

**510(k) SUBSTANTIAL EQUIVALENCE DETERMINATION
DECISION SUMMARY
ASSAY ONLY TEMPLATE**

A. 510(k) Number:

k070506

B. Purpose for Submission:

New Device

C. Measurand:

Quality control materials for blood glucose monitoring systems

D. Type of Test:

Not applicable

E. Applicant:

Specialty Medical Supplies (SMS)

F. Proprietary and Established Names:

SMS Multi Glucose Control

G. Regulatory Information:

1. Regulation section:

21 CFR § 862.1660 Quality control material (assayed and unassayed)

2. Classification:

Class I

3. Product code:

JJX, single (specified) analyte controls (assayed and unassayed)

4. Panel:

Clinical Chemistry (75)

H. Intended Use:

1. Intended use(s):

For in vitro diagnostic use (i.e. for external use only) by healthcare professionals and in the home by people with diabetes mellitus to assess the performance of the Roche Accu-Chek Active, the Bayer Ascensia Contour and the LifeScan One Touch Ultra and Fast Take Blood Glucose Monitors.

2. Indication(s) for use:

See intended use section above

3. Special conditions for use statement(s):

Over-The-Counter Use

4. Special instrument requirements:

Roche Accu-Chek Active, Bayer Ascensia Contour, LifeScan One Touch Ultra and Fast Take Blood Glucose Monitoring Systems

I. Device Description:

The SMS Multi Glucose Controls are aqueous liquid glucose control solutions for use with the Roche Accu-Chek Active, Bayer Ascensia Contour, LifeScan One Touch Ultra and Fast Take Blood Glucose Monitors. Each control consists of a buffered aqueous solution of D-Glucose, a viscosity modifier, preservatives, red dye, and other non-reactive ingredients. The device is non-sterile, non-hazardous and contains no human or animal derived materials.

The product is packaged in a plastic dropper tipped bottle for easy application of the control solution to the test strip and contains sufficient volume (3.6 mL) to run 75 tests. A red coloration is included to aid the user to visually confirm application of the control.

J. Substantial Equivalence Information:

1. Predicate device name(s):

Liberty Glucose Control Solution

2. Predicate 510(k) number(s):

k060706

3. Comparison with predicate:

Both devices contain D-Glucose and no human or animal derived materials.

Similarities		
Item	Device	Predicate
Target Population	Professional and home use	Professional and home use
Matrix	Buffered Aqueous Solution	Buffered Aqueous Solution
Container	Plastic bottle with dropper-tip	Plastic bottle with dropper-tip
Analytes	Glucose	Glucose
Number of Levels	1	1

K. Standard/Guidance Document Referenced (if applicable):

CLSI EP5-A, Evaluation of the Precision Performance of Clinical Chemistry Devices

L. Test Principle:

Not Applicable

M. Performance Characteristics (if/when applicable):

1. Analytical performance:

a. *Precision/Reproducibility:*

Not applicable

b. *Linearity/assay reportable range:*

Not applicable

c. *Traceability, Stability, Expected values (controls, calibrators, or methods):*

The D-Glucose used in this control is traceable to an in-house glucose preparation. Values are assigned by repeat analysis using three different lots of test strips. The mean and standard deviation are used to establish the acceptable range for each glucose monitoring system.

Stability characteristics of the SMS Multi Glucose Control were determined using real-time studies. The unopened shelf-life is 24 months and the open vial stability is 90 days at the recommended storage of 36 °F to 86 °F.

d. *Detection limit:*

Not applicable

e. *Analytical specificity:*

Not applicable

f. *Assay cut-off:*

Not applicable

2. Comparison studies:

a. *Method comparison with predicate device:*

Not applicable

b. *Matrix comparison:*

Not applicable

3. Clinical studies:

a. *Clinical Sensitivity:*

Not applicable

b. *Clinical specificity:*

Not applicable

c. *Other clinical supportive data (when a. and b. are not applicable):*

Not applicable

4. Clinical cut-off:

Not applicable

5. Expected values/Reference range:

An acceptable range for each glucose monitoring system is printed in the labeling. When using this control material, users are to compare their control results to the range printed in the labeling for the system being used rather than the range printed on the test strip.

N. Proposed Labeling:

The labeling is sufficient and it satisfies the requirements of 21 CFR Part 809.10.

O. Conclusion:

The submitted information in this premarket notification is complete and supports a substantial equivalence decision.