

Three-year SPYRAL HTN-ON MED results show sustained, 18 mmHg office-based blood pressure reductions

Long-term data shows significant and sustained blood pressure reductions in both office-based and 24-hour ambulatory blood pressure, reinforcing the durability, safety and effectiveness of the Symplicity™ blood pressure procedure in patients prescribed antihypertensive medications

GALWAY, Ireland, Oct. 26, 2025 /PRNewswire/ -- Medtronic plc (NYSE: MDT), a global leader in healthcare technology, today announced new, long-term results from its final report of the SPYRAL HTN-ON MED randomized clinical trial, showing that patients treated with the Symplicity™ Spyral renal denervation (RDN) procedure experienced significantly greater reductions in blood pressure compared to sham patients through three years. The data were presented as part of Featured Clinical Research during the 2025 Transcatheter Cardiovascular Therapeutics (TCT) conference.

"Radiofrequency renal denervation with the Symplicity blood pressure procedure continues to demonstrate a durable and clinically meaningful blood pressure-lowering effect," said David Kandzari, M.D., chief, Piedmont Heart Institute and Cardiovascular Service and co-principal investigator of the SPYRAL clinical program. "Through three years, sustained reductions in blood pressure were observed among subjects treated with the Symplicity Spyral RDN system, including those from the treatment arm and the approximately three quarters of patients from the control arm that were later treated with Symplicity."

At three years, patients who underwent RDN (N= 206) showed significantly greater reductions in both 24-hour ambulatory systolic blood pressure (ABPM) and office-based systolic blood pressure (OSBP) compared to sham patients (N= 131), despite similar medication burden:

- 24-hour ABPM: –14.0 mmHg in the RDN group vs. –9.3 mmHg in the sham group (treatment difference: –4.7 mmHg; p=0.0028)
- OSBP: –18.5 mmHg in the RDN group vs. –11.7 mmHg in the sham group (treatment difference: –7.4 mmHg; p=0.0002)

Additionally, no renal artery stenosis – a narrowing of the arteries that supply blood to the kidneys – greater than 70% was observed in the RDN group through three years, supporting the long-term safety of the Symplicity Spyral RDN system.

"These results further underscore the consistent and durable effects of the Symplicity blood pressure procedure, with the most long-term data presented and published to date,^{i,ii,iii, iv}" said Jason Weidman, senior vice president and president of the Coronary and Renal Denervation business within the Cardiovascular Portfolio at Medtronic. "With more than 5,000 patients studied and over 30,000 procedures performed globally, the Symplicity blood pressure procedure continues to set the standard in renal denervation by offering a safe, effective, and lasting option for patients whose blood pressure remains uncontrolled despite medications and lifestyle modifications, and who are interested in an interventional approach to control their blood pressure."

SPYRAL HTN-ON MED is a global, randomized, sham-controlled trial investigating the blood pressure lowering effect and safety of RDN with the radiofrequency-based Symplicity RDN system in hypertensive patients who have been prescribed up to three anti-hypertensive medications. After the six-month primary endpoint assessment, the study continued to assess 24-hr ABPM and OSBP from baseline through yearly follow ups. The Symplicity RDN system is approved for commercial use in nearly 80 countries around the world.

About Medtronic

Bold thinking. Bolder actions. We are Medtronic. Medtronic plc, headquartered in Galway, Ireland, is the leading global healthcare technology company that boldly attacks the most challenging health problems facing humanity by searching out and

finding solutions. Our Mission — to alleviate pain, restore health, and extend life — unites a global team of 95,000+ passionate people across more than 150 countries. Our technologies and therapies treat 70 health conditions and include cardiac devices, surgical robotics, insulin pumps, surgical tools, patient monitoring systems, and more. Powered by our diverse knowledge, insatiable curiosity, and desire to help all those who need it, we deliver innovative technologies that transform the lives of two people every second, every hour, every day. Expect more from us as we empower insight-driven care, experiences that put people first, and better outcomes for our world. In everything we do, we are engineering the extraordinary. For more information on Medtronic (NYSE: MDT), visit www.Medtronic.com and follow Medtronic on [LinkedIn](#).

Any forward-looking statements are subject to risks and uncertainties such as those described in Medtronic's periodic reports on file with the Securities and Exchange Commission. Actual results may differ materially from anticipated results.

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ⁱ Mahfoud, F, Townsend, RR, Kandzari, DE, et al. Long-term, patient-level analysis of radiofrequency renal denervation in the SYMPPLICITY clinical trial program. *JACC Adv.* 2025;4(3):101606. doi:10.1016/j.jacadv.2025.101606.

ⁱⁱ Kandzari, DE. SPYRAL HTN-ON MED 3 Year Data. Transcatheter Cardiovascular Therapeutics (TCT) conference. October 2025.

ⁱⁱⁱ Al Ghorani, et al. 10-Year Outcomes of Catheter-Based Renal Denervation in Patients With Resistant Hypertension. *JACC.* 2023 Feb, 81 (5) 517–519. <https://doi.org/10.1016/j.jacc.2022.11.038>

^{iv} Bhatt, D et al. Long-term outcomes after catheter-based renal artery denervation for resistant hypertension: final follow-up of the randomised SYMPPLICITY HTN-3 Trial. *The Lancet*, Volume 400, Issue 10361, 1405 - 1416

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