

DUPLICATE

K 033607 / A3



Diagnostics

December 5, 2003

Document Mail Center, ODE, (HFZ-401)  
Center for Devices and Radiological Health  
Food and Drug Administration  
9200 Corporate Blvd.  
Rockville, Maryland 20850

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2003 DEC -8 A 11: 28

FDA/CDRH/CBE/RMO

Re: **K033607, Request for Evaluation of Automatic Class III Designation under 513(f)(2)**

Dear FDA:

**510(k) Number for NSE finding:**

Roche Diagnostics respectfully requests that premarket notification K033607 be considered for a risk-based classification of the Factor V Leiden Kit. A "not substantially equivalent" decision was rendered for K033607 on December 5, 2003.

**Statement of Cross Reference to 510(k)**

Roche Diagnostics hereby cross-references information contained in 510(k) K033607.

**Classification being Recommended:**

Roche Diagnostics believes the documentation presented in premarket notification K033607 is sufficient to substantiate an order classifying the Factor V Leiden Kit as Class II (general and special controls) pursuant to section 513 of the Federal Food, Drug and Cosmetic Act.

**Potential benefits**

In the United States, two consensus statements have been published<sup>1,2</sup>

<sup>1</sup>Press, RD et al. (2003) Clinical Utility of Factor V Leiden (R506Q) Testing for the Diagnosis and Management of Thromboembolic Disorders. CAP Consensus Conference XXXVI: *Diagnostic Issues in Thrombophilia*

<sup>2</sup>Grody, WW et al. (2001) American College of Medical Genetics Consensus Statement on Factor V Leiden Mutation Testing. *Genetics in Medicine*, 3, Vol.2,139-148.

According to the College of American Pathologists, the primary advantage of testing for inherited thrombophilias "would be the identification of high-risk patients who could benefit from either long term anticoagulant therapy or aggressive prophylaxis in temporary periods of high thrombotic risk."

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2004P-0044

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The benefits derived from testing outweigh the possible risks associated with use of the product as an aid to diagnosis in the evaluation of patients with suspected thrombophilia include:

- The risk of a false positive is remote, as the prevalence of the causative rare mutations is estimated at less than 0.1%.
- Factor V Leiden DNA Mutation Detection Systems are not the sole means by which the occurrence of a single thromboembolic event, requiring acute anticoagulant treatment, is detected.
- Acute management of venous thromboembolic events (administration of heparin) is not altered in patients with inherited thrombophilia.
- Decisions about long-term oral anticoagulant therapy are tailored to individual patients depending on their other clinical risk factors, not solely on their inherited thrombophilia status.

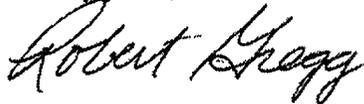
In general, nucleic acid based assays are proving to be highly reliable and accurate in comparison to current reference methodologies while offering the additional benefit of speed of delivery of the result. The LightCycler Factor V Leiden Kit demonstrated high reliability and high accuracy in prospective studies in the population of patients for which the device is intended to be used. Reliability was evidenced by the fact that 99.8% of patients were able to be genotyped by the LightCycler Factor V Leiden Kit and when a genotype was rendered it was 100% accurate with state-of-the-art direct sequencing as a reference method.

**Proposed General and Special Controls:**

Roche Diagnostics believes that general controls and special controls in accordance with FDA's draft Class II Special Control Guidance Document: "*Factor V Leiden DNA Mutation Detection Systems*" constitute adequate information to ensure reasonable assurance of the safety and effectiveness of the LightCycler Factor V Leiden Kit (K033607) via the premarket notification process 21 CFR 807. These controls parallel the safety and effectiveness information provided in K033607 for its intended use as an aid to diagnosis in the evaluation of patients with suspected thrombophilia.

If there are any questions regarding this submission, please contact me by phone at (317) 521-2386, or by fax at (317) 521-2324, or by mail at the address given below.

Sincerely yours,



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(Official Correspondent)  
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