europe is in a very good starting position for developing this field. There are already some very good biobank initiatives in place, and the structure of the health-care system provides an opportunity to collect high-quality human biological samples and data and to integrate biobanking into the health-care system.” The working consortium includes 51 participants from 21 member states and more than 150 associated organizations. Zatloukal expects there will be a prototype structure integrating Europe's most advanced biobank initiatives when the initial funding terminates in 2010.

—Barbara Nasto