Analysis Article on the Performance Analysis of the OneTouch® UltraVue™ Blood Glucose Monitoring System

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Abstract

In this issue of Journal of Diabetes Science and Technology, Chang and colleagues present the analytical performance evaluation of the OneTouch® UltraVue™ blood glucose meter. This device is an advanced construction with a color display, used-strip ejector, no-button interface, and short assay time. Accuracy studies were performed using a YSI 2300 analyzer, considered the reference. Altogether, 349 pairs of results covering a wide range of blood glucose concentrations were analyzed. Patients with diabetes performed a significant part of the tests. Obtained results indicate good accuracy of OneTouch UltraVue blood glucose monitoring system, satisfying the International Organization for Standardization recommendations and thereby locating >95% of tests within zone A of the error grid. Results of the precision studies indicate good reproducibility of measurements. In conclusion, the evaluation of the OneTouch UltraVue meter revealed good analytical performance together with convenient handling useful for self-monitoring of blood glucose performed by elderly diabetes patients.


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Abbreviations: (CV) coefficient of variation, (SMBG) self-monitoring of blood glucose

Keywords: accuracy, bias, imprecision, self-monitoring of blood glucose

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