Injectable Tissue Oxygenation Sensor

Profusa's Lumee Oxygen Platform is the tissue oxygen sensing system consisting of a tiny hydrogel sensor implant that comes with its own injector, a sensor is measuring, and a touchscreen interface.

The implant, 5mm in length, has fluorescent molecules attached to its body which glow on exposure to oxygen, and providing continuous readings through the day. It is useful in peripheral artery disease (PAD).

Source: Profusa Inc. , San Francisco
Site: profuse.com/lumee

Injeq IQ-Needle for Easier, Safer Spinal Taps

Injeq developed IQ-Needle that has electrodes via which an external control device is able to sense the environment of the needle tip, liquid or ligament or muscle tissue. And also warns if approaching nerves thus preventing damage. The technology relies on bioimpedance analysis that can distinguish tissue types at close range.

Source: Injeq Oy Ltd. Finland
Site: www.injeq.com

Heated Humidification System

F&P 950 Heated Humidification System features integrated probes, a touch screen with easy controls, and mechanisms to reduces the amount of condensation that forms inside the system. It's intended for use in invasive, non-invasive, and Optiflow procedures during which oxygen and humidity are delivered in very precisely.

Source: Fisher & Paykel Healthcare Ltd. USA.
Site: www.fphcare.com

HemaApp

HemaApp uses the cell phone’s built-in light and camera to detect the color intensity of blood passing through a finger. The user simply places a finger over the camera lens, making a solid contact, and runs the app to do its thing. The app turns on the nearby LED light, which shines light through the finger, and uses the camera to detect specific features that point to the amount of hemoglobin.

Source: University of Washington
Site: https://ubicomplab.cs.washington.edu/publications/hemaapp/

Peripheral Nerve Stimulator

A minimally invasive and completely removable peripheral nerve stimulator for interventional pain management is here. It connects to a coiled electrode lead implanted percutaneously that is held in place by a patch for up to thirty days. The neurostimulator is about the size of a bandage, and sends electrical signals toward a target nerve.

Source: SPR Therapeutics, Cleveland, OH
Site: www.sprtherapeutics.com