Medtronic News

New Pediatric At-Home Study of MiniMed(TM) 670G System Demonstrates Positive Results in Children Ages 7 to 13

DUBLIN and VIENNA - February 15, 2018 - Medtronic plc (NYSE:MDT), the global leader in medical technology, today announced that new data from its at-home pediatric study of the MiniMed(TM) 670G system in patients 7-13 years of age were presented at the Advanced Technologies & Treatments for Diabetes (ATTD) 11th International Conference in Vienna, Austria. Study results mirror data from the pivotal trial of the system in adults and adolescents (14 and above), showing patients spent more Time in Range, experienced less glycemic variability, less exposure to hypoglycemia and hyperglycemia, and reduced A1C compared to baseline data using sensor-augmented pumps. The MiniMed 670G system is currently FDA approved in the U.S. for people with type 1 diabetes 14 years of age and older. Data from this study was included in an FDA application in late January to seek future expansion of the current indication to include children 7-13 years of age. Medtronic is also evaluating the system in children 2-6 years of age and will present data from this trial at a future date. However, product labeling currently warns that the system may not be safe for children under age 7 or patients using less than 8 units of insulin per day.
See http://bit.ly/670gRisks.

"It is incredibly rewarding on both a professional and personal level to evaluate a therapy that has the potential to alleviate the enormous weight of responsibility experienced by parents and caregivers of children with type 1 diabetes." said Dr. Kevin Kaiserman, primary study investigator at the Southern California Diabetes Center. "I'm very pleased to see that the positive results observed in the pivotal trial studying older patients were also sustained in this study."

The at-home, multi-center study enrolled 105 participants ages 7-13 and included a 2-week run-in phase, followed by a 3-month study phase. Over 15,353 patient days were included in the evaluation with 97 percent of participants opting to continue using the system as part of a Continued Access Program. Participants in the study were required to enter their mealtime carbohydrates and periodically calibrate the sensor.

"This important data shows that the MiniMed 670G system can lead to more time in the desired glucose target range in school-aged children, while it reduces both time spent in hypoglycemia and hyperglycemia," said Francine Kaufman, M.D., chief medical officer of the Diabetes Group at Medtronic. "This hopefully should enable children with type 1 diabetes to decrease the risk of experiencing short and long term diabetes complications."

A subset of data from this study of 7-13 year old patients, also presented at ATTD on Thursday, February 15, 2018, reinforced the significant benefits of the SmartGuard(TM) Suspend before low feature available in both the MiniMed 670G system and MiniMed(TM) 640G system. The MiniMed 640G system is approved for use outside of the U.S. but is not approved in the U.S. SmartGuard technology is the proprietary algorithm from Medtronic that powers its advanced MiniMed insulin pump systems. Each advancement in the company's phased approach to developing a closed loop system enables increased automation of SmartGuard technology so the system takes on more of the work associated with daily diabetes management - helping to improve quality of life and overall glucose control for patients.

The MiniMed 670G system is the world's first and only commercially available hybrid closed loop system and features the company's new Guardian(TM) Sensor 3 and most advanced SmartGuard Auto Mode algorithm, which allows the system to automate the delivery of basal insulin to help maximize Time in Range throughout the day and night.

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 84,000 people worldwide, serving physicians, hospitals, and patients in approximately 160 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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