

K103601

JUN 10 2011

510(k) Summary

A. Submitter

Aalto Scientific, Ltd.  
1959 Kellogg Ave.  
Carlsbad, CA 92008  
Telephone: (760) 431-7922  
Fax: (760) 431-6824

B. Contact Person

Dessi Lyakov  
Telephone: (760) 431-7922 Ext. 118  
E-mail: dlyakov@aaltoscientific.com

C. Date of Summary Preparation

June 7, 2011

D. Device Identification

Product Trade Name:	Audit™ MicroCV™ Free T4 / Free T3 Linearity Set
Common Name:	Calibration Verification
Classification Name:	Multi analyte controls (Assayed and Unassayed)
Device Classification:	Class I
Regulation Number:	21 CFR 862.1660
Panel:	75
Product Code:	JJY

E. Legally marketed (unmodified) device

Product Trade Name:	Audit MicroCV Free T4 / Free T3 Linearity Set
	Aalto Scientific, Ltd., Carlsbad, California
	K062668

## **F. Description of the Modified Device**

The Audit™ MicroCV™ Free T4 / Free T3 Linearity Set is a 5 level quality control solution set containing Free T4 / Free T3 analytes as the messurand. It is used to confirm the proper calibration, linear operating range, and reportable range of Free T4 / Free T3 analytes. Level A is near the lower limit level and Level E has concentrations near the upper limit of instruments. Levels B – D are related by linear dilution of Level A and Level E.

## **Statement of Intended Use**

The Audit™ MicroCV™ Free T4 / Free T3 Linearity Set consists of five levels of human and bovine albumin based matrix. Each level contains the following analytes: Free T4 and Free T3. The five levels demonstrate a linear relationship to each other for their respective analytes, reagents, and instruments.

This product may also be used as a quality control material for these analytes. When used for quality control purposes, it is recommended that each laboratory establish its own means and acceptable ranges and use the values provided only as guides. The product is intended for use with quantitative assays on automatic analyzers. The Audit™ Free T4 / Free T3 Linearity Set is "For In Vitro Diagnostic Use Only".

## **I. Summary of Performance Data**

Stability studies have been performed to determine the open vial stability and shelf life for the Audit™ MicroCV™ Free T4 / Free T3 Linearity Set. All supporting data is retained on file at Aalto Scientific, Ltd. Product claims are as follows:

*Open Vial Stability:* Once a vial has been reconstituted, all analytes will be stable for 5 days when stored tightly capped at 2-8 C.

*Shelf Life:* 24 months at 2 - 8° C.

*Note:* Real time studies are ongoing to support the shelf life of this product.

## H. Technical Characteristics Compared to Unmodified Device

Characteristics	Audit™ MicroCV™ Free T4 / Free T3 Linearity Set K103601	Audit™ MicroCV™ Immunoassay Linearity Set K062668
Intended Use	<p>The Audit™ MicroCV™ Free T4 / Free T3 Linearity Set consists of five levels of human and bovine albumin based matrix. Each level contains the following analytes: Free T4 and Free T3. The five levels demonstrate a linear relationship to each other for their respective analytes, reagents, and instruments.</p> <p>This product may also be used as a quality control material for these analytes. When used for quality control purposes, it is recommended that each laboratory establish its own means and acceptable ranges and use the values provided only as guides. The product is intended for use with quantitative assays on automatic analyzers. The Audit™ Free T4 / Free T3 Linearity Set is "For In Vitro Diagnostic Use Only".</p>	<p>Audit™ MicroCV™ Immunoassay Linearity Set is assayed quality control material consisting of human Albumin based serum. It is intended to simulate human patient serum samples for the purpose of monitoring the precision and to detect systematic analytical deviations of laboratory testing procedures. This product may also be used as unassayed quality control material for these same analytes and may be used for proficiency testing in interlaboratory surveys. In addition, this product may also be used to perform CLIA directed calibration verification for these same analytes with similar reagents on similar instrumentation in accordance with current CLIA-88 guidelines and regulations.</p>
Number of levels per set	5	5
Contents	5 x 5mL	5 x 5mL
Matrix	Human and Bovine Albumin Serum	Human and Bovine Albumin Serum
Type of Analytes	Free T4 and Free T3	Cortisol, Digoxin, Estradiol, Ferritin, Folate, Free T4, FSH, hCG, LH, Progesterone, Prolactin, Testosterone, Total PSA, Total T3, Total T4, TSH, and Vitamin B12.
Form	Lyophilized	Lyophilized
Storage	2 to 8° C for 24 months	2 to 8° C for 24 months
Open Bottle Stability	5 days at 2 to 8° C	5 days at 2 to 8° C

## **J. Conclusions**

Based upon the purpose of the device, the descriptions and labeling of the unmodified device, the safety and efficacy, the risk analyses, and the stability data generated, the modified product is practically identical to the unmodified device.



Aalto Scientific Ltd.  
c/o Dessi Lyakov, Regulatory Affairs Manager  
1959 Kellogg Ave.  
Carlsbad, CA 92008

Food and Drug Administration  
10903 New Hampshire Avenue  
Silver Spring, MD 20993

JUN 10 2011

Re: k103601

Trade/Device Name: Audit™ MicroCV™ FreeT4/FreeT3 Linearity Set  
Regulation Number: 21 CFR 862.1660  
Regulation Name: Quality Control Material (Assayed and Unassayed)  
Regulatory Class: Class I, reserved  
Product Code: JJY  
Dated: 24 March, 2011  
Received: 29 March, 2011

Dear Ms. Lyakov:

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.

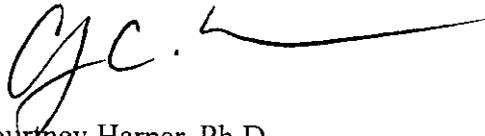
If your device is classified (see above) into class II (Special Controls), it may be subject to such additional controls. Existing major regulations affecting your device can be found in Title 21, Code of Federal Regulations (CFR), Parts 800 to 895. In addition, FDA may publish further announcements 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); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820). This letter will allow you to begin marketing your device as described in your Section 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 Parts 801 and 809), please contact the Office of *In Vitro* Diagnostic Device Evaluation and Safety at (301) 796-5450. 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 Small Manufacturers, International and Consumer Assistance at its toll-free number (800) 638-2041 or (301) 796-7100 or at its Internet address <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

A handwritten signature in black ink, appearing to read 'CHC', followed by a long horizontal line extending to the right.

Courtney Harper, Ph.D.  
Director  
Division of Chemistry and Toxicology  
Office of *In Vitro* Diagnostic Device  
Evaluation and Safety  
Center for Devices and Radiological Health

Enclosure



### Indications for Use

510(k) Number: K103601

Device Name: Audit™ MicroCV Free T4 / Free T3 Linearity Set

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Prescription Use   X    
(Part 21 CFR 801 Subpart D)

AND/OR

Over-The-Counter Use \_\_\_\_\_  
(21 CFR 801 Subpart C)

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

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Concurrence of CDRH, Office of In Vitro Diagnostic Devices (OIVD)

*Carol C. Benson*

Division Sign-Off  
Office of In Vitro Diagnostic Devices  
Evaluation and Safety

510(k)   K103601