



December 21, 2022

Apex BioTechnology Corp.
Lisa Liu
Manager of Quality Assurance Division
No. 7, Li-Hsin Road V, Hsinchu Science Park
Hsinchu, 30078
China

Re: K222234

Trade/Device Name: GlucoSure ADVANCE Link Blood Glucose Monitoring System
Regulation Number: 21 CFR 862.1345
Regulation Name: Glucose Test System
Regulatory Class: Class II
Product Code: NBW
Dated: July 25, 2022
Received: July 26, 2022

Dear Lisa Liu:

We have reviewed your Section 510(k) premarket notification of intent to market the device referenced above and have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to legally marketed predicate devices marketed in interstate commerce prior to May 28, 1976, the enactment date of the Medical Device Amendments, or to devices that have been reclassified in accordance with the provisions of the Federal Food, Drug, and Cosmetic Act (Act) that do not require approval of a premarket approval application (PMA). You may, therefore, market the device, subject to the general controls provisions of the Act. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at <https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm> identifies combination product submissions. The general controls provisions of the Act include requirements for annual registration, listing of devices, good manufacturing practice, labeling, and prohibitions against misbranding and adulteration. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to additional controls. Existing major regulations affecting your device can be found in the Code of Federal Regulations, Title 21, Parts 800 to 898. In addition, FDA may publish further announcements concerning your device in the Federal Register.

Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part

801 and Part 809); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803) for devices or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see <https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21 CFR Part 807.97). For questions regarding the reporting of adverse events under the MDR regulation (21 CFR Part 803), please go to <https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance>) and CDRH Learn (<https://www.fda.gov/training-and-continuing-education/cdrh-learn>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice>) for more information or contact DICE by email (DICE@fda.hhs.gov) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

Paula Caposino -S
Digitally signed by
Paula Caposino -S
Date: 2022.12.21
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Paula Caposino, Ph.D.
Acting Deputy Director
Division of Chemistry and Toxicology Devices
OHT7: Office of In Vitro Diagnostics
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

Indications for Use

510(k) Number (if known)

K222234

Device Name

GlucoSure ADVANCE Link Blood Glucose Monitoring System

Indications for Use (Describe)

The GlucoSure ADVANCE Link Blood Glucose Monitoring System is intended for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, forearm, or palm. Alternative site testing should be performed only during steady-state (when glucose is not changing rapidly). Testing is done outside the body (In Vitro diagnostic use). It is intended for self-testing by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. It should only be used by a single patient and should not be shared. It is not indicated for the diagnosis of or screening for diabetes or for neonatal use.

The GlucoSure ADVANCE Link Blood Glucose Monitoring System is comprised of the GlucoSure ADVANCE Link Blood Glucose Meter and GlucoSure ADVANCE Link Blood Glucose Test Strips.

Type of Use (Select one or both, as applicable)

Prescription Use (Part 21 CFR 801 Subpart D)

Over-The-Counter Use (21 CFR 801 Subpart C)

CONTINUE ON A SEPARATE PAGE IF NEEDED.

