

LifeCell plans to launch dendritic cell cancer vaccine

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LifeCell, one of India's largest stem cell banking companies recently revealed that, in addition to facilitating the collection and storage of umbilical cord stem cells, it is also spending part of its efforts into researching the use of stem cells for therapies. One of the technologies that LifeCell hopes to introduce to the Indian population in the next few years is that of the dendritic cell cancer vaccine, with the help of the US-based Dendreon.

Mr Mayur Abhaya, president and executive director, LifeCell International said that the vaccine could be useful for conditions such as brain tumours or glioblastomas. "The laboratory work regarding the dendritic cell cancer vaccine is ongoing. We hope to bring this technology to India. Even though it might take some time for the translation of these studies, I hope that the Indian population can benefit from our attempts to leverage what is currently happening worldwide in stem cell research."

A dendritic cell is an immune cell that recognizes, and presents foreign antigens to the T-cells which mount an immune response. Dendritic cell therapy thus involves the harvesting of blood cells from a patient and processing them in the laboratory to produce dendritic cells that are then given back to a patient in order to allow massive dendritic cell participation in optimally activating the immune system. The study of immune responses by dendritic cells, which forms the basis of this vaccine, won Dr Ralph Steinman, the Nobel Prize for Medicine and Physiology in 2011.

Other projects include evaluating mesenchymal stem cells for the treatment of critical limb ischaemia, for which the phase III clinical trials have been completed and the results are being evaluated. LifeCell also distributes a USFDA approved point of care device that extracts a patient's stem cells from the bone marrow within 15 minutes.

The company had recently launched the Babyshield service for newborn screening of genetic diseases, which can dentify over 118 health conditions at birth, making it the most advanced newborn screening service in the world. Importantly, this test is done entirely in a non-invasive manner. LifeCell has a marketing force of 500 with over 1,500 collections done nationwide every month. The distribution of these services is however skewed with over 50 percent of the business being concentrated in the Top six metros of the country, owing to the higher percentage of educated professionals.