

Surgeon performs first Mazor Robotics Renaissance® Spine Surgery with full integration of intraoperative imaging system

ORLANDO, Fla., May 6, 2014 – Dr. Dimitry Dzukaev performed a series of 10 successful spine procedures utilizing Mazor Robotics (TASE: MZOR; NASDAQGM: MZOR) Renaissance Guidance System with full integration of an intraoperative imaging system in Moscow, Russia at City Clinical Hospital No. 67. The CT scanner (Neurologica's BodyTom®) images were uploaded directly to Renaissance's 3D software in the operating room and the procedures were completed without the use of any fluoroscopy.

"Renaissance's ability to integrate with intraoperative imaging will allow me to improve efficiency in the operating room with the comfort of consistent accuracy that the technology provides," said Dr. Dzukaev in Moscow.

"While continuously working with our customers, we identified a need to allow integration between the Renaissance system and intraoperative imaging platforms," said Mazor Robotics CEO Ori Hadomi. "We are committed to continually improving and advancing the Renaissance technology for our surgeons."

To date, Mazor Robotics Renaissance Guidance System has been used to place over 45,000 implants in thousands of spine procedures worldwide, ranging from minimally-invasive one-level fusions to complex deformity reconstructions. Published clinical papers have shown increased accuracy rates with Mazor Robotics technology, including a study in European Spine Journal reporting 98.9 percent accuracy when implanting pedicle screws using the Renaissance system in a study group of 101 consecutive cases.¹

Mazor Robotics is dedicated to the development of innovative surgical guidance systems and complementary products that provide a safer environment for patients, surgeons, and operating room staff. For more information, please visit www.mazorrobotics.com.

About Mazor

Mazor Robotics (TASE: MZOR; NASDAQGM: MZOR) believes in healing through innovation by developing and introducing revolutionary robotic-based technology and products aimed at redefining the gold standard of quality care. Mazor Robotics Renaissance® Guidance System enables surgeons to conduct spine and brain procedures in a more accurate and secure manner. For more information, please visit www.MazorRobotics.com.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995 and other securities laws. Any statements in this release about future expectations, plans or prospects for the Company, including without limitation, statements regarding the expectations for growth in system sales and recurring revenue, the Company's expected sales in 2016, and other statements containing the words "believes," "anticipates," "plans," "expects," "will" and similar expressions are forward-looking statements. These statements are only predictions based on Mazor's current expectations and projections about future events. There are important factors that could cause Mazor's actual results, level of activity, performance or achievements to differ materially from the results, level of activity, performance or achievements expressed or implied by the forward-looking statements. Those factors include, but are not limited to, the impact of general economic conditions, competitive products, product demand and market acceptance risks, reliance on key strategic alliances, fluctuations in operating results, and other factors indicated in Mazor's filings with the Securities and Exchange Commission (SEC) including those discussed under the heading "Risk Factors" in Mazor's annual report on Form 20-F filed with the SEC on April 29, 2015 and in subsequent filings with the SEC. For more details, refer to Mazor's SEC filings. Mazor undertakes no obligation to update forward-looking statements to reflect subsequent occurring events or circumstances, or to changes in our

expectations, except as may be required by law.

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1. Hu, X, Ohnmeiss D. Lieberman, I. Robotic-assisted pedicle screw placement: lessons learned from the first 102 patients. Eur Spine J (2013) 22:661-666.

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