



Advanced Wound Care: Plasma Medicine

VALUE PROPOSITION

Six fold increase in wound healing in four days

Five log reduction in bacteria in wound

Based on CE and FDA approved technology

MARKET

Advanced wound care including; Acute Wounds, Chronic Wounds, Leg ulcers, Diabetic Foot Ulcers

Intellectual Property

Trade Secret technology based on processing Know-how

OPPORTUNITY

Research Collaboration, License

Research led by

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Wound Care - Innovation developed by the Surface Engineering Group (www.ucd.ie/surfaces) have a method for the use of cold atmospheric plasmas in wound care in order to achieve a substantial increase (> 6 fold) in the rate of wound healing. This is achieved through a combination process (Plasma + FDA approved additives) and optional detection system, which gives improved wound healing.

There are about 50 million reported cases of patients suffering from hard-to-close wounds, which has created severe cost burden to the global healthcare system. The advanced wound care technologies market in US is valued at \$2.4B and in Europe is valued at \$1.7B, with market growth at 6.2%

A market report by Frost & Sullivan show that *“Advanced energy-based healing technologies, which are building a clinical case for greater utilization, have the potential to significantly reduce costs by 75% for the treatment of complex and chronic wounds.”*

Technology

The technology developed combined know-how from Engineering, medicine and microbiology to develop a system incorporating cold atmospheric plasma, medical approved additives and a delivery system to enable improved wound healing in acute cases such as diabetic foot ulcers

Key Features

- 5 log decrease in bacteria observed on pig-skin tests carried out in the laboratory
- 6 fold enhancement in the rate of wound healing 4 days after the incision (Early wound key in reducing infection)
- Use of CE and FDA approved equipment and materials





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Licensing Opportunity

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