K981189

MAY 7 1998

510(k) Summary

Submitter's Name/Address
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Date of Preparation of this Summary: March 31, 1998

Device Trade or Proprietary Name: Uric Acid

Device Common/Usual Name or Classification Name: Uric Acid

Classification Number/Class: 75CDO/Class I

This summary of 510(k) safety and effectiveness information is being submitted in accordance with the requirements of SMDA 1990 and 21 CFR 807.92.
The assigned 510(k) number is: _____.

Test Description:

Uric Acid is an *in vitro* diagnostic assay for the quantitative determination of uric acid in human serum, plasma, or urine. The Uric Acid assay is a clinical chemistry assay in which uric acid is oxidized to allantoin by uricase with the production of hydrogen peroxide. The peroxide reacts with 4-aminoantipyrine and TBHB in the presence of peroxidase to yield a quinoneimine dye. The resulting change in absorbance at 550 nm is proportional to the uric acid concentration in the sample.

Substantial Equivalence:

The Uric Acid assay is substantially equivalent to the following devices:

- Roche® Cobas Mira® Plus Automated Chemistry Uric Acid assay (K922762) for the serum application
- Boehringer Mannheim® Uric Acid assay (K873363) on the Hitachi® 717 Analyzer for the urine application

These assays yield similar Performance Characteristics.

Similarities to Roche:

- Both assays are *in vitro* clinical chemistry methods.
- Both assays can be used for the quantitative determination of uric acid.
- Both assays yield similar clinical results.

Differences to Roche:

- There is a minor difference between the assay ranges.

Similarities to Boehringer Mannheim:

- Both assays are *in vitro* clinical chemistry methods.
- Both assays can be used for the quantitative determination of uric acid.
- Both assays yield similar clinical results.

Differences to Boehringer Mannheim:

- There is a minor difference between the assay ranges.

Intended Use:

The Uric Acid assay is used for the quantitation of uric acid in human serum, plasma, or urine on the ALCYON 300/300i Analyzer.

Performance Characteristics:

Comparative performance studies were conducted using the ALCYON™ Analyzer. The Uric Acid assay method comparison yielded acceptable correlation with the Roche

Cobas Mira Plus Automated Chemistry System Uric Acid assay for the serum application and the Boehringer Mannheim Uric Acid assay on the Hitachi 717 Analyzer for the urine application. For the serum application, the correlation coefficient = 0.9918, slope = 0.981 and the Y-intercept = 0.599 mg/dL. For the urine application, the correlation coefficient = 0.9854, slope = 0.951 and the Y-intercept = 0.435 mg/dL. Precision studies were conducted using the Uric Acid assay. Within-run, between-run, and between-day studies were performed using two levels of control material. For the serum application, the total %CV for Level 1/Panel 111 is 2.8% and Level 2/Panel 112 is 2.3%. For the urine application, the total %CV for Level 1/Panel 131 is 4.4% and Level 2/Panel 132 is 3.2%. The Uric Acid assay is linear up to 26 mg/dL. The limit of quantitation (sensitivity) of the Uric Acid assay is 0.3 mg/dL. These data demonstrate that the performance of the Uric Acid assay is substantially equivalent to the performance of the Roche Cobas Mira Plus Automated Chemistry System Uric Acid assay for the serum application and the Boehringer Mannheim Uric Acid assay on the Hitachi 717 Analyzer for the urine application.

Conclusion:

The Uric Acid assay is substantially equivalent to the Roche Cobas Mira Plus Automated Chemistry System Uric Acid assay for the serum application and the Boehringer Mannheim Uric Acid assay on the Hitachi 717Analyzer for the urine application as demonstrated by results obtained in the studies.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Public Health Service

Food and Drug Administration
2098 Gaither Road
Rockville MD 20850

MAY 7 1998

Mark Littlefield
Section Manager, Regulatory Affairs
Abbott Laboratories
1920 Hurd Drive
Irving, Texas 75038

Re: K981189
Uric Acid
Regulatory Class: I
Product Code: CDO
Dated: March 31, 1998
Received: April 2, 1998

Dear Mr. Littlefield:

We have reviewed your Section 510(k) notification of intent to market the device referenced above and we have determined the device is substantially equivalent (for the indications for use stated in the enclosure) to 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). 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 (Premarket Approval), 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 895. A substantially equivalent determination assumes compliance with the Current Good Manufacturing Practice requirements, as set forth in the Quality System Regulation (QS) for Medical Devices: General regulation (21 CFR Part 820) and that, through periodic QS inspections, the Food and Drug Administration (FDA) will verify such assumptions. Failure to comply with the GMP regulation may result in regulatory action. In addition, FDA may publish further announcements concerning your device in the Federal Register. Please note: this response to your premarket notification submission does not affect any obligation you might have under sections 531 through 542 of the Act for devices under the Electronic Product Radiation Control provisions, or other Federal laws or regulations.

Under the Clinical Laboratory Improvement Amendments of 1988 (CLIA-88), this device may require a CLIA complexity categorization. To determine if it does, you should contact the Centers for Disease Control and Prevention (CDC) at (770) 488-7655.

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" (21 CFR 807.97). Other general information on your responsibilities under the Act may be obtained from the Division of Small Manufacturers Assistance at its toll-free number (800) 638-2041 or (301) 443-6597 or at its internet address "http://www.fda.gov/cdrh/dsmamain.html".

Sincerely yours,

Steven Gutman

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: Uric Acid

Indications For Use:

The Uric Acid assay is used for the quantitation of uric acid in serum, plasma, or urine on the ALCYON 300/300i Analyzer. Measurements of uric acid are used in the diagnosis and treatment of numerous renal and metabolic disorders, including renal failure, gout, leukemia, psoriasis, starvation or other wasting conditions, and of patients receiving cytotoxic drugs.

(Division Sign-Off)
Division of Clinical Laboratory Devices
510(k) Number K981189

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

Concurrence of CDRH, Office of Device Evaluation (ODE)

Prescription Use ✓ OR Over-The-Counter Use _____
(Per 21 CFR 801.109)

(Optional Format 1-2-96)