NuGen Medical Devices provide easy and painless injections without needles

written by InvestorNews | March 24, 2022

Having spent far too much time over the last two years watching Netflix, reading fiction and playing video games, it has become apparent to me that my brain is starting to blur the lines between reality and fantasy. As I started doing my homework for today's company and their needle-free injection technology, I was thinking what's the big deal. I've seen that for decades now, at least on Star Trek. Then I started to think about it a little more. I've never had a needle free injection, nor has it ever been an option for me. I've also never spoken to, or even heard of anyone getting a needle free injection. All of sudden it dawned on me that something I just assumed was already "a thing", was instead leading-edge science and also pretty awesome.

The company with this cool technology is NuGen Medical Devices Inc. (TSXV: NGMD). The Company's principal business is the development and commercialization of innovative needle-free injection devices and systems for the administration of subcutaneous medication. It is developing products using needle-free drug delivery technology in several important fields including, but not limited to, anaphylaxis, diabetes, severe migraine, erectile dysfunction, chronic anemia, neutropenia, autoimmune rheumatoid arthritis, growth and fertility hormone, psoriasis as well as DNA and conventional/pediatric vaccines. Their flagship product – InsuJet™ is a revolutionary needle-free drug delivery device, used to self-administer medication in a safe, fear-free, and virtually pain-free manner and is now

approved for use in over 40 countries globally.

Explaining how it works may seem somewhat obvious, but because we're talking about science fiction becoming reality, I'm going to do it anyway. The liquid drug is inserted into the NuGen device, which uses a simple, but powerful, spring-loaded mechanism. Pressure is built up and releases the drug as a fine jet stream of liquid, traveling fast enough to penetrate the skin via a microscopic entrance. In less than one-tenth of a second, the drug is dispensed more safely and evenly compared to needle syringes. It's also virtually painless and leaves no mark on the skin. The graphic below also depicts how the medication is more evenly distributed. If you want to see a video animation of this, here is a link for readers.

Source: NuGen Medical Devices Corporate Presentation

As you can probably guess from the name (InsuJet™), the original focus was on serving insulin dependent diabetic patients. Diabetics manage blood sugar levels through daily administration of insulin, often three to four times per day. Aside from making life more convenient and cost effective for diabetics, this market becomes obvious when you look at the statistics. Diabetes has become one of the leading causes of deaths worldwide. According to the World Health Organization, around 1.5 million people worldwide died due to diabetes in 2019. It is estimated that 463 million people are living with diabetes all over the world and by 2045, projections show this number rising to some 700 million diabetics globally. Sadly, it doesn't stop there. According to Diabetes Canada, complications related to diabetes are serious and can be life-threatening. Annually, people living with diabetes account for:

- 30% of strokes;

- 40% of heart attacks;
- 50% of kidney failure requiring dialysis; and,
- 70% of non-traumatic amputations.

It becomes readily apparent that it is a ‘no-brainer’ for this device to become a primary tool for improving the lives of diabetics. But to me, that’s just the beginning. Having just seen the world administer billions of COVID vaccines, and thinking about all the single use needles that went along with that, I have to think the InsuJet™ would make for a way better solution on that front as well. And I’m not the only one thinking that way. The Company just signed a landmark partnership deal with Unifire Inc. to market and distribute its needle-free injection device to United States Government agencies.

Mr. Douglas Bryce, Former Joint Program Executive Officer for Chemical, Biological, Radiological, and Nuclear Defense (JPEO-CBRND) for the US Army is quoted in the press release as saying “The disruptive nature of the needle-free injection solution to improve the standard of care for members and the general public cannot be understated. The safe, rapid, and effective delivery of medication through this device are within the mandates of the government to improve care, reduce waste and lower costs. As such, I believe there is significant opportunity within the Department of Defense and Military operated medical facilities as well as inclusion within the casual combat care packages, global vaccination efforts and many others.” There you have it from someone with way more credibility than me.

I believe this is the logical evolution of injecting anything into your body, and not just because I saw it on Star Trek (well maybe a little). The addressable market is enormous. However, we’ll have to wait and see how things progress for NuGen Medical Devices as they’ve only been trading publicly since November,

2021 and thus far have no representative quarterly results. What I do know is they have a market cap of roughly C$22 million which means there could be some significant upside if the world demands their next vaccination or injection be needleless.