

Does Sernova have a cure for Type 1 Diabetes?

There are many impressive companies around the world trying to solve the world's problems and make this a better place to live. When the right group of people can find the right environment, tremendous results can happen. Today we are going to look at one of those situations – Sernova Corp. (TSXV: SVA | OTCQB: SE0VF). Sernova is a regenerative medicine therapeutics platform company developing technologies using a medical device and immune protected therapeutic cells (i.e. human donor cells, corrected human cells and stem-cell-derived cells) to improve the treatment and quality of life of people with chronic metabolic diseases such as insulin-dependent diabetes, blood disorders, and other diseases treated through replacement of proteins or hormones missing or in short supply within the body.

That's quite a mouthful so let's try and break that down a little. Sernova is a clinical-stage company developing products for the treatment of chronic debilitating diseases. They are working on commercially viable treatments for things like diabetes, hemophilia and neurological diseases with therapeutic cells placed into its proprietary Cell Pouch System, an implanted and scalable medical device.

Sernova's is focusing on treating chronic diseases with regenerative medicine. Regenerative medicine can be described as the branch of medicine that develops methods to regrow, repair or replace damaged or diseased cells, organs or tissues. It provides the potential of a functional cure vs. masking the underlying disease and long-term treatment of symptoms with prescription medicines.

To that end, what has the market excited about Sernova is their Cell Pouch System, in particular its success in treating

Diabetes. Effectively this is a novel implantable and scalable medical device which forms a natural environment in the body for the housing and long-term survival and function of therapeutic cells. These therapeutic cells release necessary proteins or factors missing from the body to treat chronic diseases as an alternative to daily administration of drugs. On Jan 15, 2021, the company announced positive preliminary safety and efficacy data from the ongoing U.S. Phase I/II Cell Pouch clinical trial for Type-1 Diabetes. In fact, one patient has now been insulin free (requiring no injectable insulin) for nine months with optimal glucose control.

This news vaulted the stock from \$0.75 to over \$2.00. The reason for the excitement over this news is that Sernova's proposed solution for Type-1 Diabetes represents a potential commercial opportunity of \$30 billion for the company. However, there are a lot more applications for the Cell Pouch System that Sernova is concurrently working on. They have completed a pre-clinical proof-of-concept for Hemophilia with a \$10 billion estimated market size and have a clinical program under development for a Thyroid program with an estimated \$2.2 billion market opportunity.

This is pretty impressive stuff but it's by no means an overnight success story. The company began trading under the name Sernova in 2006 with the first positive results from a long-term study evaluating the Cell Pouch System in a pre-clinical model of diabetes in July 2010. This has been years in the making but is finally getting close to a deliverable, and hopefully very profitable, product.

If you or anyone you know is afflicted with any of these maladies, which therapeutic would you sign up for? An existing regime of regularly administered drugs or an implant that fixes the problem at source and requires little to no maintenance. I'm pretty sure I know what I'd sign up for assuming nothing discouraging arises from clinical trials.

With that said, there is currently no revenue being generated although they are receiving grant money to support their Diabetes research. The current burn rate is a modest \$1.0 – \$1.5 million per quarter and they have over \$30 million of cash following a \$23 million financing that closed Mar 1, 2021. So funding shouldn't be an issue for the foreseeable future. The company has roughly 257 million shares outstanding with another 50+ million warrants making the current market cap a little over \$400 million. This stock is now on the radar but with plenty of potential given the markets they are trying to tap into.