

NHS Innovations Case Study

Safer Injection for Regional Anaesthesia – Giving Anaesthetists Control

Unmet Need

Regional anaesthesia is directed at a specific region of the body to allow a surgical operation or provide post-operative pain relief. SAFIRA makes regional anaesthesia a one person procedure, putting control in the hands of the anaesthesiologist.

Current regional anaesthesia practice requires two operators: an anaesthetist who holds an ultrasound scanner and uses this to guide the needle tip placement and a second operator to inject the anaesthetic solution at a required pressure.

It has been reported that anaesthetic solutions are often injected at high pressure. High pressure can cause damage to nerve fascicles, with serious nerve damage occurring in up to 1% of procedures and transient nerve damage in up to 8% of cases.

The Solution

In response to these problems, a group of inventors – Dr Peter Young, Dr Emad Fawzy, Dr Joseph Carter and Dr John Gibson – from our member Trust, Queen Elizabeth Hospital King's Lynn NHS Foundation Trust, developed a new method to inject regional anaesthetics.



SAFIRA – SAFer Injection for Regional Anaesthesia – allows a single operator to control the entire delivery of anaesthetic at safer pressures. This eliminates the risks associated with the standard procedure such as irreversible nerve fascicle damage caused by excessive injection pressures.

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In addition, SAFIRA replaces the need for a second operator therefore offering potential cost savings.

Health Tech Enterprise (HTE) worked with the inventors of SAFIRA, applying our commercial & Intellectual Property (IP) expertise to the commercialisation of the SAFIRA technology. We provided the hospital and clinical team with comprehensive assessments which investigated the prospects of achieving

Commercialisation

With the benefit of HTE's ongoing support and advice, the SAFIRA team were able to secure investment from the Medtech Accelerator of £80,000 in 2017 to continue development of the idea. In 2018, HTE's technology development partner Medovate secured the exclusive rights to develop, manufacture and sell this ground-breaking innovation in the field of anaesthesia.

Medovate launched SAFIRA on the US market in early 2020. For further information on the product and details of distributors in the US, EU, Australasia and other countries please visit the [Medovate](#) website.

About Health Tech Enterprise

Our business and innovation management services support healthcare innovators throughout the product development journey, from concept to commercialisation and final roll-out.

We offer healthcare market and health economics insights and evaluation, as well as regulatory, business and IP advice and management. We also advise on strategic market access, support with securing funding and deliver training and entrepreneurship services.

Our work ensures medical technology innovations are developed to realise their potential and benefit patients. We work with 20 NHS Trusts across England providing a range of innovation management services delivered by our expert team.