### **ArQule buys Camitro**

In hopes of redefining the fundamental process of pharmaceutical lead discovery, on January 25 chemistry-based drug discovery company ArQule (Woburn, MA) acquired privately-held Camitro (Menlo Park, CA; Cambridge, UK), a company that uses in silico modeling to predict how small molecule drug candidates' chemical structures affect the molecules' absorption, distribution, metabolism, elimination, and toxicology (ADMET) in the body. ArQule issued 3.4 million shares of stock and \$1.7 million in cash for the purchase, valuing the deal when it closed on February 1 at approximately \$85 million. According to Ivonne Marondel, analyst at Gerard Klauer Mattison (New York), Camitro's high-throughput ADMET modeling will greatly accelerate the drug development from ArQule's 250 targets, as well as generate an estimated \$35 million from software sales by the end of 2002. "This merger is kind of a turbo charger for ArQule," says Marondel. "Looking at other combichem companies, I think they really have an edge here." GlaxoSmithKline (London) recently became a client of Camitro, which expects two more large pharmas to join the mix soon. CM

# Easing the rules

The UK authority that oversees the listing of companies on the London Stock Exchange is proposing to relax its rules so as to encourage biotechnology companies to raise money on the exchange. Currently, in order to list, a company must satisfy the Financial Services Authority (FSA; London) that it has, for example, two products in clinical trials, £5 million (\$7.3 million) through collaborations, or has spent more that £20 million on R&D over the last 3 years and has IP to show for it. But now the FSA is going "to allow the admission of scientific research-based companies that do not meet the specific criteria absolutely, but nonetheless could achieve milestones appropriate to its business"-basically allowing companies to disclose information for investors to evaluate, rather than having to satisfy the FSA. Daniel Abrams, chair of the BioIndustry Association's (BIA; London) finance committee, welcomes the proposed changes, saying that "a credible biotechnology company can be created in six months, not necessarily over three years." But he adds that, "I would not expect to see a large increase in the numbers of biotechnology companies listing." After a consultation period closing on March 16, the FSA plans to implement any changes in the summer. AM

# Malaria pact to speed vaccine



In late January, privately-held biotech firm Apovia (San Diego, CA) and the Malaria Vaccine Initiative (MVI; Rockville, MD), a non-profit effort founded by computer billionaire Bill Gates, signed a two-year agreement to produce a new malaria vaccine. In return for undisclosed up-front and milestone payments, Apovia will manufacture a vaccine comprising virus-like particles that display pieces of malaria parasite proteins that stimulate the immune system against a future exposure to the disease. "It's a very promising technology that

induces a very strong immune response that we haven't seen before," says Walter Brand, MVI program manager. Apovia has already tested the vaccine in laboratory animal studies and limited primate studies, and Apovia president Ben Thornton says he expects the vaccine to enter human clinical trials in the third quarter of 2001. If the vaccine is a success, MVI requires that Apovia find a way of making it affordable to developing nations, where malaria can kill up to three children a minute, according to MVI figures. *EN* 

## Human genome published

Publication of the human genome sequence on February 12 signaled the end of the draft phase of the public and private sequencing efforts. Analysis of the assemblies generated by the public Human Genome Project (HGP) (Nature 409, 860, 2001) and Celera Genomics (Rockville, MD) (Science 291, 1304, 2001) confirms they are of similar size (2.9 Gb containing 30,000-40,000 genes) and contain comparable numbers of unique stretches. Even so, there are differences in the chromosomal location of certain genes, indicating anomalies arising from the different assembly methods and insufficient coverage of different chromosome regions. Unlike the free, unrestricted availability of the HGP data, Celera's data will remain on the company's website, with relatively strict conditions of access: researchers will be able to download up to one megabase per week (downloading the entire sequence under this arrangement would take about 56 years), but can download longer stretches of sequence if they provide a nonredistribution statement signed by an institutional representative detailing the noncommercial nature of their research. Commercial users wishing to access the data for verification purposes must execute a material transfer agreement or buy a subscription/license. AB

# Scotia's woes

In late January, biopharmaceutical firm Scotia Holdings (Stirling, UK) became the first UK public biotech firm to require administrator protection—a move that analysts say will probably result in either its acquisition or the sale of all its assets piece-meal. Last October, the FDA rejected Scotia's primary photodynamic therapeutic (PDT) Foscan as a palliative for late-stage head-and-neck cancer, and the European Agency for the Evaluation of Medicinal Products (EMEA) followed suit in January, resulting in the suspension of trading of Scotia's stock by the London Stock Exchange. Analysts say £6-7 million in cash unlikely to last the company through March, coupled with a looming £50 million convertible debt due in March 2002, prompted Scotia to appoint Ernst & Young to restructure the firm. Scotia founder David Horrobin attributes the company's demise to the decisions made by Robert Dow, who replaced Horrobin as CEO in 1998: Horrobin says that Dow fired the "best PDT team in the industry," killed 25 early-stage projects that cost only about £1 million a year, and then changed Foscan's modality from an effective cure for early-stage cancer to palliation of late-stage cancer where it doesn't really have a major advantage over other treatment modalities. AB

### Vive la France

What a difference two days at the BioVision World Life Sciences Forum in Lyon can make to all our lives. Speaking in the opening plenary session on February 8, Francis Collins, director of the NIH Human Genome Research Institute (Bethesda, MD), hesitantly predicted that the average human life expectancy at birth in the developed countries could be as high as 90 years by 2030. By the closing plenary of the forum on February 10, Laurent Fabius, the French Minister of Finance, had revised that estimate upwards to 120 years. No wonder France has a budget surplus. *JH* 

Business and Regulatory News Briefs written by Aaron Bouchie, Emma Dorey, Liz Fletcher, Jeff Fox, John Hodgson, Sabine Louët, Adam Michael, Chris Morrison, and Eric Niiler.