



DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

Dr. David Casal  
Vice President, Clinical, Regulatory, and Quality Affairs  
Microgenics Corporation  
46360 Fremont Boulevard  
Fremont, CA 94538

JUL 28 1991

Re: K034069  
Evaluation of Automatic Class III Designation  
Microgenics CEDIA® Sirolimus Assay  
Regulation Number: 21 CFR 862.3840  
Classification: Class II  
Product Code: NRP

Dear Dr. Casal:

The Center for Devices and Radiological Health (CDRH) of the Food and Drug Administration (FDA) has completed its review of your petition for classification of the Microgenics CEDIA® Sirolimus Assay that is intended for the quantitative determination of sirolimus in human whole blood, using automated clinical chemistry analyzers, as an aid in the management of sirolimus therapy in renal transplant patients taking sirolimus. FDA concludes that this device, and substantially equivalent devices of this generic type, should be classified into class II. This order, therefore, classifies the Microgenics CEDIA® Sirolimus Assay, and substantially equivalent devices of this generic type into class II under the generic name, Sirolimus Test Systems. This order also identifies the special controls applicable to this device.

FDA identifies this generic type of device as:

21 CFR 862.3840 Sirolimus Test System. A sirolimus test system is a device intended to quantitatively determine sirolimus concentrations in whole blood. Measurements are used as an aid in the management of transplant patients receiving therapy with sirolimus.

In accordance with section 513(f)(1) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360c(f)(1)) (the act), devices that were not in commercial distribution prior to May 28, 1976 (the date of enactment of the Medical Device Amendments of 1976 (the amendments)), generally referred to as postamendments devices, are classified automatically by statute into class III without any FDA rulemaking process. These devices remain in class III and require premarket approval, unless and until the device is classified or reclassified into class I or II or FDA issues an order finding the device to be substantially equivalent, in accordance with section 513(i) of the act (21 U.S.C. 360c(i)), to a predicate device that does not require premarket approval. The agency determines whether new devices are substantially equivalent to previously marketed devices by means of premarket notification procedures in section 510(k) of the act (21 U.S.C. 360(k)) and Part 807 of the FDA regulations (21 CFR 807).

Section 513(f)(2) of the act provides that any person who submits a premarket notification under section 510(k) for a device may, within 30 days after receiving an order classifying the device in class III under section 513(f)(1), request FDA to classify the device under the criteria set forth in section 513(a)(1). FDA shall, within 60 days of receiving such a request classify the device. This classification shall be the initial classification of the device type. Within 30 days after the issuance of an order classifying the device, FDA must publish a notice in the **Federal Register** classifying the device type.

On June 17, 2004, FDA filed your petition requesting classification of the Microgenics CEDIA® Sirolimus Assay into class II. The petition was submitted under section 513(f)(2) of the act. In accordance with section 513(f)(1) of the act, FDA issued an order on June 15, 2004, automatically classifying the Microgenics CEDIA® Sirolimus Assay in class III, because it was not within a type of device which was introduced or delivered for introduction into interstate commerce for commercial distribution before May 28, 1976, which was subsequently reclassified into class I or class II. In order to classify the Microgenics CEDIA® Sirolimus Assay into class I or II, it is necessary that the proposed class have sufficient regulatory controls to provide reasonable assurance of the safety and effectiveness of the device for its intended use.

After review of the information submitted in the petition, FDA has determined that the Microgenics CEDIA® Sirolimus Assay, intended for use for the quantitative determination of sirolimus in human whole blood, using automated clinical chemistry analyzers, as an aid in the management of sirolimus therapy in renal transplant patients taking sirolimus, can be classified in class II with the establishment of special controls. FDA believes that class II special controls provide reasonable assurance of the safety and effectiveness of the device.

FDA has identified no direct risks to health related to use of sirolimus test systems. However, failure of the test to perform as indicated, or an error in interpretation of results, could lead to improper patient management. Specifically, a falsely low sirolimus measurement could contribute to a decision to raise the dose above that which is necessary for therapeutic benefit. This could result in increased risk in the form of thrombocytopenia, leukopenia, anemia, or hyperlipidemia. A falsely high sirolimus measurement could contribute to a decision to decrease the dose below that which is necessary for immunosuppression. This could result in increased risk of rejection of the transplanted organ. Since optimal ranges for sirolimus may vary depending on the metabolite cross-reactivity of the specific assay, as well as on clinical factors, use of assay results to adjust a treatment regimen without consideration of such factors could also pose a risk. The measures FDA recommends to mitigate these risks are described in the guidance document, "Class II Special Controls Guidance Document: Sirolimus Test Systems", which includes recommendations for performance validation and labeling.

In addition to the general controls of the act, Sirolimus Test Systems are subject to the following special controls: "Class II Special Controls Guidance Document: Sirolimus Test Systems". Section 510(m) of the act provides that FDA may exempt a class II device from the premarket notification requirements under section 510(k) of the act, if FDA determines that premarket notification is not necessary to provide reasonable assurance of the safety and effectiveness of the device. FDA has determined premarket notification is necessary to provide reasonable assurance of the safety and effectiveness of the device and, therefore, the device is not exempt from the premarket notification requirements. Thus, persons who intend to market this device must submit to FDA a premarket notification submission containing information on the sirolimus test system they intend to market prior to marketing the device.

A notice announcing this classification order will be published in the **Federal Register**. A copy of this order and supporting documentation are on file in the Dockets Management Branch (HFA-305), Food and Drug Administration, 5630 Fishers Lane, Room 1061, Rockville, MD 20852 and are available for inspection between 9 a.m. and 4 p.m., Monday through Friday.

As a result of this order, you may immediately market this device, subject to the general control provisions of the act and the special controls identified in this order.

If you have any questions concerning this classification order, please contact Avis Danishefsky at (301) 594-1243.

Sincerely yours,



for Steven I. Gutman, M.D., M.B.A.  
Director  
Office of *In Vitro* Diagnostic Device  
Evaluation and Safety  
Center for Devices and  
Radiological Health