**Stempeutics conducts largest global phase 2 trial in patients with Buerger’s disease**

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Stempeutics Research, a group company of Manipal Education and Medical Group and a joint venture with Cipla Group has successfully completed phase 2 clinical trial of Stempeucel – a novel stem cells based medicinal product designed to treat critical limb ischemia (CLI) due to Buerger’s disease. Buerger’s disease is a rare illness with unmet medical need in India and globally.

The phase 2 trial conducted by Stempeutics is the largest ever phase 2 trial in no-option patients with Buerger’s disease in the world. In the trial, Stempeucel demonstrated statistically significant results in ulcer healing, rest pain reduction, increased Ankle Brachial Pressure Index (indicator of increased blood flow due to neo-angiogenesis) and improvement in quality of life.

Stempeucel has been given the Advanced Therapeutic Medicinal Product designation by the European Medicines Agency and Buerger’s disease has been granted the Orphan Drug designation (ODD) by the same agency.

Buerger's disease is a rare and severe disease affecting the blood vessels of the limbs. It is characterised by inflammation and occlusion of the vessels of extremities resulting in reduced blood flow to these areas. This leads to severe rest pain and ulcers or necrosis, which finally leads to amputation of the limbs. Stempeucel treatment is designed to enhance the body's limited capability to restore blood flow in ischemic tissue by reducing inflammation and improving blood flow to the affected limbs.

Says BN Manohar, CEO, Stempeutics Research Pvt Ltd, “The company has spent the last nine years developing innovative stem cell products that could provide a cure for chronic and degenerative diseases. Stempeucel is developed from allogeneic pooled mesenchymal stromal cells extracted from the bone marrow of healthy, adult voluntary donors. The drug works by increasing blood flow which is the root cause of diseases and just does not give symptomative relief, thus proving to be much more effective agent of treatment. Stempeutics’s proprietary pooling technology allows an efficient manufacturing process with minimum wastage of resources in order to provide the product at an affordable cost to patients.”

Stempeucel has a strong patent protection with 18 patent applications filed across the globe. The core patent has been granted in US, Australia, New Zealand, Singapore, South Africa, China and Japan.

Globally scientists and researchers are working aggressively towards unlocking the true potential of stem cell therapies and treatments. Clinical trials are successfully proving the efficacy of stem cells in repairing damaged tissue. Stems cells are essentially ‘unspecialised cells’ that may remain as they are or develop into different specialised cell types, like muscle cell, blood cell, and brain cell in the body during early life and growth. Stem cells also have the ability to divide and multiply, regenerate without any limit.

“Stem cell research is continually advancing knowledge on how an organism develops from a single cell and how healthy cells are derived from precursor cells to replace damaged tissue. All this knowledge and data is then used in developing stem cell treatments for diseases that do not have a cure yet, with an aim to replace/regenerate damaged cells with healthy cells,” concludes BN Manohar.