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**EFFECTIVE SELF-MANAGEMENT OF BLOOD GLUCOSE CAN BE
ACHIEVED BY USING METERS WITH ADVANCED FEATURES PAIRED
WITH DIABETES EDUCATION**

TARRYTOWN, NY (September 23, 2010) – According to a new study, people with diabetes, especially those treated with insulin, may achieve optimal blood sugar control when they understand the impact of food on blood sugar and they utilize useful advanced blood glucose meter (BGM) features such as meal markers and audible reminders. These findings, presented at the 46th European Association for the Study of Diabetes (EASD) Annual Meeting in Stockholm, Sweden, are important because structured self management of blood glucose (SMBG) may be integral to attaining optimal glycemic control. Further, understanding and utilization of particular advanced BGM features may improve the value of SMBG.

A six-month randomized, multicenter prospective clinical outcomes study called ACT (Actions with the CONTOUR[®] Blood Glucose Meter and Behaviors in Frequent Testers), conducted at four clinical sites in the U.S., evaluated the impact of diabetes education *plus* use of advanced BGM features *versus* diabetes education *plus* use of meters with basic features. Investigators also evaluated the influence of SMBG information, motivation, and behavioral skills on measures of glycemic control via survey questions based on the Information-Motivation-Behavioral skills (IMB) model. The study was sponsored by Bayer HealthCare.

Clinical results indicate that ACT study participants who were randomized to the advanced meter features group (n=105), and used meal markers and audible reminders, engaged in significantly more structured testing, including post-meal testing as well as paired (before and after meal) testing, than those who were randomized to basic meter features. Moreover, 72 percent of study participants in the advanced meter features group had a better understanding of the difference between before and after meal blood sugar results.

Remembering to test blood sugar levels is one of the obstacles for patients with diabetes.¹ At the end of the study, about one quarter of study participants (24 percent in the basic group, 23 percent in the advanced group) said that remembering to test their blood sugars *before* meals is

¹ Bayer Diabetes Care Data on file, IMB Cross Sectional study presented at ADA 2010.

difficult. However, 55 percent of participants who used basic meter features also said it was difficult to remember to test their blood sugars *after* meals versus the 23 percent of those that used the advanced meter features. Thus, utilizing the meal marker feature made remembering to test after meals easier.

At the end of the study, more than 61 percent of participants who used the advanced features said they better understood how to make decisions on their own at home, and 66 percent had more confidence in their meal choices since they started testing pre-and post-meal blood sugars. Seventy-two percent of study participants who used the advanced features said they could use their meters in a more helpful way.

The IMB data presented by Dr. William Fisher, Distinguished University Professor in the Department of Psychology at the University of Western Ontario in London, Canada and co-developer of the IMB model, demonstrate that the correlation of changes in SMBG, IMB skills as they relate to changes in SMBG behavior, and understanding of results are seen in both people with type 1 and type 2 diabetes.

“There is a considerable amount of medical literature about adherence in diabetes, and a wide range of interventions have been shown to have a positive effect on knowledge, frequency, and accuracy of SMBG. Maintaining change in SMBG over time has been variable, however, and may be dependent upon regular reinforcement. What’s been lacking is a well-integrated behavioral science model of factors that influence SMBG adherence,” said Dr. Fisher. “We are gratified to see that the IMB model for understanding and promoting health behavior change has provided evidence of utility in understanding SMBG in diabetes.”

Study Meaning for Bayer Diabetes Care

“At Bayer Diabetes Care, we are taking a leadership role in developing the awareness that self-monitoring of blood glucose is an important behavioral tool in the management of diabetes,” said Dr. David Simmons, VP and Chief Medical Officer, Bayer Diabetes Care. “The results of the ACT study will help us to identify areas of patient and professional education. They will also provide us with insight for more focused development and improvements in our products and their features, as well as new services we can provide for our customers.”

