



**SPECIAL 510(k) SUBSTANTIAL EQUIVALENCE DETERMINATION
DECISION SUMMARY**

I Background Information:

A 510(k) Number

K220421

B Applicant

Apex BioTechnology Corp.

C Proprietary and Established Names

BGM039 Blood Glucose Monitoring System
BGM039 Link Blood Glucose Monitoring System

D Regulatory Information

Product Code(s)	Classification	Regulation Section	Panel
NBW	Class II	21 CFR 862.1345 - Glucose Test System	CH - Clinical Chemistry

II Review Summary:

This 510(k) submission contains information/data on modifications made to the submitter's own CLASS II device requiring 510(k). The following items are present and acceptable:

1. The name and 510(k) number of the SUBMITTER'S previously cleared device: GlucoSure HT Plus Blood Glucose Monitoring System, K202885.
2. Submitter's statement that the **INDICATIONS FOR USE/INTENDED USE** of the modified device as described in its labeling **HAS NOT CHANGED** along with the proposed labeling which includes instructions for use, package labeling, and, if available, advertisements or promotional materials (labeling changes are permitted as long as they do not affect the intended use).
3. A description of the device **MODIFICATION(S)**, including clearly labeled diagrams, engineering drawings, photographs, user's and/or service manuals in sufficient detail to

demonstrate that the **FUNDAMENTAL SCIENTIFIC TECHNOLOGY** of the modified device **has not changed. This change was for:**

- Changes common to both the BGM039 and BGM039 Link Blood Glucose Meters:
 - Change in meter dimensions from 96Lx58Wx16H (mm) to 86Lx58Wx18H (mm)
 - Removal of the test strip ejection button and removal of the USB port and functionality
 - Change in the position of all the buttons from the front to the side of the meter and a change in the position of the test strip port from the top to the bottom of the meter
 - Changes to the color of the buttons, the battery cover, and the upper and lower case of the meter
 - Changes to the circuit and to the microcontroller unit
 - Addition of Bluetooth functionality to the BGM039 Link Blood Glucose System only including associated meter display changes and the addition of Bluetooth pairing and data transmission related error messages
 - The device name was changed from GlucoSure HT Plus Blood Glucose Monitoring System to BGM039 Blood Glucose Monitoring System or BGM039 Link Blood Glucose Monitoring System
4. Comparison Information (i.e., similarities and differences) to the submitter's legally marketed predicate device including, labeling, intended use, and physical characteristics.
5. A Design Control Activities Summary which includes:
- a) Identification of Risk Analysis method(s) used to assess the impact of the modification on the device and its components, and the results of the analysis.
 - b) Based on the Risk Analysis, an identification of the verification and/or validation activities required, including methods or tests used and acceptance criteria to be applied.

The labeling for this modified subject device has been reviewed to verify that the indication/intended use for the device is unaffected by the modification. In addition, the submitter's description of the particular modification(s) and the comparative information between the modified and unmodified devices demonstrate that the fundamental scientific technology has not changed. The submitter has provided the design control information as specified in The New 510(k) Paradigm and on this basis, I recommend the device be determined substantially equivalent to the previously cleared (or their preamendment) device.

The device system is intended for single-patient use only. Disinfection efficacy studies were previously performed on the exterior meter materials (K50396) demonstrating complete inactivation of hepatitis B virus (HBV) with Clorox Healthcare Bleach Germicidal Wipes (EPA Reg. No.:67619-12). A robustness study was performed by the sponsor to demonstrate that the meter is robust to one cleaning and one disinfection cycle per week over a 5-year use life of the meter (260 cycles). Labeling was reviewed for adequate instructions for the validated cleaning and disinfection procedures.