

IN BRIEF

GM food policy upheld

At the end of October, Judge Colleen Kollar-Kotelly of the US District Court in Washington threw out a case filed by a coalition of biotech activists, including the Alliance for BioIntegrity, against the federal government in 1998 (*Nat. Biotechnol.* 17, 746, 1999). Referring to FDA's 1992 policy statement on *Foods Derived From New Plant Varieties*, the group demanded a revision of food safety laws whereby the FDA impose mandatory safety testing and labeling. "Dismissal of the case against the FDA is a huge victory for FDA and consumers," says Michael Philips, BIO's executive director for food and agriculture, "The summary dismissal of this case upholds existing FDA policies based on a science-based regulatory system for reviewing and labeling foods improved through biotechnology." ED

New xeno joint venture

In a final vote of no confidence in its subsidiary Imutran (Cambridge, UK), Novartis has announced plans to merge its xenotransplantation research with that of Boston, MA-based BioTransplant; Imutran will cease operations on 31 December. Imutran has developed a line of GM pigs with 'humanized' organs that express a human complement inhibitor.

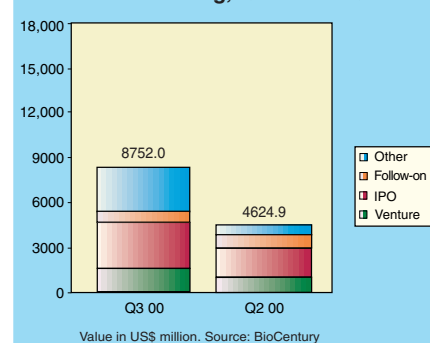
However, Novartis was unhappy with Imutran's 39-day average survival time of pig-to-monkey heart transplants. Meanwhile, BioTransplant has bred a herd of miniature swine that are relatively free of transmissible PERV. The company has also developed "tolerance induction"—a technique of teaching the body to recognize foreign antigens as its own—and has submitted a patent claim for the creation of hybrid, human-pig pluripotent stem cells for use in therapeutic cloning. Thus, Novartis is hoping that BioTransplant will take xenotransplantation to heights not reached by Imutran, namely clinical trials. Novartis will own two thirds of the new venture and will pump in \$30 million over 3 years. KB

Affymetrix spins off firm

Microarray maker, Affymetrix (Santa Clara, CA) has formed a spin-off genomics unit, Perlegen Sciences, to use Affymetrix' DNA scanning technology to survey 50 human genomes a year for variations associated with multigenic disease and pharmacogenetic responses. The venture, which will create ink jet printed microarrays of SNPs or other variable regions, has received \$100 million from an unnamed source. The company's technical strategy includes the separation of chromosome pairs from the genetic sample

in order to allow the tracking of relatively complex haplotypes. The formation of the new company followed shortly after the acquisition of Neomorphic (Berkeley, CA), a genomic software developer, for about \$70 million in stock. To some observers, Perlegen appears to have been built on the Celera model in that a new generation of a particular technology will be made available by the parent company. Whereas Celera had a short lead time of exclusive access to the ABI 3700 automated 96-capillary electrophoresis sequencers from PE Biosystems, Perlegen will initially have exclusive access to a new whole wafer gene chip technology developed by Affymetrix. JH

Biotech fundraising, Q3 2000 V. Q2 2000



Research collaborations

| Company 1 | Company 2 | \$ millions | Details |
|---|--|-------------|--|
| Medarex (Princeton, NJ) | Oxford Glycosciences (OGS, Oxford, UK) | 5 | A deal to develop human antibodies for treating breast cancer and other life threatening illnesses. OGS will use its proteomics platform to provide protein targets from which Medarex will develop multiple product candidates. Medarex will make a \$5 million equity investment in OGS. |
| StelSys (Baltimore, MD) | NASA (Washington, DC) | 2.1 | A five-year agreement gives StelSys rights to use NASA's patented bioreactor technology to develop a liver assist device and harvest unique liver biomolecules for drug discovery. In return for permission to conduct experiments on the Shuttle and International Space Station, StelSys will pay NASA a \$100,000 licensing fee and up to \$2 million in royalties. |
| Coulter Pharmaceutical (S. San Francisco, CA) | Cobra Therapeutics (Birmingham, UK) | 1.5 | A deal to jointly develop and commercialize parts of Cobra's gene expression technology for the creation and manufacturing of antibody-based therapeutics. Coulter will pay Cobra a \$1.5 million signature fee and milestones, but the cost of development will be shared equally. Each company will retain exclusive, royalty-free commercialization of the first two products derived within its line, but all products thereafter will be subject to sublicensing. |
| Agritope (Portland, OR) | Rohm and Haas (Philadelphia, PA) | * | A 50/50 joint technology agreement to develop and market an efficient method of transgenic plant identification. Agritope has developed a proprietary visual marker gene that encodes a naturally occurring plant compound, which when combined with Rohm and Haas' ligand-inducible gene expression technology will result in the new transformation marker system that can be used in a wide variety of crops. |
| Genomics Collaborative (Cambridge, MA) | PolyGenix (Ontario, Canada) | * | An agreement to discover correlations between genetic variation and coronary artery disease (CAD). Polygenix's high-throughput HaploScan technology will be used to determine SNPs within haplotypes of genes relevant to CAD. These will be correlated with GCI's large and clinically well-phenotyped population of CAD patients. |

*Financial details not disclosed