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IMMUNOCELLULAR THERAPEUTICS IDENTIFIES NOVEL PEPTIDES TO BROADEN APPLICABILITY OF CANCER STEM CELL VACCINE

LOS ANGELES, CA – February 24, 2009 – ImmunoCellular Therapeutics, Ltd. (OTC: IMUC.OB) (IMUC), a biotechnology company, today announced that the company has identified new peptide candidates that may significantly expand the potential target patient population for the company's cancer stem cell vaccine product candidate, ICT-121. Many cancer therapies are limited by their ability to be used only in patients with certain human leukocyte antigen (HLA) types. Identification of the new peptides for use in IMUC's vaccine should enable the use of IMUC's product candidate in patients with many different HLA types.

"This is an encouraging finding for us, as it could dramatically increase the number of patients who may be able to someday benefit from our cancer stem cell therapies," stated Manish Singh, Ph.D., president and chief executive officer of IMUC. "ICT-121 is an exciting product candidate given that it targets cancer stem cells—cancer cells at their very root—and it has been shown in preclinical studies to be highly targeted for destroying cancer stem cells present in brain tumors. This is a very unique approach, as active immunotherapy provides a high degree of selectivity to target primarily cancer cells while leaving the normal stem cells alone."

Dr. Singh continued, "We've been pleased to see the high level of interest around cancer stem cell technologies of late as evidenced by the number of recent deals done by pharmaceutical companies in this area, as well as by the September 2008 cover story in *The Economist* entitled 'Cancer and Stem Cells—The Connection that Could Lead to a Cure.'"

About ICT-121

ICT-121 is IMUC's cancer stem cell (CSC) vaccine product candidate that consists of a peptide to stimulate a cytotoxic T-lymphocyte (CTL) response to CD133, which is generally overexpressed on the CSCs. It is designed as an "off-the-shelf" vaccine. IMUC will initially evaluate it in a Phase I clinical study for glioblastoma which, subject to FDA clearance, IMUC plans to commence in the third quarter of this year. While glioblastoma will be the initial target for ICT-121, CD133 is also overexpressed in colon cancer, breast cancer, liver cancer, prostate cancer, multiple myeloma and melanoma, providing many potential cancer targets for this CSC vaccine in the future.

About ImmunoCellular Therapeutics, Ltd.

IMUC is a Los Angeles-based clinical-stage company that is developing immune based therapies for the treatment of brain and other cancers. IMUC is currently evaluating a dendritic cell-based vaccine in a Phase I clinical trial for glioblastoma. The company's "off the shelf" therapeutic vaccine product candidate targeting cancer stem cells for multiple cancer indications is expected to enter clinical trials during the third quarter of 2009. IMUC is in pre-clinical development of a monoclonal antibody product candidate for the treatment of small cell lung cancer and pancreatic cancer, and is also evaluating its platform technology for monoclonal antibody discovery using differential immunization for diagnosing and treating multiple types of cancer. To learn more about IMUC, please visit www.imuc.com.

Forward-Looking Statements

This press release contains certain forward-looking statements that are subject to a number of risks and uncertainties, including without limitation the risks associated with obtaining FDA clearance to commence clinical trials of the cancer stem vaccine on a timely basis or at all; the risks associated with adhering to projected preclinical or clinical timelines and the uncertainties of outcomes of development work for product candidates, including those based on destroying cancer stem cells as a potentially safe and effective treatment for various cancers; the need to satisfy performance milestones to maintain the vaccine technology licenses with Cedars-Sinai; the risks associated with generating data to support the provisional patent application for the CSC technology and of obtaining a patent that provides commercially significant protection for this technology; and the need for substantial additional capital to fund development of product candidates beyond their initial clinical or pre-clinical stages. Additional risks and uncertainties are described in IMUC's most recently filed SEC documents, such as its most recent annual report on Form 10-KSB, all quarterly reports on Form 10-Q and any current reports on Form 8-K. IMUC undertakes no obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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