

SBRI Healthcare

Case Study



Company: Edixomed

Competition Entered/ Phase: Long Term Conditions/ Phase 2

Innovation: A nitric oxide dressing for diabetic patients with chronic leg ulcers to enable rapid healing.

Overview



Edinburgh based Edixomed Ltd has developed a nitric oxide dressing for diabetic patients with chronic leg ulcers to enable rapid healing.

The system delivers nitric oxide directly to specific skin tissue in order to help increase blood flow and stimulate wound healing.

In 1998 three American scientists won the Nobel Prize in medicine for discovering that one of the major signalling mechanisms in the human body is the release of nitrous oxide. It sterilises the skin and will kill bacteria and viruses which is why we never get an infection on the skin. Diabetic patients however, are very poor at producing nitrous oxide and have lost the controlling mechanism to do so.

The research originally started at Queen Mary's College - part of the University of London - where a laboratory team had been working on nitrous oxide technology for several years before they approached Edixomed to take on the work.

The technology is very simple, Edixomed partnered with a wound dressing company and developed a dressing which restores this loss of nitrous oxide to the skin. But in order to get the product to clinical trials Edixomed secured £800,000 in equity funding, a £300,000 Medical Research Council grant and £400,000 from the SBRI Healthcare competition.

In order to bring the product to market in the UK and the dressing is now in clinical trials at King's College Hospital in London and at Ninewells Hospital in Dundee which aims to be in the market next year at a "reasonable" £2 to £3 a dressing cost to the NHS.

Currently there is no dressing on the market which works in terms of wound healing, so if the dressing only worked in 30 or 40 per cent of cases it is a massive improvement. Furthermore, around 100 amputations per week caused by diabetic foot ulcers with each amputation costing the NHS approximately £9,000.

"Ultimately SBRI has meant we had a sufficient amount of money to make the product but more than that it has also given us the validation and the very fact that SBRI came in meant that others did not want to miss out."

Chris Wood, Edixomed's Chair.

Visit Edixomed's site: <http://www.edixomed.com/index.html>