January 9, 2014

ImmunoCellular Therapeutics Issues Shareholder Letter Providing Update on ICT-107 Program in Newly Diagnosed Glioblastoma

Highlights Include ICT-107 Results to Date, Ongoing Data Analyses and Phase III Planning

LOS ANGELES, Jan. 9, 2014 /PRNewswire/ -- ImmunoCellular Therapeutics, Ltd. ("ImmunoCellular") (NYSE MKT: IMUC) today issued the following letter to shareholders providing an update on the Company's ICT-107 clinical program in patients with newly diagnosed glioblastoma (GBM).

(Logo: http://photos.prnewswire.com/prnh/20140109/AQ43875LOGO)

To Our Shareholders:

Since the December 11, 2013 announcement of results from the exploratory phase II trial of ICT-107, we have continued to analyze the data set from the trial and consulted with experts in the field of neuro-oncology with the goal of informing our next development and regulatory activities for this program. We would like to update shareholders on three key topics:

- Our determination that overall survival (OS) was the appropriate primary endpoint for our development program. Although we did not meet the OS endpoint, we are enthusiastic about meeting our progression free survival (PFS) endpoint because we think it supports the presence of an OS signal, which may clarify, and potentially strengthen, as we collect more survival data;
- Our review of additional immunological data from the trial. To date, we have found two hallmark indicators of dendritic cell activation in the ICT-107 vaccines that are predictive of survival benefit. This finding is important to developing manufacturing assays and informing our phase III trial design; and
- Our plan, in the next two to three quarters, to communicate additional phase II trial data, and to meet with the US FDA and the European Medicines Agency (EMA) to discuss next steps in the development of ICT-107.

The primary goals of this exploratory trial were to assess safety and the effect that ICT-107 has on clinical outcomes in patients with newly diagnosed GBM, and to gather important insights that could inform the design of a phase III program. Our intention is to objectively determine whether ICT-107 can make a meaningful difference for GBM patients. Based on the top-line results reported in December we continue to believe that this trial met those goals. Our current view on the ICT-107 program is positive, and we anticipate that the additional information we will gather will be supportive of that view.

Interpreting OS and PFS Results to Date

The phase II trial demonstrated mixed results on the two major pre-defined clinical endpoints of OS and PFS. The trial met the key secondary endpoint of demonstrating a statistically significant treatment benefit for PFS, but missed the primary endpoint of OS, showing a numerical, but not statistical, advantage of treatment over placebo. We selected OS as the primary endpoint for clear, pragmatic reasons: to follow the guidance of the FDA relative to what constitutes a registration endpoint, and to inform the design of a phase III registration study. In 2011 written correspondence with our Company regarding our phase II protocol, the FDA indicated "…progression free survival (PFS) as an endpoint is acceptable for hypothesis testing, but not as a primary endpoint for a phase 3 trial to support a BLA." Based on FDA's guidance, we focused the trial on generating detailed survival data, and retained PFS as an important secondary clinical endpoint.

Our current view is that PFS matters as an important indicator of clinical efficacy, but not as an end in itself relative to registration. In our open-label phase I trial, we observed a PFS benefit in comparison to historical controls. We were excited by the important and confirmatory finding in our phase II trial that ICT-107 improves PFS compared to placebo, as it clearly indicates that ICT-107 has a positive biological effect in patients and modulates a clinically important outcome. To our knowledge, ICT-107 is the first immunotherapy in GBM to demonstrate a PFS advantage in a well-designed, placebo controlled trial, and our clinical advisors, who are experts in neuro-oncology, have impressed upon us the importance of this finding.

We think the PFS result could portend improvement in the ultimate OS result from the phase II trial, and we continue to collect and incorporate more survival data. Our view is instructed by two recent publications (K. Han et al, *Neuro-Oncology* — December 2013 and M. Polley et al, *Neuro-Oncology* — March 2010) describing analyses of glioblastoma trials which establish a strong correlation between PFS and OS hazard ratios. As a reminder, we do not yet have final median survival times from the trial, but anticipate reaching them within the first half of 2014. The median survival times reported in December were estimates

based on 67 events out of a possible 124 events, with an average follow-up time of about 14.2 months from randomization.

Importance of Immunological Data

In addition to learning more about the OS and PFS results and the relationship between them, we believe that there are three categories of immunological data that have the potential to further inform our phase III planning.

- First, we have patient tumor samples being analyzed for antigen expression. ICT-107 is a dendritic cell vaccine incorporating six antigens from tumor and cancer stem cells. In the small phase I trial, we demonstrated a correlation between the expression of certain antigens in patients' tumors and OS and PFS. We expect the phase II tumor expression data to be available in the second quarter of 2014, and we plan to look for a corresponding relationship in this much larger data set.

- Second, we have detailed dendritic cell characterization data from all of the vaccines prior to administration. We have identified two hallmark indicators of dendritic cell activation that are statistically predictive of OS in the treated patients. This important finding may inform both manufacturing assay development and phase III trial design.

- Third, we collected blood samples throughout the trial which we are analyzing for vaccine-induced T-cell activation. We expect these results to become available in the second quarter of 2014, and should enable us to determine if there is a relationship between vaccine responders and OS.

Collectively, these immunological data will inform our phase III design and how we might target patient selection.

Next Steps in Phase III Planning

In the next few weeks, we will submit an abstract for the 50th Anniversary Annual ASCO meeting taking place May 30-June 3, 2014. If the abstract is accepted, we will report on more mature OS results and findings from the immunological analysis.

Subsequent to ASCO, we plan to meet with FDA for an end-of-phase II discussion of the ICT-107 trial results and future trial design. We anticipate this meeting can take place late in the second quarter or in the third quarter of 2014. After that meeting, we will be in a better position to evaluate what next steps might be required to plan a phase III trial for ICT-107. The timing to begin a potential next clinical trial is not certain at this time, but a reasonable timeframe could be late 2014 or early 2015.

In the second quarter, we expect to have a decision from the European Medicines Agency or EMA on granting ICT-107 orphan designation in the EU (we already have orphan designation in the US), and we are planning for our first in-person discussion with the EMA regarding ICT-107 clinical data also in the second quarter.

The management and board of ImmunoCellular want to thank our shareholders for your continued support and interest. We will look forward to keeping you informed as our plans and strategies for ICT-107, as well as our other pipeline programs and corporate initiatives, take shape.

About ImmunoCellular Therapeutics, Ltd.

ImmunoCellular Therapeutics, Ltd. is a Los Angeles area-based clinical-stage company that is developing immune-based therapies for the treatment of brain and other cancers. ImmunoCellular has concluded a phase II trial of its lead product candidate, ICT-107, a dendritic cell-based vaccine targeting multiple tumor-associated antigens for glioblastoma. ImmunoCellular's pipeline also includes ICT-121, a dendritic cell vaccine targeting CD133, and ICT-140, a dendritic cell vaccine targeting ovarian cancer antigens and cancer stem cells. To learn more about ImmunoCellular, please visit www.imuc.com.

Forward-Looking Statements for ImmunoCellular Therapeutics

This press release contains certain forward-looking statements that are subject to a number of risks and uncertainties, including the risk that ICT-107 can be further successfully developed or commercialized, the outcome and timing of our immunological data, the outcome of our end of phase II meeting with the FDA, and our ability to show that PFS and OS outcomes are related with respect to ICT-107 in a manner that justifies further development. Additional risks and uncertainties are described in IMUC's most recently filed quarterly report on Form 10-Q and annual report on Form 10-K. Except as permitted by law, IMUC undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

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