Study Finds Improved Accuracy and Safety Utilizing Mazor Robotics Renaissance® Guidance System

Orlando, Fla., August 21, 2014 – Utilization of Mazor Robotics (TASE: MZOR; NASDAQ GM: MZOR) Renaissance[®] Guidance System provides greater reliability in screw placement and reduced use of fluoroscopy, according to a prospective study published in the current issue of Turkish Neurosurgery.¹

The study, led by Dr. Mehmet Resid Onen, Umraniye Training and Research Hospital, Department of Neurosurgery, Istanbul, reviewed 27 patients who underwent thoracolumbar stabilization operations aided by Renaissance at the hospital during 2012-2013. The accuracy rate of pedicle screw positioning with the system was found to be 98.5 percent², and no neurological, vascular or dural damage was observed in the case series.

According to the investigators, while the use of percutaneous instrumentation holds a superior advantage over open procedures, the localization and orientation of percutaneous placed implants are completely dependent on the use of fluoroscopy. With the Renaissance system, an average of only 1.3 seconds of fluoroscopy was used per screw and 40 percent of patients' implants were instrumented percutaneously. The study noted that the total surgery duration in patients who undergo multi-level instrumentation is reduced because of the decrease in the time that is typically lost in gaining x-ray images to determine the screw location.

"This data shows how the benefits of utilizing the Renaissance system supports the shift in healthcare toward providing better care for patients that translates into overall population health improvement," said Mazor Robotics CEO Ori Hadomi. "And by reducing the chance of error and revision procedures, our goal is to provide real value to the hospital system by helping to reduce unnecessary costs."

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 <u>www.MazorRobotics.com</u>.

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 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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¹Onen, Mehmet Resid, Simsek, Mehmet, Naderi, Sait. Robotic Spine Surgery: A Preliminary Report. Turkish Neurosurgery: Volume 24, Number 4, pp 512-518.

²This rate includes the total number of accurate placements and those that were malposition by less than2mm. Two screws placed at level T8 in one patient showed 2.1mm deviations.

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