Medtronic News

MiniMed 670G System Real-World Data Show Improved Time in Range and Reduced Lows and Highs Across All Patient Groups Including a 41 Percent Time in Range Improvement for Previous MDI Patients

GLOBE NEWSWIRE via COMTEX) --DUBLIN - June 24, 2018 - Medtronic plc (NYSE:MDT), the global leader in medical technology, today announced real-world clinical outcomes for 32,178 users of the MiniMed(TM) 670G system. Data on more than 2 million patient days showed an average Time in Range of 70.6 percent across all age groups for those using the system's most advanced SmartGuard(TM) technology - the only smart algorithm that can adapt to fluctuating glucose levels and automatically self-adjust background insulin delivery. This advanced algorithm mimics some of the functions of a healthy pancreas and is the only technology in the world that proactively drives increased Time in Range - addressing both highs and lows.

The real-world data reinforces the significant benefits of the SmartGuard Hybrid Closed algorithm, demonstrating improvement in Time in Range of 73.1 percent, Hypoglycemic Range of 2.0 percent and Hyperglycemic Range of 25.0 percent. Using data on MDI patients from the STAR3 trial as a reference, this equates to an improvement of 41.1 percent for Time in Range, 41.2 percent reduction of time in the hypoglycemic range and 44.2 percent reduction of time in the hyperglycemic range. In addition to the comparisons to the STAR3 Data, an analysis of real-world outcomes on more than 12,000 patient days has provided a promising early look at data specific to MDI patients transitioning to the MiniMed 670G system.

"These data are compelling and demonstrate that MDI patients are doing very well on the MiniMed 670G system and are experiencing significant Time in Range improvements," said Anders Carlson, M.D., medical director, International Diabetes Center. "The innovative approach to automated insulin delivery using SmartGuard Auto Mode is a remarkable technology that can improve the lives of those living with type 1 diabetes, regardless of their prior pump experience. In addition to the clinical benefits, reducing mental burden associated with diabetes management is a key component to improving their overall wellness and this innovative system is a major step towards that goal."

Across the larger sample size of patients who transitioned to the system since commercial launch, all patients, regardless of age group, experienced improved Time in Range when compared to data captured during Manual Mode. Time in Range was highest for adults >= 60 years of age at 74.6 percent. The results also showed reduced hypoglycemia and hyperglycemia. This was consistent with results from pivotal trial patients and other real-world users of the system.

The real-world analysis included data from patients who voluntarily uploaded their CareLink(TM) Personal software data, from March 17, 2017 to December 14, 2017 and had >7 days of Guardian(TM) Sensor 3 wear. The full data set since commercial launch was shared during a poster presentation at the 78th Scientific Sessions of the American Diabetes Association, in Orlando on June 24, 2018 at 12:00 p.m. EST. The real-world data on a subset of patients who self-reported their use of multiple daily injection (MDI) therapy was also presented via an oral presentation on June 24, 2018 at 3:00 p.m. EST.

Quality of Life Data

The company also presented quality of life (QoL) data on patients using the MiniMed 670G system in a real-world setting - a key marker in assessing the impact of new diabetes therapies brought to market. Data evaluating 2,534 patients showed that >85 percent of patients experienced positive outcomes across all five surveyed categories, including Energy & Mobility, Diabetes Control, Anxiety & Worry, Social Burden, and Sexual Functioning. All patients reported positive experiences on the SmartGuard Auto Mode feature of the MiniMed 670G system with demonstrated improvement in multiple QoL measures. Former MDI patients also showed significant improvement in overall QoL indicating broad acceptance of the MiniMed 670G system.

"These results demonstrate that more time spent in SmartGuard Auto Mode improves both Time in Range and Quality of Life - two very important metrics that provide an accurate picture of the impact that a therapy like this on both outcomes and well-being," said Francine Kaufman, M.D., chief medical officer of the Diabetes Group at Medtronic. "I am pleased to see that the great results we saw in the controlled pivotal trial are mirrored in the commercial use of this therapy and that patients are living full and healthy lives on this system."

Time in Range

Time in Range refers to the percentage of time people with type 1 diabetes spend in the optimal glycemic range of 70-180 mg/dL. The goal with diabetes management is to increase time spent in this healthy range and to minimize high and low sugar levels, which can lead to both immediate and long-term complications such as damage to blood vessels - increasing the risk of coronary artery disease, heart attack, and stroke. Damage to blood vessels can also lead to loss of vision, kidney disease, and nerve problems. Increasing the "Time in Range" over the long-term can best be accomplished by using advances in diabetes therapies, like the MiniMed 670G system with SmartGuard technology, that automates basal insulin.

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 86,000 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.

-end-

Contacts:
Janet Cho
Public Relations
+1-818-576-5014

Ryan Weispfenning
Investor Relations
+1-763-505-4626

This announcement is distributed by Nasdaq Corporate Solutions on behalf of Nasdaq Corporate Solutions clients.

The issuer of this announcement warrants that they are solely responsible for the content, accuracy and originality of the information contained therein.

Source: Medtronic plc via Globenewswire

Patients