



## **Medicrea Partners with Orthopaedic Surgeon in World's First 360-Degree Personalized Spine Surgery**

**Lyon and New York, September 26, 2017** - The Medicrea Group (Euronext Growth Paris: FR0004178572 - ALMED), pioneering the convergence of healthcare IT and next-generation, outcome-centered device design and manufacturing with UNiD ASI™ technology, announced today the successful completion of a 360-degree spinal surgery using a bespoke combination of patient-specific implants generated by Medicrea's proprietary UNiD ASI™ system technology.

The complex two-stage operation took place in London at the Wellington Hospital and was performed by Orthopaedic Surgeon, Dr. Benjamin Taylor, MB, BS, MCh(ortho), FRCS, FRCS(Ed). Dr. Taylor partnered with Medicrea's UNiD LAB™ team of specialized biomedical engineers to strategically plan the operation and design four custom implants to be precisely manufactured in titanium at the company's new ultra-modern facilities, all within a tight deadline before surgery. The successful outcome was the result of patient-specific spinal instrumentation being implanted from the front and back to create the first-ever 360-degree personalized spinal surgery.

"The ability to strategically plan and manufacture personalized implants in a controlled iterative process generated by Medicrea's proprietary UNiD ASI™ system technology was a key element in the success of this operation, helping me to simplify and expedite the procedure. Because the implants are scientifically designed using clinical data, I am confident that this patient will continue to see improvements in their quality of life due to the sophisticated outcome-based technology that UNiD ASI™ injects throughout the process," stated Dr. Taylor following the operation.

Medicrea's UNiD ASI™ systems technology was used to create a fully personalized solution for the operation that was adapted to both surgeon and patient requirements. The process began with the Company's UNiD LAB™ engineers using proprietary planning software to turn Dr. Taylor's surgical plan into a fully digital simulation using patient imaging. The optimal surgical strategy was then identified by Dr. Taylor who was able to draw on the technology's Adaptive Spine Intelligence™ to directly answer to his and his patient's needs. Medicrea's engineering team took this strategy and translated the digital plans into patient-specific implants, using its proprietary manufacturing techniques to create bespoke spinal rods and interbody devices for the operation.

On the day of the surgery, the implants were already at the hospital, prepared to be placed in two stages. First, Dr. Taylor addressed the patient's spine through an anterior approach where three custom UNiD™ Cages were inserted between the patient's lumbar vertebrae to restore the exact height to the spine according to the patient's unique anatomy. The implants were also perfectly sized to form an exact fit between the patient's vertebrae, leading to a marked reduction in the operation time required to size and place standard off-the-shelf implants.

In the second stage of the operation, the patient's spine was approached posteriorly. Here, Dr. Taylor inserted two patient-specific UNiD™ Rods to stabilize the patient's spine in a predetermined patient-specific alignment. Sagittal alignment of the spine is well known to be directly correlated with the long-term success of a spinal surgery, and as such, matching the rod's shape with the patient's unique spinal curvature is a critical component of the surgery and was previously only achieved by manually bending the rod during the operation.

Denys Sournac, President and CEO of Medicrea, stated, "Our partnership with Dr. Taylor in this case demonstrates the power of UNiD ASI™'s system-based approach. We offer true collaboration with surgeons to deliver outcome-based data science that is adapted to surgeon and patient in each spine surgery. The

result has been to drive improved outcomes and efficiencies in more than 1,500 UNiD ASI™ cases to date. ”

### **About Medicrea ([www.Medicrea.com](http://www.Medicrea.com))**

Through the lens of predictive medicine, Medicrea leads the design, integrated manufacture, and distribution of 30+ FDA approved spinal implant technologies that have been utilized in over 100,000 spinal surgeries to date. By leveraging its proprietary software analysis tools with big data and machine learning technologies and supported by an expansive collection of clinical and scientific data, Medicrea is well-placed to streamline the efficiency of spinal care, reduce procedural complications and limit time spent in the operating room.

Operating in a \$10 billion marketplace, Medicrea is a Small and Medium sized Enterprise (SME) with 175 employees worldwide, which includes 50 who are based in the U.S. The Company has an ultra-modern manufacturing facility in Lyon, France housing the development and production of 3D-printed titanium patient-specific implants.

For further information, please visit: [Medicrea.com](http://Medicrea.com).

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