

A HEALING TOUCH FOR IGNORED WOUNDS!

The Pune based startup, Welnnovate Biosolutions, has come up with a unique product to address the diabetic ulcers that in worst forms also lead to amputations

BY RAHUL KOUL



According to the World Health Organization's 'The World Health Statistics 2012' report, there will be 70 million diabetic patients in India by 2025. Estimates have shown that up to 25 percent of patients with diabetes develop a foot ulcer, and approximately 56 percent of diabetic ulcerations will become infected and 20 percent of such patients will have to undergo lower limb amputations. Therefore, there is an

startup series

increasing need for a low cost, comprehensive treatment of diabetic ulcerations, which cannot be treated using normal wound treatments such as bandaging. India is a diabetic capital of the world and diabetic foot ulcer is going to be a major problem to address in a country like India.

Now the Pune (India) based startup, **WeInnovate Biosolutions** has come up with an answer. It is developing a novel formulation which can be used in Gel form or with wound closure materials (such as bandages and sutures) for rapid wound healing. HEALRAP, the company's first registered innovative product, is a novel organic and inorganic nano-formulation that demonstrates threeway action:

So, how is the product unique?

HEALRAP helps subside the inflammation, provides antimicrobial action, and promotes cell proliferation for rapid wound healing. The most innovative aspect of the formulation is that it targets the root cause that makes a wound critical, helping restore blood, oxygen, and nutrition flow to the wound ensuring rapid healing. Another unique selling point of this formulation is that it is inorganic in nature, which means that the problem



of antibiotic resistance is circumvented. The R&D product has reached to pre-clinical investigative studies.

"This problem has not been looked on with attention and we believe this problem can be solved with strategically devising the treatment options," mentioned Mr Milind Chaudhari, who is the primary founder and Chief Executive Officer of the WeInnovate Biosolutions.

A look at the journey

The company faced few initial challenges starting form technology validation to funding to regulatory but Milind says his team has been strategically tackling the same. He elaborates, "Initially organizing the set up and joining hands with the right people was the biggest challenge. We strategize hiring policy on the basis of "On same stage" policy, by this we can get the people who have same understanding as we, distributing work become easy thereafter. We struggled for investments too,

fortunately the science behind the technology was strong so the government agencies put money and that made it easy for the investors to follow."

L Estimates have shown that up to 25 percent of patients with diabetes develop a foot ulcer, and approximately 56 percent of diabetic ulcerations will become infected and 20 percent of such patients will have to undergo **lower limb** amputations.

The journey of the company started with an idea for which it was initially funded by a grant from the Biotechnology Industry Research Assistance

Council (BIRAC) under the scheme Biotechnology Ignitions grant of 36.8 Lakh to finish the proof of concept study for 18 months. Once the team proved its concept, it started working on validation studies for which again an investment of Rs 50 lakh was raised from NSTEDB followed by a matching grant of 50 Lakh from SBIRI scheme of BIRAC. During a pitching session, the company also won the Healthcare accelerator competition organized by CIIE, IIM-Ahmadabad, with a prize we got 10 Lakh grant support for product development.

"Though there was a background data already generated, however converting an Idea in to enterprise requires a lot of imputes. So, I went ahead to look for a co-founder and realized a technology company need brilliant scientists initially, reveals Milind, adding "I found two of my friends from my Grad school who were enthusiastic committed and ready to work with less money. We also got few senior scientists in the

startup series

field to mentor our project and finally convinced few medical doctors to join the team and provide us insights."

Currently the WeInnovate Biosolution has a team of 5 dedicated scientists and is still growing. The five-member team comprising of scientists and technologists are working together in a harmony. Team members holds doctorates in microbiology, biotechnology and electronics with experience in diagnostic product development and licencing. The average age of the team is 32 years each member being equally enthusiastic and passionate for the technology. Collectively the team has more than 60 papers and 7 patents.

Way forward

The company is also working towards launching an all purpose surface sterilization spray for hospital and industry settings (Silvoclean) in June 2017. The formulation is made up of a proprietary formula



consisting of silver nanoparticles, well known for its antimicrobial effects. The formulation has been shown to be effective against bacteria, spores, and virus, making it twice as effective as current sterilization sprays, while being 10 times safer than current surface sterilization agents. The formulation is designed have a longer residence time on surfaces, saving one from repetitive application.

The founders expect the products in pipeline to finish the regulatory pathway and reach the market in next 5 years. The company valued at \$1 million, is in full force of its production and sales targeting revenue of \$1-2 million per annum. Aggressively moving to make its presence, it aims to capture at least 10-20 percent market share. With high ambitions, the WeInnovate Biosolutions is also looking at starting overseas operations in at least 5 countries, thereby expecting to grow by 10 folds.

BIRAC'S FUNDING WAS WORTH IT!

BIRAC according to me is the best organization to catalyse the start-up activity in India. We were a group of scientists and hoping to do something to make a change but the decision to form a company rolled in because BIRAC showed the initial trust on us. Apart from just the funding, BIRAC plays a very important role in their funded startup by organising various events and meetings where we get to meet investors, advisors and networking. In all we are very happy by the way BIRAC works and the whole idea behind it.



MILIND CHAUDHARI,
CEO, WEINNOVATE BIOSOULTIONS