

Stem Cell Agency Awards Almost \$4 Million to Develop a Treatment for Spinal Degeneration

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Oakland, CA – Today the governing Board of the California Institute for Regenerative Medicine (CIRM) awarded \$3.9 million to Ankasa Regenerative Therapeutics for a promising approach to treat a degenerative condition that can cause chronic, progressive back pain.

As we get older, the bones, joints and ligaments in our back become weak and less able to hold the spinal column in alignment. As a result, an individual vertebral bone in our spine may slip forward over the one below it, compressing the nerves in the spine, and causing lower back pain or radiating pain. This condition, called degenerative spondylolisthesis, primarily affects individuals over the age of 50 and, if left untreated, can cause intense pain and further degeneration of adjacent regions of the spine.

Current treatment usually involves taking bone from one of the patient's other bones, and moving it to the site of the injury. The transplanted bone contains stem cells necessary to generate new bone. However, there is a caveat to this approach— as we get older the grafts become less effective because the stem cells in our bones are less efficient at making new bone. The end result is little or no bone healing.

Ankasa has developed ART352-L, a protein-based drug product meant to enhance the bone healing properties of these bone grafts. ART352-L works by stimulating bone stem cells to increase the amount of bone produced by the graft.

The award is in the form of a CLIN1 grant, with the goal of completing the testing needed to apply to the Food and Drug Administration (FDA) for permission to start a clinical trial in people.

This is a project that CIRM has supported through earlier phases of research.

"We are excited to see the development that this approach has made since its early stages and reflects our commitment to supporting the most promising science and helping it advance to the clinic," says Maria T. Millan, MD, President & CEO of CIRM. "There is an unmet medical need in older patients with bone disorders such as degenerative spondylolisthesis. As our population ages, it is important for us to invest in potential treatments such as these that can help alleviate a debilitating condition that predisposes people to additional and fatal medical complications."

About CIRM

At CIRM, we never forget that we were created by the people of California to accelerate stem cell treatments to patients with unmet medical needs, and act with a sense of urgency to succeed in that mission.

To meet this challenge, our team of highly trained and experienced professionals actively partners with both academia and industry in a hands-on, entrepreneurial environment to fast track the development of today's most promising stem cell technologies.

With \$3 billion in funding and approximately 300 active stem cell programs in our portfolio, CIRM is the world's largest institution dedicated to helping people by bringing the future of cellular medicine closer to reality.

For more information go to www.cirm.ca.gov