

World's first spinal fusion surgery performed with single-step insertion of DSG™ Technology enabled screws



"The direct insertion of pedicle screws along with real-time x-ray-free feedback represents a key step for spine surgery," said Charles Court, M.D., French orthopedic surgeon

PARIS and SAN FRANCISCO, Jan. 5, 2016 – SpineGuard (FR0011464452 – ALSGD), an [innovative company](#) that designs, develops and markets disposable medical devices designed to make spine surgery safer, announced today the world's first spinal fusion surgery performed with the one-step-insertion of pedicle "smart screws" guided by DSG™ (Dynamic Surgical Guidance) technology. This surgery was performed successfully by Dr. Court and his team at the Centre Hospitalier Universitaire Bicêtre Paris-Sud in France. Dr. Tropiano in Marseille, France, and Dr. Bolger in Ireland have scheduled surgeries in the coming days. For SpineGuard and Neuro France Implants, who announced their co-development partnership in early 2015, this successful first surgery performed immediately after obtaining CE mark is a critical milestone in preparation for the commercial launch of the G2S pedicle screw instrumentation that integrates the DSG technology.

"The direct insertion of pedicle screws along with real-time x-ray-free feedback represents a key step for spine surgery. This first case gave me a glimpse of the great potential of this innovation in terms of safety and precision. A multi-centric study will allow us to substantiate it," said Charles Court M.D., orthopedic surgeon at the Centre Hospitalier universitaire Bicêtre Paris-Sud in France.

Pierre Jérôme, CEO and co-founder of SpineGuard, said: *"This pioneering surgery validates the clinical utility of embedding our DSG technology into the vertebral implant itself, thus enabling its insertion without any preliminary step. I believe this major technological advancement will further secure and simplify the most commonly performed instrumented spine procedure, fusion."*

Patrice Moreau, CEO and co-founder of Neuro France, added: *« For 17 years Neuro France Implants has been focusing on simplifying and securing spine surgery through innovative implants. This first direct insertion of our G2S pedicle screws integrating the DSG technology is a real success, our collaboration with SpineGuard is bearing fruit. »*

Pedicle screw-based fusion has become the gold standard for treating spine instabilities and deformities. The market continues to grow globally due to the increasing number of patients requiring surgical treatment, a larger number of surgeons being trained, and technological advancements such as minimally invasive surgery, bone substitutes and dynamic stabilization. Worldwide there are about one million pedicle screw-based procedures performed annuallyⁱ. However, accuracy of pedicle screw placement remains a critical issue in spine surgery. In recently published papers studying screw

placement accuracy, the average rate of misplaced screws is approximately 20%, with 2-11% of patients presenting neurologic or vascular complications due to misplaced screwsⁱⁱ.

More information on the DSG™ technology, its new applications and surgeons' testimonials [here](#)

Previous release: 45% of growth for 3Q 2015 revenue

Next Press Release: 2015 FY Sales on January 14, 2016

SpineGuard will participate to the 'Invest Securities Biomed' conference on January 27, 2016 in Paris

About SpineGuard®

Co-founded in 2009 in France and the USA by Pierre Jérôme and Stéphane Bette, SpineGuard's mission is to make spine surgery safer. Its primary objective is to establish its proprietary DSG™ (Dynamic Surgical Guidance) technology as the global standard of surgical care, initially for safer screw placement in spine surgery and then in other surgeries. PediGuard®, the first device designed using DSG was co-invented by Maurice Bourlion, Ph.D., Ciaran Bolger, M.D., Ph.D., and Alain Vanquaethem, Biomedical Engineer. It is the world's first and only handheld device capable of alerting surgeons to potential pedicular or vertebral breaches. Over 40,000 surgical procedures have been performed worldwide with PediGuard. Numerous studies published in peer-reviewed medical and scientific journals have demonstrated the multiple benefits that PediGuard delivers to patients, surgical staff and hospitals. In 2015, SpineGuard started to expand the applications of DSG into pedicle screws through partnerships with innovative surgical companies in France and the US. SpineGuard has offices in San Francisco and Paris. For further information, visit www.spineguard.com.

Disclaimer

The SpineGuard securities may not be offered or sold in the United States as they have not been and will not be registered under the Securities Act or any USA state securities laws, and SpineGuard does not intend to make a public offer of its securities in the United States. This is an announcement and not a prospectus, and the information contained herein does and shall not constitute an offer to sell or the solicitation of an offer to buy, nor shall there be any sale of the securities referred to herein in the United States in which such offer, solicitation or sale would be unlawful prior to registration or exemption from registration.

Contacts

SpineGuard

Pierre Jérôme
Chief Executive Officer
Tel: +33 (0)1 45 18 45 19
p.jerome@spineguard.com

Manuel Lanfossi
Chief Financial Officer
m.lanfossi@spineguard.com

Europe / NewCap

Investor Relations & Financial Communication
Florent Alba / Pierre Laurent
Tel: +33 (0)1 44 71 94 94
spineguard@newcap.fr

US

Ronald Trahan, APR, Ronald Trahan Associates Inc.
+1-508-359-4005, x108



ⁱ Source : I-Data Research

ⁱⁱ Source : [Bibliography](#)