

## 6.0 510(k) Summary

### Submitter's Name / Contact Person

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

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### General Information

<b>Trade Name</b>	Vitrea <sup>®</sup> 4DCT Medical Image Processing Software
<b>Common / Usual Name</b>	System, Image Processing, Radiological
<b>Classification Name</b>	LLZ, Class II, CFR 21 892.2050
<b>Predicate Device</b>	Vitrea, Version 4.0 (K071331)

### Device Description

The Vitrea 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 Vitrea system provides multi-dimensional visualization of digital images to aid clinicians in their analysis of anatomy and pathology. The Vitrea 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

Vitrea is a medical diagnostic system that allows the processing, review, analysis, communication and media interchange of multi-dimensional digital images acquired from a variety of imaging devices. In addition, Vitrea 4DCT has the following indication:

The Vitrea 4DCT Brain Perfusion option is intended for post processing based on dynamic CT images continuously acquired during the injection of contrast, for the visualization of apparent blood flow in brain tissue and pictorial illustration of perfusion-related parameters to aid in the assessment of the type and extend of cerebral perfusion disturbances.

## Predicate Device Comparison

The Vitrea 4DCT system and its predicate device 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.



**'AUG 7 2008**

Food and Drug Administration  
9200 Corporate Boulevard  
Rockville MD 20850

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

Re: K072821

Trade/Device Name: Vitrea<sup>®</sup> 4DCT Medical Image Processing Software  
Regulation Number: 21 CFR 892.2050  
Regulation Name: Picture archiving and communications system  
Regulatory Class: II  
Product Code: LLZ  
Dated: January 19, 2008  
Received: January 22, 2008

Dear Mr. Job:

This letter corrects our substantially equivalent letter of February 20, 2008.

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 (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 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.

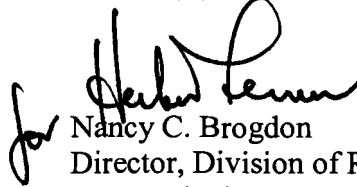
Please be advised that FDA's issuance of a substantial equivalence determination does not mean that FDA has made a determination that your device complies with other requirements of the Act or any Federal statutes and regulations administered by other Federal agencies. You must comply with all the Act's 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 continue 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 (240) 276-0120. 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/dsma/dsmamain.html>

Sincerely yours,

A handwritten signature in black ink, appearing to read "Nancy C. Brogdon", is written over the typed name. To the left of the signature is a small, stylized initial or mark.

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

# Indications for Use

510(k) Number (if known): K072821

Device Name: Vitrea® 4DCT Medical Image Processing Software

## Indications For Use:

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Prescription Use   X  

AND/OR

Over-The-Counter Use

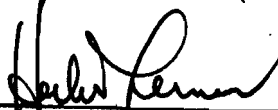
(Part 21 CFR 801 Subpart D)

(21 CFR 801 Subpart C)

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Concurrence of CDRH, Office of Device Evaluation (ODE)



(Division Sign-Off)

Division of Reproductive, Abdominal and Radiological Devices

510(k) Number

  K072821