



Food and Drug Administration  
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September 5, 2014

ARKRAY USA  
LONNA DENDOOVEN  
REGULATORY AFFAIRS SPECIALIST  
5198 W. 76TH ST  
EDINA, MN 55439

Re: K142035

Trade/Device Name: GLUCOCARD 01-mini Blood Glucose Monitoring System,  
ReliOn Micro Blood Glucose Monitoring System

Regulation Number: 21 CFR 862.1345

Regulation Name: Glucose test system

Regulatory Class: II

Product Code: CGA, NBW

Dated: July 24, 2014

Received: July 28, 2014

Dear Ms. Lonna DenDooven:

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. 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 Parts 801 and 809); medical device reporting (reporting of medical device-related adverse events) (21 CFR 803); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

If you desire specific advice for your device on our labeling regulations (21 CFR Parts 801 and 809), please contact the Division of Industry and Consumer Education at its toll-free number (800) 638 2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>. 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 <http://www.fda.gov/MedicalDevices/Safety/ReportaProblem/default.htm> for the CDRH’s Office of Surveillance and Biometrics/Division of Postmarket Surveillance.

You may obtain other general information on your responsibilities under the Act from the Division of Industry and Consumer Education at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/MedicalDevices/ResourcesforYou/Industry/default.htm>.

Sincerely yours,

**Courtney H. Lias -S**

Courtney H. Lias, Ph.D.  
Director  
Division of Chemistry and Toxicology Devices  
Office of In Vitro Diagnostics  
and Radiological Health  
Center for Devices and Radiological Health

Enclosure

## Indications for Use

510(k) Number (if known)  
k142035

Device Name  
The GLUCOCARD 01-mini Blood Glucose Monitoring System  
The ReliOn Micro Blood Glucose Monitoring System

### Indications for Use (Describe)

The GLUCOCARD 01-mini Blood Glucose Monitoring System is intended for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, or palm. Testing is done outside the body (In Vitro diagnostic use). It is indicated for use at home by persons with diabetes as an aid to monitor the effectiveness of diabetes control. It is not intended for the diagnosis of or screening for diabetes mellitus, and is not intended for use on neonates. It is intended for single patient use and should not be shared with other individuals.

The GLUCOCARD 01 SENSOR PLUS Blood Glucose Test Strips are intended to be used with the GLUCOCARD 01-mini Blood Glucose Meter for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, or palm.

The ReliOn Micro Blood Glucose Monitoring System is intended for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, or palm. Testing is done outside the body (In Vitro diagnostic use). It is indicated for use at home by persons with diabetes as an aid to monitor the effectiveness of diabetes control. It is not intended for the diagnosis of or screening for diabetes mellitus, and is not intended for use on neonates. It is intended for single patient use and should not be shared with other individuals.

The ReliOn Micro Plus Blood Glucose Test Strips are intended to be used with the ReliOn Micro Blood Glucose Meter for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, or palm.

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)

**PLEASE DO NOT WRITE BELOW THIS LINE – CONTINUE ON A SEPARATE PAGE IF NEEDED.**

### FOR FDA USE ONLY

Concurrence of Center for Devices and Radiological Health (CDRH) (Signature)

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This section applies only to requirements of the Paperwork Reduction Act of 1995.

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## 510(k) Summary

<b>Submitter:</b>	ARKRAY Factory, Inc. 1480 Koji, Konan-cho Koka-shi, Shiga, JAPAN, 520-3306
<b>Contact Person:</b>	Lonna M. DenDooven Regulatory Affairs Specialist ARKRAY Factory USA, Inc. 5182 West 76 <sup>th</sup> Street Edina, Minnesota, USA 55439 Phone: (952) 646-3175 Fax: (952) 646-3230
<b>Date Prepared:</b>	July 17, 2014
<b>Trade Name:</b>	GLUCOCARD 01-mini Blood Glucose Monitoring System ReliOn Micro Blood Glucose Monitoring System
<b>Classification:</b>	Glucose test system, 21 CFR 862.1345; Class II
<b>Product Codes:</b>	CGA, NBW
<b>Predicate Device:</b>	GLUCOCARD 01-mini Blood Glucose Monitoring System (K082417)
<b>Device Description:</b>	The GLUCOCARD 01-mini Blood Glucose Monitoring System and ReliOn Micro Blood Glucose Monitoring System consist of a meter, test strips, and control solution for use as an aid to monitor the effectiveness of diabetes control.
<b>Intended Use:</b>	<p>The GLUCOCARD 01-mini Blood Glucose Monitoring System is intended for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, or palm. Testing is done outside the body (In Vitro diagnostic use). It is indicated for use at home by persons with diabetes as an aid to monitor the effectiveness of diabetes control. It is not intended for the diagnosis of or screening for diabetes mellitus, and is not intended for use on neonates. It is intended for single patient use and should not be shared with other individuals.</p> <p>The GLUCOCARD 01 SENSOR PLUS Blood Glucose Test Strips are intended to be used with the GLUCOCARD 01-mini Blood Glucose Meter for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, or palm.</p> <p>For over the counter use only</p> <p>The ReliOn Micro Blood Glucose Monitoring System is intended for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, or palm. Testing is done outside the body (In Vitro diagnostic use). It is indicated for use at home by persons with diabetes as an aid to monitor the effectiveness of diabetes control. It is not intended for the diagnosis of or screening for diabetes mellitus, and is not intended for use on neonates. It is intended for single patient use and should not be shared with</p>

	<p>other individuals</p> <p>The ReliOn Micro Plus Blood Glucose Test Strips are intended to be used with the ReliOn Micro Blood Glucose Meter for the quantitative measurement of glucose in fresh capillary whole blood samples drawn from the fingertips, or palm.</p> <p>For over the counter use only</p>
<p><b>Substantial Equivalence Basis:</b></p>	<p>The new GLUCOCARD 01-mini Blood Glucose Monitoring System is identical to the GLUCOCARD 01-mini (k082417, cleared by FDA October 21, 2008) except that the manufacturing process for the GLUCOCARD 01 SENSOR Blood Glucose Test Strip has been modified to allow for more efficient production (new trade name: GLUCOCARD 01 SENSOR PLUS). The fundamental scientific technology of the modified test strip has not changed. The modifications to the test strip did not require any changes to meter hardware, software or other components of the test system.</p>
<p><b>Functional and Safety Testing:</b></p>	<p>A clinical study was done with persons with diabetes to evaluate system accuracy and to assess ease of use.</p> <p>Analytical verification testing was performed to evaluate precision, dynamic range/linearity, interfering substances, sample volume, stability and the effect of altitude, hematocrit, and environmental conditions.</p>
<p><b>Conclusion:</b></p>	<p>Labeling, bench testing results and clinical testing results support the Indications for Use and the claim of substantial equivalence to the predicate.</p>