

Birthing the next big healthcare break

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Mumbai, 4 November

Next-generation therapy based on stem cells and cord blood banking is emerging as a big opportunity for the healthcare sector in India.

The country's first umbilical cord blood and tissue stem cell bank, Chennai-based Life Cell, started its operations only six years earlier. Now about 10 cord blood banking companies are operating, collecting an average of 15,000 umbilical cord blood samples every year.

Therapy using stem cells — the body's 'master' cells that can regenerate and turn into cells that form tissues and organs — are considered a breakthrough in regenerative medicine. An emerging industry globally in the past two decades, stem cells from the umbilical cord blood of newborns are stored in specialised blood banks for use in future treatment.

It is estimated that stem cells can be used to treat 70-odd types of various debilitating and life-threatening diseases, including various cancers. In India, cord blood banking companies charge an average of ₹75,000 from customers, with a commitment to store the cord blood for exclusive use for the next 21 years, said industry experts.

They estimate companies op-

erating in India are likely to store over 100,000 umbilical cords by 2012, considering the average industry growth rate of 30 per cent in the past three years. The size of India's cord blood banking industry is estimated at close to ₹150 crore and this is likely to grow manifold in the coming years, they said.

Indian potential

"Considering the fact that 26 million births are happening every year in India, this country has huge potential if the industry is able to attract a fraction of potential customers," said Arnoud Van Tulder, chief executive officer of Netherlands based Cryo-Save Group, Europe's leading stem cell bank, with 135,000 customers and the third largest cord blood banking company in the world.

A public listed company on the London Stock Exchange, Cryo-Save started operations in India a couple of years before, with Bangalore as its base. It has emerged as the third largest cord blood banking company in India, with a "few thousands of customers" in the past two years, with around 100 employees and offices across the country. Its centralised storage facility in Bangalore can store 300,000 samples, said Van Tulder.

Life Cell, started in 2004 with a technology tie-up with Cryo-Cell International of the US, has about 40 centres in India, be-

sides places like Dubai and Sri Lanka. Its partner, Cryo-Cell, is one of the largest and oldest stem cell banks in the world.

Mukesh Ambani-promoted Reliance Life Sciences' ReliCord is one of the premier stem-cell banking companies in Southeast Asia and also conducts research in stem cells for future applications. Four-year-old Cryobanks International India, Pune-based Cord Life

Hospital, NIMS and L V Prasad Eye Institute in Hyderabad; Narayana Hrudyalaya, Manipal Hospitals and Trinity Hospital in Bangalore; Christian Medical College in Vellore, Army Hospital and AIIMS in New Delhi, the Armed Forces Medical College in Pune and Sanjay Gandhi PGIMS, Lucknow.

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Biotech and Stem One Biologics are some of the other prominent cord blood banking companies in India.

India has a huge population of affordable and educated young parents who are willing to invest in a technology that can save the lives and health of their kids, noted Chaitanya Purandare, chairman and managing director of StemOne Biologics.

The experts say India has a long way to go in stem cell therapy. Currently, only a handful of medical centres have experts having the capability to use stem cells for treatment. Among these are Tata Memorial in Mumbai; Apollo Hospital and Adyar Cancer Center in Chennai; Global

for only about 25 transplants," said Van Tulder. And, of 3,000 clinical trials happening globally for new stem cell therapies, India's share is very small, he added.

Experts also note India is yet to establish a regulatory framework, except the guidelines brought out by the Indian Council of Medical Research. Whereas, the US and Europe have stringent laws to regulate and ensure quality of cord blood banking and stem cell therapy and to protect the interests of consumers.

Promoting awareness

"Creating awareness among doctors and parents on the benefits of stem cell therapy and

the need for cord blood banking is a major challenge before the Indian industry," said Mrinalini Chaturvedi, medical director of Cryo Banks International India.

Efforts are on by the industry to create awareness among people. Stem Cell Global Foundation, a Delhi-based organisation, is exclusively focused on creating awareness and updating the latest developments in research. Asia Knowledge Associates, an event management company, is organising India's first stem cell conclave and a stem cell exhibition in Mumbai this week, to offer comprehensive knowledge to citizens on the various benefits of stem cell therapy, its reach and utility.

Actress and model Lisa Ray, also a cancer survivor, has been brought in by the event organisers. "I am here only because of stem cells and am happy to have been associated with this noble cause; spreading awareness about stem cell has become my professional repertoire," she said at a pre-event press conference yesterday.

Similarly, Life Cell uses actor Hrthik Roshan in its promotions to create awareness on stem cells and cord blood banking. Arnoud Van Tulder said his company would soon pioneer direct tie-up arrangements with hospitals and gynecologists for promoting cord blood banking.