James F. Kelly, Ph.D.
Regulatory Affairs
Roche Molecular Systems, Inc.
4300 Hacienda Dr.
Pleasanton, CA 94588

Re: k042259
Evaluation of Automatic Class III Designation
Roche AmpliChip CYP450 Test
Regulation Number: 21 CFR 862.3360
Classification: Class II
Product Code: NTI

Dear Dr. Kelly:

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 Roche AmpliChip CYP450 Test that is intended to identify a patient’s CYP2D6 genotype from genomic DNA extracted from a whole blood sample. Information about CYP2D6 genotype may be used as an aid to clinicians in determining therapeutic strategy and treatment doses for therapeutics that are metabolized by the CYP2D6 gene product. FDA concludes that this device, and substantially equivalent devices of this generic type, should be classified into class II. This order, therefore, classifies the Roche AmpliChip CYP450 Test, and substantially equivalent devices of this generic type into class II under the generic name, Drug Metabolizing Enzyme Genotyping System. This order also identifies the special controls applicable to this device.

FDA identifies this generic type of device as:

21 CFR §862.3360 – Drug Metabolizing Enzyme Genotyping System. A drug metabolizing enzyme genotyping system is intended for use in testing DNA to identify the presence or absence of human genotypic markers encoding a drug metabolizing enzyme. The device is used as an aid in determining treatment choice and individualizing treatment dose for therapeutics that are metabolized primarily by the specific enzyme about which the system provides genotypic information.

In accordance with section 513(f)(1) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. 360e(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 December 20, 2004, FDA filed your petition requesting classification of the Roche
AmpliChip CYP450 Test 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 December
17, 2004, automatically classifying the Roche AmpliChip CYP450 Test 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 Roche AmpliChip
CYP450 Test 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 Roche
AmpliChip CYP450 Test 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 drug metabolizing enzyme
genotyping systems. However, failure to correctly identify a drug metabolizing enzyme
genotype, or failure to properly interpret genotyping results, could lead to incorrect patient
management decisions. The measures FDA recommends to mitigate these risks are described
in the guidance documents, “Class II Special Controls Guidance Document: Drug
Metabolizing Enzyme Genotyping System”, which includes recommendations for
performance validation and labeling.

In addition to the general controls of the act, the Roche AmpliChip CYP450 Test is subject to
the following special controls: “Class II Special Controls Guidance Document: Drug
Metabolizing Enzyme Genotyping System.” 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 type must submit to FDA a premarket notification submission containing information on the Drug Metabolizing Enzyme Genotyping 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 begin marketing your device subject to the general control provisions of the act, and the special controls identified in this order. If you have questions concerning this classification order, please contact Courtney Harper at (240) 276-0443.

Sincerely yours,

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