K071362

6.0 510(k) Summary

Submitter's Name / Contact Person

MAY 30 2007

Timothy J. Kappers, MBA, RAC
Director, Quality Systems, Regulatory & Clinical Affairs
Vital Images, Inc.
5850 Opus Parkway, Suite 300
Minnetonka, MN 55343

General Information

Device Trade Name	ViTALConnect™ 4.1 - Medical Image Processing Software
Common / Usual Name	System, Image Processing, Radiological
Classification	892.2050 Picture Archiving and Communications System (LLZ; Class II)
Identification of Predicate Devices	ViTALConnect Version 4.0 (K062154) Vital Images, Inc. Vitrea®, Version 3.9 (K061624) Vital Images, Inc.

Device Description

The ViTALConnect system is a medical diagnostic device that allows the processing, review, analysis, communication and media interchange of multi-dimensional digital images acquired from a variety of imaging devices.

The ViTALConnect system provides multi-dimensional visualization of digital images to aid clinicians in their analysis of anatomy and pathology. The ViTALConnect system user interface follows typical clinical workflow patterns to process, review, and analyze digital images, including:

- Retrieve image data over the network via DICOM
- Display images that are automatically adapted to exam type via dedicated protocols
- Select images for closer examination from a gallery of up to six 2D or 3D views
- Interactively manipulate an image in real-time to visualize anatomy and pathology
- Annotate, tag, measure, and record selected views

- Output selected views to standard film or paper printers, or post a report to an Intranet Web server or export views to another DICOM device
- Retrieve reports that are archived on a Web server

Intended Use

VITALConnect, Version 4.1 is a medical diagnostic software system intended to process, analyze, review, and distribute multi-dimensional digital images acquired from a variety of imaging devices including: CT, MR, CR/DR/DX, SC, US, NM, PET, XA, and RF, etc. VITALConnect is not meant for primary image interpretation in mammography. In addition, the VITALConnect system has the following specific intended use:

Vessel Probe is intended for viewing the anatomy and pathology of a patient's coronary arteries. Clinicians select any artery to view the following anatomical references: the highlighted vessel in 3D, two rotate-able curved MPR vessel views displayed at angles orthogonal to each other, and cross sections of the vessel. Cross sectional measurements can be obtained using standard Vital Images software measuring tools. Clinicians can manually measure the lumen width to obtain percentage stenosis calculations, based on the ratio of the smallest to the largest diameter. In addition, clinicians can manually measure vessel length along the centerline in standard curved MPR views and examine Hounsfield Units statistics.

CT Coronary Artery Analysis is intended for viewing the anatomy and pathology of a patient's coronary arteries. Clinicians can select any coronary artery to view the following anatomical references: the highlighted vessel in 3D, two rotatable curved MPR vessel views displayed at 90 degree angles to each other, and cross sections of the vessel. The clinician can semi-automatically determine contrasted lumen boundaries, stenosis measurements, and maximum and minimum lumen diameters. In addition, clinicians can edit lumen boundaries and examine Houndsfield unit statistics.

Predicate Device Comparison

The VITALConnect 4.1 system and its predicate devices allow for the analysis, communication and media interchange of digital images acquired from a variety of acquisition devices. All devices support the DICOM protocol for communication of images with other medical imaging devices.

Summary of Studies

The software utilized was designed, developed, tested, and validated according to written procedures. These procedures specify individuals within the organization responsible for developing and approving product specifications, coding, testing, validating, and maintenance.

The ViTALConnect 4.1 system will successfully complete integration testing/verification testing prior to Beta validation. Software Beta testing/validation will be successfully completed prior to release. In addition, potential hazards have been studied and controlled by a Risk Management Plan.

DEPARTMENT OF HEALTH & HUMAN SERVICES

Food and Drug Administration
9200 Corporate Blvd.
Rockville MD 20850

MAY 30 2007

Vital Images, Inc.
% Mr. Mark Job
Responsible Third Party Official
Regulatory Technology Services LLC
1394 25th Street NW
BUFFALO MN 55313

Re: K071362
Trade/Device Name: VITALConnect™ 4.1 Medical Image Processing Software
Regulation Number: 21 CFR 892.2050
Regulation Name: Picture archiving and communications system
Regulatory Class: II
Product Code: LLZ
Dated: May 14, 2007
Received: May 15, 2007

Dear Mr. Job:

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 (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 898. 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 Part 801); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820); and if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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 Part 801), please contact the Office of Compliance at one of the following numbers, based on the regulation number at the top of this letter:

21 CFR 876.xxx	(Gastroenterology/Renal/Urology	240-276-0115
21 CFR 884.xxx	(Obstetrics/Gynecology)	240-276-0115
21 CFR 894.xxx	(Radiology)	240-276-0120
Other		240-276-0100

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 http://www.fda.gov/cdrh/industry/support/index.html.

Sincerely yours,

Nancy C Brogdon

Nancy C. Brogdon
Director, Division of Reproductive,
Abdominal, and Radiological Devices
Office of Device Evaluation
Center for Devices and Radiological Health

Enclosure

3.0 Intended Use Statement

510(k) Number (if known): K071362

Device Name: VITALConnect™ 4.1 Medical Image Processing Software

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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 OF NEEDED)

Concurrence of CDRH, Office of Device Evaluation (ODE)

Nancy C Brogdon

(Division Sign-Off)
Division of Reproductive, Abdominal, and Radiological Devices
510(k) Number K071362

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