

Helping people heal themselves

Local company seeks early position in \$80 billion industry

BY LAUREN RIGNEY

Honolulu-based Tissue Genesis is taking self-help a step further with its patented cell isolation system. In less than two hours, a patient's own regenerative cells can be put back into their body to heal diseased tissue. "You're not putting anything into the body that wasn't in there before," president and CEO Anton Krucky explains.

The Procedure To isolate 30 million cells, all a doctor needs is 60cc of fat (roughly 4 tablespoons) from a patient. The fat is squirted into the portable machine, which can function right in the operating room. After the doctor closes the machine and presses the start button, the system takes over.

The system The Tissue Genesis system first washes the fat to remove waste such as blood, and adds an enzyme solution to break down the fat. Using centrifuge technology, the broken-down fat is spun at precisely the right temperature and speed to isolate regenerative cells, such as adult stem cells. When the doctor returns a little more than an hour later, a clean syringe filled with a solution of the extracted cells will be ready for use.



Tissue Genesis President and CEO Anton Krucky
Photo: David Croxford

The future Approval for the system will come after the Food and Drug Administration performs clinical trials for each of its potential applications. Krucky is expecting FDA approval by the end of this year for one of the system's most promising uses—building vascular grafts for patients who need vessel replacements, particularly those suffering from peripheral vascular disease. "We can take a scaffolding material, coat it with the patient's own cells using cells

from the cell isolation system, and build a vessel for them in less than two hours,” Krucky says. He is confident the system can also treat heart disease, peripheral artery disease, spinal injuries and medical problems in animals.

The market Jain PharmaBiotech, which studies healthcare innovations worldwide, estimates the global market for stem-cell-based therapeutics and platform technologies will be \$81.3 billion by 2012. “We see ourselves positioned at the very early stage of what has potential to be a very big deal,” Krucky says.

Tissue Genesis

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