About Bayer’s Blood Glucose Meters

Bayer’s CONTOUR® USB and DIDGET meters were *not* used in the ACT clinical study, however both meters are based on Bayer’s trusted CONTOUR® system that was used in the ACT clinical study, using the same advanced meter features and providing the same easy accuracy and No Coding™ technology, automatic correction for hematocrit and many common interfering substances (such as acetaminophen and ascorbic acid), 5-second test time and small (0.6 µL) sample size. The meters use CONTOUR® blood glucose test strips currently available for Bayer’s CONTOUR® meter. For more information, visit www.bayercontourusb.com.

Study Design

ACT: Actions with the CONTOUR[®] Blood Glucose Meter

Subjects (n=211) had type 1 (n=120) or type 2 (n=90) diabetes, used meal-time insulin at least one meal per day, and tested their blood glucose levels at least three times per day. Subjects received diabetes education and were randomized to **Basic** (no meal marker or reminder) or **Advanced** (meal marker and reminder), and were instructed to record blood glucose levels in their logbook. Subjects were seen at baseline, six weeks, three months, and six months with no mandated actions between visits. Baseline testing frequency was self-reported, and meters were downloaded at visit 2-4.

About Diabetes

Diabetes is a disease in which the body does not produce or properly use insulin. Approximately 23.6 million children and adults in the United States have diabetes, which puts them at risk for developing serious health complications over time, such as heart disease, kidney disease, blindness and stroke.² Type 1 diabetes, also called juvenile diabetes, is usually diagnosed in children and young adults. In persons with type 1 diabetes, the body makes little or no insulin, and therefore people with type 1 diabetes need to take insulin daily.³ Type 2 diabetes is usually diagnosed in adults, although increasingly, children are being diagnosed with this disease. Type 2 is associated with obesity, family history of diabetes, history of gestational diabetes, impaired glucose metabolism, physical inactivity and race/ethnicity.⁴ Managing blood glucose levels within target ranges can prevent or delay the long-term complications of diabetes.⁵ An estimated 30 percent of people with diabetes require insulin to manage their disease. Those who require insulin must closely monitor their blood sugar with a blood glucose meter to plan their meals, exercise regimens and insulin dosage.

Bayer Diabetes Care

Bayer Diabetes Care is a worldwide leader in diabetes care, supporting customers in 100 countries and, for more than 40 years, has led the way in diabetes care product innovation. Today, Bayer Diabetes Care offers an unparalleled choice in diabetes management systems and comprehensive support including education, tools and resources designed to simplify life with diabetes. Bayer Diabetes Care is a business of the Bayer HealthCare LLC, Medical Care Division and has its global headquarters located in Tarrytown, New York. Visit www.simplewins.com.

Bayer HealthCare

The Bayer Group is a global enterprise with core competencies in the fields of health care, nutrition and high-tech materials. Bayer HealthCare, a subsidiary of Bayer AG, is one of the world's leading, innovative companies in the healthcare and medical products industry and is based in Leverkusen, Germany. The company combines the global activities of the Animal Health, Consumer Care, Medical Care and Pharmaceuticals divisions. The pharmaceuticals business operates under the name Bayer Schering Pharma. Bayer HealthCare's aim is to discover and manufacture products that will improve human and animal health worldwide. Find more information at www.bayerhealthcare.com.

² <http://ndep.nih.gov/publications/PublicationDetail.aspx?PubId=97#page4> Last accessed Sept 20, 2010

³ <http://www.cdc.gov/diabetes/pubs/pdf/search.pdf>. Last accessed June 11, 2010

⁴ <http://www.cdc.gov/diabetes/pubs/general.htm> Last accessed June 11, 2010

⁵ <http://ndep.nih.gov/publications/PublicationDetail.aspx?PubId=97#page4>. Last accessed Sept 20, 2010

Forward-looking statements

This release may contain forward-looking statements based on current assumptions and forecasts made by Bayer Group or subgroup management. Various known and unknown risks, uncertainties and other factors could lead to material differences between the actual future results, financial situation, development or performance of the company and the estimates given here. These factors include those discussed in Bayer's public reports which are available on the Bayer website at www.bayer.com. The company assumes no liability whatsoever to update these forward-looking statements or to conform them to future events or developments.

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