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NanoHive Medical and DirectSync Surgical to Collaborate on Patient-Powered Smart Spinal Implants

Leaders in the medical technology industry, NanoHive Medical and DirectSync Surgical, are pleased to announce a pioneering partnership poised to redefine spinal fusion procedures. The strategic collaboration is a joint development that endeavors to create a first-of-kind stimulating/sensing 3D printed interbody fusion cage.

The partnership unites NanoHive Medical, celebrated for its pioneering work in nanotechnology and biocompatible 3D printed implants, with DirectSync Surgical, a leading force in the research and development of patient-powered smart implants. This research collaboration leverages the distinctive strengths and expertise of both organizations to propel medical advancements.

The central objectives of the research comprise two key initiatives. The first strives to seamlessly integrate patient-powered stimulation into the innovative Hive™ implants, with the goal of expediting fusion and potentially mitigating the costs associated with biologics and patient compliance issues associated with external bone growth stimulators.

The second objective is to equip surgeons with a critical post-operative data analysis tool. Moreover, this innovation has the potential to reduce expenses associated with post-operative imaging.

Patrick O'Donnell, CEO of NanoHive Medical, remarks "NanoHive's Soft Titanium® technology is the ideal interbody fusion implant to be combined with DirectSync's bone stimulation and diagnostic sensor technology. We are excited about collaborating on the development of what we believe is a potential technology leap in the interbody fusion device category."

Zygmunt Porada, CEO of DirectSync Surgical, adds "DirectSync Surgical is proud to collaborate with NanoHive Medical on this exciting endeavor. Our combined expertise will empower surgeons with devices that provide to them objective data insights to enable improved patient outcomes and reduce costs to the healthcare system."

About NanoHive Medical LLC

NanoHive Medical, LLC is a pioneer and leading innovator in 3D printed spinal interbody fusion implants and instrumentation. The company's proprietary, biomimetic Soft Titanium® technology clearly distinguishes their products in the \$1.9B spinal interbody fusion device market. The Hive™ portfolio of interbody fusion devices offers surgeons and patients a set of exceptional characteristics, including optimal biomechanical elastic modulus properties, precise diagnostic imaging capabilities, and ideal osteoblast cell attraction and integration qualities. These features may consistently contribute to strong fusion constructs and positive clinical experiences.

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Press Release – NanoHive Medical – DirectSync Joint Development

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About DirectSync Surgical

DirectSync Surgical is a rising leader in smart patient powered implantable devices. With a commitment to innovation and foundational research, the company develops and manufactures advanced tools that empower both spinal and orthopedic professionals to achieve superior surgical outcomes. DirectSync Surgical's products are not available for sale in the US.

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