

Lion Biotechnologies Announces Positive Data From a TIL-Ipilimumab Combination Study in Melanoma

March 30, 2015 12:14 PM ET

LOS ANGELES, March 30, 2015 (GLOBE NEWSWIRE) -- Lion Biotechnologies, Inc. (Nasdaq:LBIO), a biotechnology company that is developing novel cancer immunotherapies based on tumor infiltrating lymphocytes (TIL), today announced that researchers from Moffitt Cancer Center reported positive results from a pilot trial of TIL and ipilimumab in patients with metastatic melanoma. The data from the trial, which Lion partially sponsored, were presented at the Society of Surgical Oncology 2015 meeting in Houston, TX on Friday, March 27, 2015.

The Phase 1 trial was conducted at Moffitt Cancer Center in 12 patients with metastatic melanoma, with the objective of determining the safety and feasibility of combining TIL therapy with the CTLA-4 checkpoint inhibitor, ipilimumab. Patients were treated with ipilimumab one week prior to tumor harvest for TIL expansion, a second time while their TIL were being expanded, and two more times following TIL transfer.

Of the 12 patients enrolled in the trial, 11 went on to receive their autologous TIL, with five out of the 11 TIL-treated patients (46%) responding to treatment (one complete response and four partial responses), consistent with response rates from previous TIL studies in metastatic melanoma. Notably, the researchers observed that following a single infusion of ipilimumab, TIL grew to higher numbers than historically had been observed in previous studies, in which ipilimumab was not administered prior to tumor harvest. In addition, only one of the 12 enrolled patients (8%) was ineligible for TIL transfer, indicating relatively high patient adherence to trial protocol.

"Ipilimumab has potential to enhance the effectiveness of TIL therapy by boosting the concentration of tumor-reactive T cells in the tumors of patients prior to TIL harvest, and by controlling disease before TIL transfer," said Sangeetha Prabhakaran, MD, the study's presenting author. "Based on the results of this study, we conclude that TIL-ipilimumab combination treatment is both safe and feasible. Furthermore, this approach serves as a model for future efforts to combine TIL with PD-1/PD-L1 blockade and other emerging immune checkpoint inhibitors."

Amod Sarnaik, MD, a surgical oncologist at Moffitt and assistant professor of surgery at the University of South Florida, added, "This is the first report of TIL therapy being combined with checkpoint blockade therapy. These results are clinically significant because they show that checkpoint blockade can be safely combined with TIL therapy, potentially increasing the clinical benefit of this promising treatment modality for unresectable metastatic melanoma."

About Lion Biotechnologies

Lion Biotechnologies, Inc. is engaged in the development of T cells and engineered T cells for the treatment of various cancers. The company's lead product candidate, LN-144, is a ready-to-infuse, autologous T-cell therapy utilizing tumor-infiltrating lymphocytes (TIL) for the treatment of patients with metastatic melanoma, and is based on a clinical Cooperative Research and Development Agreement with the National Cancer Institute. TIL therapy is also being evaluated in physician-sponsored clinical trials at MD Anderson Cancer Center and Moffitt Cancer Center. For more information, please visit <http://www.lionbio.com>.

Forward Looking Statements

This press release contains certain forward-looking statements that are subject to a number of risks and uncertainties, including the risks relating to the potential of ipilimumab to enhance the effectiveness of TIL therapy and the safety and feasibility of TIL-ipilimumab combination treatment. Additional risks and uncertainties are described in the Company's most recently filed quarterly report on Form 10-Q and annual report on Form 10-K. Except as permitted by law, the Company undertakes no obligation to update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

CONTACT: Investor Relations

The Trout Group
Tricia Truehart
646-378-2953
ttruehart@troutgroup.com

Source: Lion Biotechnologies, Inc.

Released March 30, 2015