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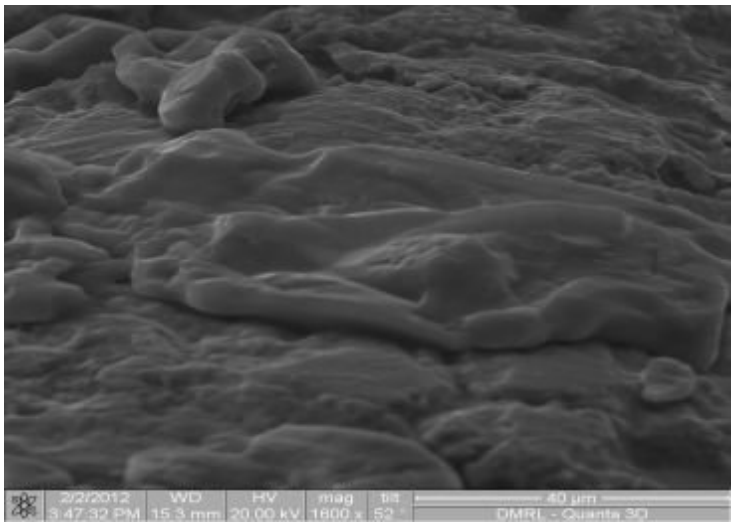

Tran-Scell Biologics is a private player in Stem Cell banking and research for applications in India. Its management team consists of a heterogeneous mixture of practicing clinicians, Stem Cell scientists and industry veterans.

All solutions or proposing healthcare solutions come from practicing clinicians at Tran-Scell's network, who are the end users themselves. One such problem in dentistry that was submitted to the company was periodontal diseases, which make patients chronically run down and fatigued by overloading their immune system, ultimately leading to organ dysfunctions.

The main objectives of the program were to establish an effective procedure for culturing MSCs (Mesenchymal Stem Cells) on 3 different implant materials namely, Titanium, Zirconium and Collagen; To compare attachment kinetics, proliferation rate, and synthesis of generationassociated proteins on all the three surfaces; To completely quantify bone and neuro specific periodontal components in the MIB (Mesenchymal Implant Bio-complex) cultures; To study the stability of the Stem Cell Implant bio-complexes - comparative SEM (FIB) evaluation of the Cell-implant surfaces.

Tran-Scell Biologics Pvt. Ltd., received the project support from SBIRI (Small Business Innovation Research Initiative) scheme, DBT, in December 2012. Tran-Scell has an established laboratory facility in Hyderabad, working on clinical grade Stem Cells, tissue engineering
aspects of scaffolding and formulating Cell types, for a potential integrated solutions in managing diseases.

The project's vision has been on managing debilitating diseases, than propagating single step magic cure, which is not the reality in global healthcare. The project on "Stem Cell Implant Biocomplexes for Periodontal Tissue Regeneration" was initiated in 2011 at Tran-Scell's
laboratory, Hyderabad.

The project saw the establishment of preliminary proof of concept on the proposal in collaboration with Sri Sai Dental College and Vitae Medical Centre, Hyderabad, on handling dental pulp Stem Cells, logistics of the clinical resources, as well as the commercialization
requirement with the end users of the technology, that was proposed to come up with successful completion of clinical activity in India.

"PPP (Public-Private Partnership) in the biotech industry in India has been a hit and the DBT task force committees for the funding agencies are eclectic with clear agenda on supporting technologies that have the potential to commercialize. In our project, we received not just the
constructive criticism in the proposal, but also to fine tune the objectives in accelerating the time to market", said Dr Subadra Dravida, CEO, Tran-Scell Biologics Pvt. Ltd.,

The company now is focusing on bringing a minimum of 3 Stem Cell based technologies to clinical stage by the year 2015, addressing various issues in the area of autoimmunity, cancer and bone anomalies.

This technology is entirely indigenous and revolutionary to practitioners in regenerative dentistry, with over 670 million USD market space in the Asia Pacific region. The project cost 100 lakhs (INR) in 2012 for 2 2012 for scale up activity, and for additional experimentation on detailed characterizations on the stability of the product, including prototype development.

Till the proof of concept stage, the project was self-funded and the support from SBIRI was crucial for the proposed technology to reach the commercialization stage with the purpose of bringing it to the market.