



Amsterdam University Medical Centers Treats 1,000th Patient with MRIdian SMART MRI-Guided Radiation Therapy

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Amsterdam UMC reaches treatment milestone while establishing key clinical evidence in tough-to-treat cancer including pancreas, prostate, lung, liver, and kidney

CLEVELAND, Nov. 12, 2020 /PRNewswire/ -- ViewRay, Inc. (Nasdaq: VRAY) announced today that the clinical team at Amsterdam University Medical Centers (Amsterdam UMC) has treated one thousand patients using MRIdian SMART (stereotactic MR-guided adaptive radiotherapy). Amsterdam UMC continues to advance the practice of high-dose ablative radiation therapy with MRIdian through research and publication of the center's findings.



Amsterdam UMC began treating patients with MRIdian in 2016 and has been a leader in the treatment of prostate, pancreatic, lung, liver, and kidney cancers. MRIdian SMART allows for high doses of radiation to be delivered over a short course of therapy, given the system's real-time soft-tissue visualization capabilities and the ability for daily plan adaptation. To date, Amsterdam UMC has published more than a dozen manuscripts on their experience with MRIdian and had more than 50 MRIdian-related abstracts featured at major medical meetings around the world.

Recently, Amsterdam UMC published their experience using MRIdian SMART for the treatment of primary renal cell carcinoma in high-surgical-risk patients, given the system's ability to deliver a completely non-invasive outpatient ablative treatment. Unlike other therapy options, no fiducials are required when delivering treatment on MRIdian. At 12-month follow-up, there was low toxicity (zero grade ≥ 3) and high local control (95.2 percent). Findings were particularly noteworthy given that most patients were elderly (mean age was 78.1 years) and some tumors were quite large (tumor diameter ranged from 2.4-9.3 cm; mean 5.6 cm).

Full results, as published in the September 25, 2020 issue of *Cancers*, are available open access: <https://www.mdpi.com/2072-6694/12/10/2763>.

Additionally, Amsterdam UMC completed a prospective single arm phase 2 study of SBRT with MRIdian for the treatment of prostate cancer. At 1-year follow-up, the study demonstrated zero grade 3 toxicities and very low grade 2 toxicities in more than 100 patients, of which more than half were high-risk (59.4 percent). This study shows low incidence of early toxicity using MRIdian SMART while eliminating potential complications and costs associated with implanted marker procedures.

"Because MRIdian allows us to utilize smaller uncertainty margins and employ daily adaptive planning, we believe it is well-suited to treat a variety of tough to treat cancers for which high-dose radiation may not typically be considered," said Prof. Ben Slotman, M.D., Ph.D., FACR, FASTRO, Professor & Chairman, Radiation Oncology Departments Amsterdam UMC. "In prostate cancer specifically, previous data illustrates the quality of life challenges patients can experience after radiation therapy, such as bowel symptoms, whereas we saw very low incidence of early GI and GU toxicity, both in clinician- and patient-reported outcome measurements in our MRIdian SBRT study."

Final results were published in the June 12, 2020 issue of *European Urology Oncology*: [https://euoncology.europeanurology.com/article/S2588-9311\(20\)30061-4/fulltext](https://euoncology.europeanurology.com/article/S2588-9311(20)30061-4/fulltext) and early toxicity results were published in the December 2019 issue of the *International Journal of Radiation Oncology*Biophysics*: [https://www.redjournal.org/article/S0360-3016\(19\)33640-5/fulltext](https://www.redjournal.org/article/S0360-3016(19)33640-5/fulltext).

Currently, 40 MRIdian systems are installed at hospitals around the world where they are used to treat a wide variety of solid tumors and are the focus of numerous ongoing research efforts. MRIdian has been the subject of hundreds of peer-reviewed publications, scientific meeting abstracts and presentations. More than 11,000 patients have been treated with MRIdian. For a list of treatment centers, please visit: <https://viewray.com/find-mridian-mri-guided-radiation-therapy/>

About ViewRay

ViewRay, Inc. (Nasdaq: VRAY), designs, manufactures and markets the MRIdian radiation therapy system. MRIdian is built upon a proprietary high-definition MR imaging system designed from the ground up to address the unique challenges and clinical workflow for advanced radiation oncology. Unlike MR systems used in diagnostic radiology, MRIdian's high-definition MR was purpose built to address specific challenges, including beam distortion, skin toxicity, and other concerns that potentially may arise when high magnetic fields interact with radiation beams. ViewRay and MRIdian are registered trademarks of ViewRay, Inc.

ViewRay is a medical device manufacturer and cannot and does not recommend specific treatment approaches. Individual results may vary. The results described herein may not be predictive

Conflicts of Interest: Anna M.E. Bruynzeel has received honoraria from ViewRay, Inc. outside of the scope of these studies and has served on the advisory board of ViewRay, Inc. Frank J. Lagerwaard and Miguel A. Palacios have received honoraria from Viewray, Inc. outside of the scope of these studies. Suresh Senan has received research grants from ViewRay, Inc. Berend J. Slotman has received research grants and honoraria from ViewRay Inc.

Forward-Looking Statements

This press release contains forward-looking statements within the meaning of Section 27A of the Private Securities Litigation Reform Act. Statements in this press release that are not purely historical are forward-looking statements. Such forward-looking statements include, among other things, the rate of new orders, upgrades, and installations, ViewRay's anticipated future operating and financial performance, and ViewRay's conference calls to discuss its quarterly results. Actual results could differ from those projected in any forward-looking statements due to numerous factors. Such factors include, among others, the ability to commercialize MRIdian Linac System, demand for ViewRay's products, the ability to convert backlog into revenue, the timing of delivery of ViewRay's products, the timing, length, and severity of the recent COVID-19 (coronavirus) pandemic, including its impacts across our businesses on demand, operations and our global supply chains, the results and other uncertainties associated with clinical trials, the ability to raise the additional funding needed to continue to pursue ViewRay's business and product development plans, the inherent uncertainties associated with developing new products or technologies, competition in the industry in which ViewRay operates, and overall market conditions. For a further description of the risks and uncertainties that could cause actual results to differ from those expressed in these forward-looking statements, as well as risks relating to ViewRay's business in general, see ViewRay's current and future reports filed with the Securities and Exchange Commission, including its Annual Report on Form 10-K for the fiscal year ended December 31, 2019 and its Quarterly Reports on Form 10-Q, as updated periodically with the company's other filings with the SEC. These forward-looking statements are made as of the date of this press release, and ViewRay assumes no obligation to update the forward-looking statements, or to update the reasons why actual results could differ from those projected in the forward-looking statements, except as required by law.

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Media Enquiries: Karen Hackstaff, Vice President, Strategy and Brand, ViewRay, Inc., 1-844-MRIdian (674-3426), media@viewray.com, Investor Relations: Michaela Gallina, Vice President, Chief of Staff, Head of Investor Relations and Communications, ViewRay, Inc., 1-844-MRIdian (674-3426), investors@viewray.com