

JUN 11 2002

K021513

## 510(k) Summary

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**Introduction** According to the requirements of 21 CFR 807.92, the following information provides sufficient detail to understand the basis for a determination of substantial equivalence.

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**1) Submitter name, address, contact** Roche Diagnostics Corporation  
9115 Hague Rd.  
Indianapolis, IN 46250  
(317) 845-2000

Contact Person: Scott Thiel

Date Prepared: May 7, 2002

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**2) Device name** Proprietary name: Accu-Chek Advantage Module  
  
Common name: Whole blood glucose test system  
  
Classification name: 75 LFR, Glucose dehydrogenase, glucose

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**3) Predicate device** We claim substantial equivalence to the Accu-Chek Complete System.

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**4) Device Description** The Accu-Chek Advantage Module is an in vitro device designed for measuring the concentration of glucose in whole blood, which is applied to the Accu-Chek Comfort Curve test strips.

The test principle is:

The enzyme glucose dehydrogenase converts the glucose in a blood sample to gluconolactone. This reaction liberates an electron that reacts with a coenzyme electron acceptor, the oxidized form of the mediator hexacyanoferrate (III), forming the reduced form of the mediator, hexacyanoferrate (II). The test strip employs the electrochemical principle of biamperometry. The meter applies a voltage between two identical electrodes, which causes the reduced mediator formed during the incubation period to be reconverted to an oxidized mediator. This generates a small current that is read by the meter.

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*Continued on next page*

## 510(k) Summary, Continued

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**5) Intended use** The Accu-Chek Advantage Module is designed for testing glucose in whole blood by persons with diabetes or by health care professionals in the home or in health care facilities.

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**6) Comparison to predicate device** The Roche Diagnostics Accu-Chek Advantage Module is substantially equivalent to other products in commercial distribution intended for similar use. Most notably, it is substantially equivalent to the currently marketed Accu-Chek Complete System.

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DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

Mr. Scott Thiel  
Regulatory Affairs/Diabetes Specialist  
Roche Diagnostics Corporation  
9115 Hague Rd.  
P.O. Box 50457  
Indianapolis, IN 46250

**JUN 11 2002**

Re: k021513

Device Name: Accu-Chek Advantage Module  
Regulation Number: 21 CFR§862.1345  
Regulation Name: Glucose Test System  
Regulatory Class: II  
Product Code: NBW  
Dated: June 3, 2002  
Received: June 5, 2002

Dear Mr. Thiel:

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.

If your device is classified (see above) into either class II (Special Controls) or class III (PMA), it may be subject to such 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.

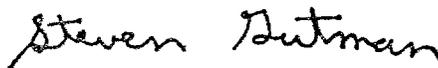
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's requirements, including, but not limited to: registration and listing (21 CFR Part 807); labeling (21 CFR Part 801); 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.

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This letter will allow you to begin marketing your device as described in your 510(k) premarket notification. The FDA finding of substantial equivalence of your device to a legally marketed predicate device results in a classification for your device and thus, permits your device to proceed to the market.

If you desire specific advice for your device on our labeling regulation (21 CFR Part 801 and additionally 809.10 for in vitro diagnostic devices), please contact the Office of Compliance at (301) 594-4588. Additionally, for questions on the promotion and advertising of your device, please contact the Office of Compliance at (301) 594-4639. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "<http://www.fda.gov/cdrh/dsma/dsmamain.html>".

Sincerely yours,

A handwritten signature in black ink that reads "Steven Gutman". The signature is written in a cursive style.

Steven I. Gutman, M.D., M.B.A.  
Director  
Division of Clinical  
Laboratory Devices  
Office of Device Evaluation  
Center for Devices and  
Radiological Health

Enclosure

510(k) Number (if known):  
Device Name: Accu-Chek Advantage Module  
Indications for Use:

The Accu-Chek Advantage Module is designed for testing glucose in whole blood by persons with diabetes or by health care professionals in the home or in health care facilities.

Sean Coogan  
(Division Sign-Off)  
Division of Clinical Laboratory Devices  
510(k) Number K021513

(PLEASE DO NOT WRITE BELOW THIS LINE - CONTINUE ON ANOTHER PAGE IF  
NEEDED)

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Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use \_\_\_\_\_  
(Per 21 CFR 801.109)

OR

Over-The-Counter Use ✓

(Optional Format 1-2-96)