

## **HepaLife's Patented 'PBS-1' Cells for Avian Flu Vaccines Outperform Current Cell System by 500%.**

**In tests of human influenza viruses received from the Centers for Disease Control, HepaLife's PBS-1 cells outperform widely-used 'primary chick kidney cell' system by an average of 500%, and in some cases, by as much as 150-fold!**

**Boston, MA – March 28, 2007** - HepaLife Technologies, Inc. (OTCBB: HPLF) (FWB: HL1) (WKN: 500625) today announced that the Company's patented 'PBS-1' cells, under development for influenza vaccine production, have successfully replicated numerous human influenza virus strains received from the Centers for Disease Control (CDC) at substantially higher levels than the research community's widely-used current model, primary chick kidney cells.

“The single most important step towards the production of a cell-culture based vaccine against a targeted virus is the ability to grow the same virus in a cell substrate. Today's announcement clearly demonstrates that not only are HepaLife's PBS-1 cells capable of replicating some of the most active and significant human influenza viruses in the world, but our cells are also far superior, in some cases outperforming the traditional research cell system model by as much as 150-fold,” explained HepaLife President and CEO, Mr. Frank Menzler.

The ability to replicate virulent human viruses received from the CDC inside HepaLife's PBS-1 cells, is a very important step towards the use of the cell line in cell-based vaccine production, a faster, cheaper, and more flexible technology for producing influenza vaccines in response to constantly evolving virus strains.

(View HepaLife's January 22, 2007 press release, announcing that the Company's PBS-1 cells successfully replicate H1N1, H3N2, and type-B viruses at:  
<http://www.hepalife.com/20070122-1.html.php> )

A US Government report issued by the Department of Health and Human Services has reiterated earlier warnings of the avian flu's pandemic threat, and among its response recommendations, urged cell-culture based influenza vaccine production, HepaLife's primary application for its patented 'PBS-1' cell line.

Cell-culture based vaccine production with the ability to quickly address prospective mutations in the avian influenza virus is a promising replacement of cumbersome, time-consuming, and costly vaccine production processes which currently rely on chicken eggs. In the event of a flu pandemic, the traditional egg-based process is unlikely to produce vaccines fast enough to meet expected demand.

### **HepaLife's PBS-1 Cells Outperform Others in Tests of Highly Potent Influenza Viruses Received from the Centers for Disease Control (CDC)**

In recent lab tests, HepaLife's patented PBS-1 cells successfully amplified several strains of human influenza viruses received from the Centers for Disease Control. On average, PBS-1 cells functioned five times better than the research community's widely-used, 'primary

chick kidney cells', and in some cases, outperformed them by 150-fold.

Importantly, among the viruses successfully tested were three specific strains deemed currently most threatening by the World Health Organization and the U.S. Food and Drug Administration. These viruses were selected for development of the inactivated influenza vaccines prepared for the 2006-2007 influenza season.

"These results are astounding," explained Dr. Paul Coussens, a HepaLife Scientific Advisory Board Member and Professor of Molecular Biology and Molecular Virology. "Most interestingly, these research results suggest that PBS-1 cells could allow for manufacture of vaccines that are much more similar to the actual viruses circulating in humans during any given year, since HepaLife's successfully tested influenza strains from the CDC are all recent human isolates which are unmodified."

"Surprisingly, these same influenza strains either grow very poorly or not all in commonly used cell lines, such as MDCK and VERO cells," continued Dr. Coussens. "The research outcomes however, are even more encouraging when considering that PBS-1 successfully replicated these viruses without the addition of Trypsin, a protease often used to help cleave various influenza viruses from other cell types, such as MDCK or VERO cells."

"These outstanding performance results cover a wide range of virus strains, and further highlight the exciting potential for HepaLife's PBS-1 cell technology platform to increase efficiency and simplify downstream cell-culture based vaccine production, a system that is more cost-effective, flexible and responsive than traditional egg-based methods," concluded Mr. Frank Menzler.

Currently, vaccine production involves injecting a small amount of a targeted virus into fertilized chicken eggs. Over time, the virus is harvested from the eggs, eventually inactivated and purified, and finally blended into a vaccine and bottled in vials. Fertilized eggs require approximately six months from order to delivery, with the total egg-based production method requiring about 12 months. In the event of a flu pandemic, it is unlikely to produce vaccines fast enough to meet expected demand.

HepaLife's PBS-1 cell technology platform was recognized in a report by Frost & Sullivan and broadcast by the CBS-affiliate, WWMT-TV News. To review the report and view the television news story, please visit [www.hepalife.com](http://www.hepalife.com).

#### ABOUT HEPALIFE TECHNOLOGIES, INC.

HepaLife Technologies, Inc. (OTCBB: HPLF - News; FWB: HL1) (WKN: 500625) is a biotechnology company focused on the identification and development of cell-based technologies and products.

Current cell-based technologies under development by HepaLife include 1) the first-of-its-kind artificial liver device, 2) proprietary in-vitro toxicology and pre-clinical drug testing platforms, and 3) novel cell-culture based vaccine production to protect against the spread of influenza viruses among humans, including potentially the high pathogenicity H5N1 virus.

For additional information, please visit [www.hepalife.com](http://www.hepalife.com).

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Form 10-K filings with the Securities and Exchange Commission. These reports and filings may be inspected and copied at the Public Reference Room maintained by the U.S. Securities & Exchange Commission at 100 F Street, N.E., Washington, D.C. 20549. You can obtain information about operation of the Public Reference Room by calling the U.S. Securities & Exchange Commission at 1-800-SEC-0330. The U.S. Securities & Exchange Commission also maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the U.S. Securities & Exchange Commission at <http://www.sec.gov>. The Company undertakes no obligation to publicly release the results of any revisions to these forward looking statements that may be made to reflect the events or circumstances after the date hereof or to reflect the occurrence of unanticipated events.