



Investors Alert: IMUC's Vaccine against brain cancer

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by Gene Marcial

The fight against cancer is being waged on multiple fronts and, in particular, the search for a vaccine targeting specific tumors is the ultimate objective of many biotechnology companies that focus on oncology.

ImmunoCellular Therapeutics (IMUC.OB) is one of them, which is developing immune-based therapies for the treatment of brain and other cancers. What has attracted some investors to the company is that its chief product, ICT-107, is based on dendritic cells, similar to the immunologically based therapeutic method that Dendreon (DNDN) uses in its blockbuster drug, Provenge. The difference is Dendreon's Provenge targets prostate cancer while ImmunoCellular focuses on brain cancer. As the next-generation dendritic-cell based therapy, ImmunoCellular's vaccine is also aimed at treating five other types of cancer, including lung and breast cancer.

Yesterday, ImmunoCellular went one step further in improving production of ICT-107. It has developed an innovative way to speed up the manufacture of ICT-107 through a method developed in collaboration with the Clinical Cell and Vaccine Production Facility at the University of Pennsylvania. The new method produces highly potent dendritic cells from white blood cells collected from patients. They can be cryo-preserved for use in future vaccine treatments. The company says the process could produce 20 or more doses of ICT-107 vaccine from a single blood collection.

This new process provides significant cost advantages and convenience over current manufacturing methods, as patients will be able to be treated for several years from a single manufacturing run, says Manish Singh, President and CEO of ImmunoCellular. Provenge is produced one dose at a time, contributing to its very expensive treatment cost, he notes. "We continue to conduct analyses on the significant per-dose manufacturing cost savings of this new method, as we prepare to initiate a Phase II study of ICT-107 in GBM in the fourth quarter of this year," says Singh.

Dendritic cells are the sentries of the immune system to essentially provoke the immune system into recognizing and fighting cancer in the same way that it fights bacteria and viruses. Singh says his company uses the same approach that Dendreon uses in mobilizing one's immune system

says his company uses the same approach that Dendreon uses in mobilizing one's immune system against antigens that are specific to brain cancer.

In developing ICT-107 against brain cancer, ImmunoCellular joins other big pharmaceutical companies, such as Pfizer (PFE) and Roche (RHHBY), in looking to develop new standards of care in battling cancer. Singh says that while Dendreon leads in the use of dendritic cells in the fight against cancer, ImmunoCellular's next-generation ICT-107, will help expand the array of treatments.

As a young and little known biotech, shares of ImmunoCellular have been under the radar screen of most investors, trading at 95 cents a share, down from its 52-week high of \$2.44 a share, reached last May. But some market pros expect the stock to move higher once Wall Street pays attention to the prospects of its ICT-107 vaccine, and news about its existence spreads. But so far, no analysts follow the company.

Dendreon was just about unnoticed before its Provenge got the attention of Wall Street. When I first wrote about Dendreon in my Inside Wall Street at Business Week long before the world heard of it, its stock was trading at \$4 a share. The stock has since skyrocketed to \$38 a share. Investors who have bought shares of ImmunoCellular are betting its ICT-107 vaccine against brain cancer holds similar or more promise as Dendreon's Provenge.