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510(k) Summary

510(k) number	K222234
Submitter	Apex Biotechnology Corp. No. 7, Li-Hsin Road V, Hsinchu Science Park Hsinchu, 30078 CHINA (TAIWAN)
Contact Person	Lisa Liu Manager of Quality Assurance Division Apex Biotechnology Corp. No. 7, Li-Hsin Road V, Hsinchu Science Park Hsinchu, 30078 CHINA (TAIWAN) email: lisaliu@apexbio.com Phone: 011-886-3-5641952 FAX: 011-886-3-5678021
Date Prepared	July 25, 2022
Trade Names	GlucoSure ADVANCE Link Blood Glucose Monitoring System
Classification	Glucose test system, 21 CFR 862.1345, Class II
Product Codes	NBW
Predicate Devices	BGM014 Blood Glucose Monitoring System (k161299)
Device Description	<p>The GlucoSure ADVANCE Link Blood Glucose Monitoring System consists of the GlucoSure ADVANCE Link Blood Glucose Meter, GlucoSure ADVANCE Link Blood Glucose Test Strips and Contrex Plus 5 glucose control solution. It is used for testing of blood glucose by self-testers at home. The GlucoSure ADVANCE Link Blood Glucose Test Strips and Contrex Plus 5 glucose control solution are purchased separately.</p> <p>The modified device of GlucoSure ADVANCE Link Blood Glucose Meter is derived from the existing device of BGM014 Blood Glucose Meter and the modified device contain the Bluetooth function to transfer glucose results to the mobile device.</p> <p>The blood glucose test strips and glucose control solution utilized in the GlucoSure ADVANCE Link Blood Glucose Monitoring System are the same as</p>

	<p>the BGM014 Blood Glucose Test Strips and Contrex Plus 5 Glucose Control Solution, previously cleared in k161299.</p> <p>The meter materials of GlucoSure ADVANCE Link Blood Glucose Meter are the same as the BGM014 Blood Glucose Meter. Therefore, the disinfection performance (robustness of meter to multiple cleanings and disinfections) was previously cleared in k161299.</p>
Intended Use	<p>The GlucoSure ADVANCE Link Blood Glucose Monitoring System is intended for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, forearm, or palm. Alternative site testing should be performed only during steady-state (when glucose is not changing rapidly). Testing is done outside the body (In Vitro diagnostic use). It is intended for self-testing by people with diabetes at home as an aid to monitor the effectiveness of diabetes control. It should only be used by a single patient and should not be shared. It is not indicated for the diagnosis of or screening for diabetes or for neonatal use.</p> <p>The GlucoSure ADVANCE Link Blood Glucose Monitoring System is comprised of the GlucoSure ADVANCE Link Blood Glucose Meter and GlucoSure ADVANCE Link Blood Glucose Test Strips.</p>
Comparison of Technological Characteristics	<p>The GlucoSure ADVANCE Link Blood Glucose Meter uses the same test strip and test algorithm as the predicate. The changes was for</p> <ul style="list-style-type: none"> • The color of strip ejection button changed from gray to white. The printing color on the backside of the LCD cover changed from gray to blue. • LCD pattern modification • Bluetooth connectivity was added to the meter for the wireless transfer of data to mobile devices. • Added Bluetooth related error message <ul style="list-style-type: none"> Er5: Bluetooth status failed Er6: The Bluetooth device pairing failed Er7: Failed data transmission via Bluetooth Er8: Bluetooth disconnected during data upload • Minor modification to control solution test process. • Decrease memory capacity from 1000 test results to 700 test results. • Battery life decreased from 1000 tests to 750 tests.

	<ul style="list-style-type: none"> • Change in name from BGM014 Blood Glucose Monitoring System to GlucoSure ADVANCE Link Blood Glucose Monitoring System. • Change in name from BGM014 Blood Glucose Meter to GlucoSure ADVANCE Link Blood Glucose Meter. • The GlucoSure ADVANCE Link Blood Glucose Monitoring System shares identical blood glucose test strips with BGM014 Blood Glucose Monitoring System, but only change in brand name from BGM014 Blood Glucose Test Strips to GlucoSure ADVANCE Link Blood Glucose Test Strips.
Non-Clinical Testing	Testing was conducted as follows: Battery life test, EMC and Electrical Safety, Software verification and validation including cybersecurity management demonstrate substantial equivalence to the predicate system.
Clinical Testing	A Usability study confirmed the system accuracy, operation according to design, and ease of use to support the intended use as described in the proposed labeling.
Conclusion	Testing showed that the GlucoSure ADVANCE Link Blood Glucose Monitoring System perform in a substantially equivalent manner to that of the predicate. We conclude that the candidate devices are substantially equivalent to the predicate device.