

Medtronic Shares Study Results on First of Its Kind Extended Wear Infusion Set from American Diabetes Association Conference

DUBLIN, June 13, 2020 (GLOBE NEWSWIRE) -- [Medtronic plc](#) (NYSE:MDT), the global leader in medical technology, today announced data on its extended wear infusion set presented at the virtual 80th Scientific Sessions of the American Diabetes Association (ADA). Infusion sets allow people on insulin pump therapy to deliver insulin under the skin to maintain healthy blood glucose levels. Current generation infusion sets must be changed every two to three days. The research revealed that Medtronic Extended infusion sets last twice as long as standard infusion sets with study results suggesting they could provide safe and comfortable wear for patients using Medtronic insulin pumps. It is the only infusion set in the industry with the ability to be used for up to 7 days and adds to the portfolio of technology offerings from Medtronic which aim to reduce burden and enhance user experience. The Medtronic Extended infusion set has received CE Mark, and a U.S. pivotal trial to study the safety and effectiveness is currently underway.

“By changing the infusion set half as often, the skin will have more time to rest and heal,” said Ohad Cohen, M.D., medical affairs director in EMEA for the Diabetes Group at Medtronic. “While the industry has seen advances made with insulin pumps and continuous glucose monitoring (CGM) innovation, only Medtronic has focused on the entire system which also includes infusion sets. We believe extending infusion set wear to a week will significantly improve quality of life and ease of use for people using insulin pump therapy.”

Clinical studies on multiple infusion set platforms¹ demonstrated that the Medtronic Extended infusion set is safe and effective for up to 7 days, more than twice as long as current Medtronic three-day infusion sets. Using proprietary technology, this new infusion set aims to extend patient wear time by maintaining insulin stability and using new adhesive technology.

The breakthrough of longer infusion set wear is achieved through a novel and proprietary approach that addresses insulin degradation and preservative loss which result in infusion set occlusion and consequent hyperglycemia. Details shared on the innovative technology included how insulin stability contributes to infusion site performance and occlusions as well as the methodology used to ensure that the adhesive patch will comfortably last for the duration of wear. Additional analysis has revealed that patients may save between 5-10 vials of insulin per year that is currently thrown away in 3-day set changes.

These data were shared at the 80th Scientific Sessions of the American Diabetes Association virtual meeting, June 12-15, 2020:

- [“Study of Insulin Stability Impact on Pump Therapy: Test Model Development”](#) - Poster 1012-P by Sarnath Chattaraj, Ph.D.
 - Key Conclusion: Improved insulin stability contributes to better infusion site performance and reduction in hyperglycemia due to occlusions. This enables the extended wear infusion set technology.
- [“Assessment of Adhesive Patches for an Extended-Wear Infusion Set”](#) – Poster 986-P by Gina Zhang, Ph.D.
 - Key Conclusion: The extended wear adhesive patch was selected for longevity and comfort.
- [“Clinical Study of a New Extended Wear Infusion Set”](#) – Poster 994-P by Jacob Ilany, M.D.
 - Key Conclusion: The extended wear infusion set is safe and effective for up to 7-days wear, more than twice the duration of the current 3-day wear.
- [“Testing a Novel Infusion Set for Extended Wear Duration”](#)– Poster 997-P by Bruce Buckingham, M.D.
 - Key Conclusion: Extended wear technology on current 3-day QuickSet platform, extends the durations up to 7 days
- [“CSII & Insulin: Does Extending the Wear Duration of Infusion Sets Save Expensive Insulin?”](#) - Poster 1167-P by Sarnath

Chattaraj, Ph.D.

- Key Conclusion: An extended wear infusion set saves 5-10 vials of insulin per year that is currently being thrown away during two-day or three-day set changes.

About the Diabetes Group at Medtronic (www.medtronicdiabetes.com)

Medtronic is working together with the global community to change the way people manage diabetes. The company aims to transform diabetes care by expanding access, integrating care and improving outcomes, so people living with diabetes can enjoy greater freedom and better health.

About Medtronic

Medtronic plc (www.medtronic.com), headquartered in Dublin, Ireland, is among the world's largest medical technology, services and solutions companies - alleviating pain, restoring health and extending life for millions of people around the world. Medtronic employs more than 90,000 people worldwide, serving physicians, hospitals and patients in more than 150 countries. The company is focused on collaborating with stakeholders around the world to take healthcare Further, Together.

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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1 Mio Advance and QuickSet infusion set platforms

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