

## ARCHITECT iDigoxin

### 510(k) Summary (Summary of Safety and Effectiveness)

This summary of the 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: K082953

**Preparation Date:** 30<sup>th</sup> September 2008

**Applicant Name:**

Mr. Joan Guixer  
Director of Quality Assurance and Regulatory Affairs  
Biokit S.A.  
Lliça d'Amunt  
Barcelona, Spain 08186

**Device Name:**

Reagents

Classification Name: digoxin test system  
Trade Name: ARCHITECT iDigoxin Immunoassay  
Common Name: digoxin test system  
Governing Regulation: 862.3320  
Device Classification: Class II  
Classification Panel: Toxicology  
Product Code: KXT

Calibrators: Classification Name: Calibrator, drug specific

Trade Name: ARCHITECT iDigoxin Calibrators (A-F)  
Common Name: Calibrator  
Governing Regulation: 862.3200  
Device Classification: Class II  
Classification Panel: Toxicology  
Product Code: DLJ

**Legally marketed device to which equivalency is claimed:**

Aeroset Multigent Digoxin (k023058)

**Intended Use of Device:**

The ARCHITECT *i*Digoxin assay is an *in vitro* chemiluminescent microparticle immunoassay (CMIA) for the quantitative measurement of digoxin in human serum or plasma on the ARCHITECT *i* System with *STAT* protocol capability. The measurements obtained are used to aid in the diagnosis and treatment of digoxin overdose and in monitoring levels of digoxin to help ensure appropriate therapy.

The ARCHITECT *i*Digoxin Calibrators are for the calibration of the ARCHITECT *i* System with *STAT* protocol capability when used for the quantitative determination of digoxin in human serum or plasma.

**Description of Device:**

The ARCHITECT *i*Digoxin assay is a one-step *STAT* immunoassay for the quantitative measurement of digoxin in human serum or plasma using CMIA technology with flexible assay protocols, referred to as Chemiflex. Sample, anti-digoxin coated paramagnetic microparticles, assay diluent, and digoxigenin acridinium-labeled conjugate are combined to create a reaction mixture. The anti-digoxin coated microparticles bind to digoxin present in the sample and to the digoxigenin acridinium-labeled conjugate. After washing, pre-trigger and trigger solutions are added to the reaction mixture. The resulting chemiluminescent reaction is measured as relative light units (RLUs). An indirect relationship exists between the amount of digoxin in the sample and the RLUs detected by the ARCHITECT *i* System optics.

**Comparison of Technological Characteristics:**

The ARCHITECT *i*Digoxin assay is a chemiluminescent microparticle immunoassay (CMIA) method for the quantitative measurement of digoxin in human serum or plasma. The Aeroset Multigent Digoxin assay is a homogeneous particle-enhanced turbidimetric immunoassay (PETIA) used for the analysis of digoxin in serum or plasma.

**Summary of Non-Clinical Performance:**

The ARCHITECT *i*Digoxin assay is substantially equivalent to the Aeroset Multigent Digoxin assay in terms of precision, linearity and interferences as demonstrated in non-clinical performance data in this 510(k) submission.

**Summary of Clinical Performance:**

The ARCHITECT *i*Digoxin demonstrated substantially equivalent performance to the Aeroset Multigent Digoxin with a Pearson correlation coefficient of 0.993.



Food and Drug Administration  
2098 Gaither Road  
Rockville MD 20850

DEC 22 2008

BioKit S.A.  
c/o Mr. John Guixer  
Quality Assurance and Regulatory Affairs Director  
Can Malé s/n  
Lliçà d'Amunt, Barcelona, 08186, Spain

Re: k082953  
Trade Name: Architect iDigoxin Reagents, Architect iDigoxin Calibrator  
Regulation Number: 21 CFR 862.3320  
Regulation Name: Digoxin Test System.  
Regulatory Class: Class II  
Product Codes: KXT, DLJ  
Dated: September 30, 2008  
Received: October 06, 2008

Dear Mr. Guixer:

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 either class II (Special Controls) or class III (PMA), 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); and good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820).

Page 2 –

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 information about the application of labeling requirements to your device, or questions on the promotion and advertising of your device, please contact the Office of In Vitro Diagnostic Device Evaluation and Safety at (240) 276-0490. Also, please note the regulation entitled, "Misbranding by reference to premarket notification" (21CFR Part 807.97). 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 (240) 276-3150 or at its Internet address at <http://www.fda.gov/cdrh/industry/support/index.html>.

Sincerely yours,

*Jean M. Cooper, M.S., D.V.M.*

Jean M. Cooper, M.S., D.V.M.

Director

Division of Chemistry and Toxicology

Office of *In Vitro* Diagnostic Device

Evaluation and Safety

Center for Devices and

Radiological Health

Enclosure

## Indication for Use

510(k) Number (if known): K082953

Device Name: ARCHITECT iDigoxin Reagents and ARCHITECT iDigoxin Calibrators (A-F)

Indication for Use:

### Reagents

The ARCHITECT iDigoxin assay is an *in vitro* chemiluminescent microparticle immunoassay (CMIA) for the quantitative measurement of digoxin in human serum or plasma on the ARCHITECT i System with STAT protocol capability. The measurements obtained are used to aid in the diagnosis and treatment of digoxin overdose and in monitoring levels of digoxin to help ensure appropriate therapy.

### Calibrators

The ARCHITECT iDigoxin Calibrators are for the calibration of the ARCHITECT i System with STAT protocol capability when used for the quantitative determination of digoxin in human serum or plasma.

For *in vitro* diagnostic use.

Prescription Use   X    
(Part 21 CFR 801 Subpart D)

OR Over-The-Counter Use \_\_\_\_\_  
(21 CFR 807 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)

  
\_\_\_\_\_  
Sign-Off

Office of In Vitro Diagnostic Device  
Regulation and Safety

K082953