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## **Avid Bioservices Presents Data From Manufacturing Successes Achieved With Single-Use Bioreactor Systems**

### **--- Presentation Includes Results from Completion of First 1000 L Cell Culture Using Thermo Scientific HyClone Single-Use Bioreactor Technology -**

TUSTIN and SAN DIEGO, Calif., Feb 13, 2009 /PRNewswire-FirstCall via COMTEX News Network/ -- Avid Bioservices, Inc. today reported that it presented data from several antibody projects using the company's recently installed Single-Use Bioreactors (S.U.B.) at the Thermo Scientific BioProduction Optimization Workshop held this week in San Diego, California. In response to growing demand for its cGMP bioproduction services, Avid installed a HyClone 1000 L S.U.B. in its manufacturing suite in November 2008, complementing the HyClone 100 L S.U.B. that was already installed in Avid's Process Development unit at its production facilities in Tustin, California.

At the workshop, Avid researchers discussed their early successes using the 100 L S.U.B. and 1000 L S.U.B. systems. Avid senior vice president of bioprocess development and manufacturing Richard Richieri presented data on cell culture performance at both the 100 L and 1000 L scale, demonstrating that the process is scalable and that cell growth and production are very similar in the two systems. Avid's initial analysis of the antibody product also shows excellent comparability between these disposable units and traditional reactors.

"We installed our HyClone S.U.B. systems to help meet the rising demand for our biomanufacturing services," said Mr. Richieri. "Our experience to date with these systems has been very positive, and we welcomed the opportunity to share our insights at this workshop with other industry representatives. Avid's commitment to efficient production has led us to innovate in a number of areas, including installing our two HyClone S.U.B. systems and acquiring a ClonePix automated system for optimal clone selection. These new technologies have been very successful in reducing our processing costs and shortening project timelines."

The Thermo Scientific HyClone S.U.B. consists of a reusable stainless steel outer support container and S.U.B. BioProcess Container (BPC(R)) that integrates with existing bioreactor control systems, providing the advantages of single-use bioprocessing without having to install a complete new bioreactor system. The retrofit product replaces the stainless steel bioreactor vessel in existing bioreactor systems, making it a flexible, rapid and economic option to increase bioreactor capacity.

Avid Bioservices is a wholly owned subsidiary of Peregrine Pharmaceuticals Inc. (Nasdaq: PPHM).

#### About Avid Bioservices

Avid Bioservices provides a comprehensive range of cGMP manufacturing services for the biotechnology and biopharmaceutical industries. Avid manufactures cGMP commercial product, as well as clinical supplies for all phases of clinical trials. The company's comprehensive range of cGMP services includes cell banking, stability testing, clinical product manufacturing and purification, bulk packaging, final product filling and regulatory support. Avid also provides a variety of process development activities, including cell line optimization, analytical method development and product characterization. The company has over 10 years of antibody manufacturing experience producing monoclonal antibodies and recombinant proteins in batch, fed-batch and perfusion modes. Avid was recently named the first pre-approved U.S. contract manufacturer of the DSM/Crucell PER.C6(R) production system. For more information about Avid, visit [www.avidbio.com](http://www.avidbio.com).

#### About Peregrine Pharmaceuticals

Peregrine Pharmaceuticals, Inc. is a biopharmaceutical company with a portfolio of innovative monoclonal antibodies in clinical trials for the treatment of cancer and serious viral infections. The company is pursuing three separate clinical programs in cancer and hepatitis C virus (HCV) infection with its lead product candidates bavituximab and Cotara(R). Peregrine also has in-house manufacturing capabilities through its wholly owned subsidiary Avid Bioservices, Inc., which provides development and biomanufacturing services for both Peregrine and outside customers. Additional information about Peregrine can be found at [www.peregrineinc.com](http://www.peregrineinc.com).

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