

OsseoPulse[™] Osseointegration System Accelerate Bone Healing After Dental Implant Surgery





Device Description

OsseoPulse's light treatment technology safely, effectively and non-invasively accelerates early wound healing, implant loading and bone regeneration following oral surgery and dental implants.

Goals & Challenges

With a proof-of-concept prototype in hand and no in-house engineering team, Biolux approached StarFish to help bring their technology to market. They wanted to resolve a human factors issue of adapting their technology to variable facial geometries and address the technical challenge of preventing the device from overheating while safely increasing the power of the light treatment. StarFish leveraged electronics, mechanical design, user interface design and human factors to develop a device that could be commercialized and transferred to manufacture.

StarFish Solution

- Tested & refined the design for a more ergonomic, aesthetic headset that facilitated a variety of facial geometries
- Developed electronic handset & operator interface
- Developed a heat management system
- Created protective disposables for the headset contact areas
- Supported a distributor through regulatory approval in Asia
- Detailed design & manufacturing transfer under ISO13485
- Provided ongoing manufacturing & sustaining engineering services

Summary Results

- Received approval for sale by Health Canada & CE Mark regulatory approval
- Received a Red Dot Design Award Honourable Mention 2010

Medical Device Development for Entrepreneurial Companies

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