

Konica Minolta, Inc. % Ms. Jan Maniscalco Director of QA/RA Konica Minolta Healthcare Americas, Inc. 411 Newark-Pompton Turnpike WAYNE NJ 07470 May 6, 2021

Re: K210066

Trade/Device Name: ImagePilot Regulation Number: 21 CFR 892.2050

Regulation Name: Medical Image Management and Processing System

Regulatory Class: Class II

Product Code: LLZ Dated: April 7, 2021 Received: April 8, 2021

#### Dear Ms. Maniscalco:

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. Although this letter refers to your product as a device, please be aware that some cleared products may instead be combination products. The 510(k) Premarket Notification Database located at <a href="https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm">https://www.accessdata.fda.gov/scripts/cdrh/cfdocs/cfpmn/pmn.cfm</a> identifies combination product submissions. 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. Please note: CDRH does not evaluate information related to contract liability warranties. We remind you, however, that device labeling must be truthful and not misleading.

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 <u>Federal Register</u>.

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) medical device reporting (reporting of medical device-related adverse events) (21 CFR 803) for devices

or postmarketing safety reporting (21 CFR 4, Subpart B) for combination products (see <a href="https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products">https://www.fda.gov/combination-products/guidance-regulatory-information/postmarketing-safety-reporting-combination-products</a>); good manufacturing practice requirements as set forth in the quality systems (QS) regulation (21 CFR Part 820) for devices or current good manufacturing practices (21 CFR 4, Subpart A) for combination products; and, if applicable, the electronic product radiation control provisions (Sections 531-542 of the Act); 21 CFR 1000-1050.

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 <a href="https://www.fda.gov/medical-devices/medical-device-safety/medical-device-reporting-mdr-how-report-medical-device-problems">https://www.fda.gov/medical-device-problems</a>.

For comprehensive regulatory information about medical devices and radiation-emitting products, including information about labeling regulations, please see Device Advice (<a href="https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance">https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance</a>) and CDRH Learn (<a href="https://www.fda.gov/training-and-continuing-education/cdrh-learn">https://www.fda.gov/training-and-continuing-education/cdrh-learn</a>). Additionally, you may contact the Division of Industry and Consumer Education (DICE) to ask a question about a specific regulatory topic. See the DICE website (<a href="https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice">https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice">https://www.fda.gov/medical-devices/device-advice-comprehensive-regulatory-assistance/contact-us-division-industry-and-consumer-education-dice</a>) for more information or contact DICE by email (<a href="DICE@fda.hhs.gov">DICE@fda.hhs.gov</a>) or phone (1-800-638-2041 or 301-796-7100).

Sincerely,

For

Thalia T. Mills, Ph.D.
Director
Division of Radiological Health
OHT7: Office of In Vitro Diagnostics
and Radiological Health
Office of Product Evaluation and Quality
Center for Devices and Radiological Health

Enclosure

# DEPARTMENT OF HEALTH AND HUMAN SERVICES Food and Drug Administration

# **Indications for Use**

510(k) Number (if known)

Form Approved: OMB No. 0910-0120

Expiration Date: 06/30/2023 See PRA Statement below.

K210066					
Device Name ImagePilot					
Indications for Use (Describe) The ImagePilot software is intended for installation on an off-the-shelf PC meeting or exceeding minimum specifications. The ImagePilot software primarily facilitates processing and presentation of medical images on display monitors suitable for the medical task being performed. The ImagePilot software can process and display medical images from the following modality types: Plain X-ray Radiography, X-ray Computed Tomography, Magnetic Resonance imaging, Ultrasound, Nuclear Medicine and other DICOM compliant modalities. The ImagePilot must not be used for primary image diagnosis in mammography.					
Type of Use (Select one or both, as applicable)					
Prescription Use (Part 21 CFR 801 Subpart D)					
CONTINUE ON A SEPARATE PAGE IF NEEDED.					

This section applies only to requirements of the Paperwork Reduction Act of 1995.

## \*DO NOT SEND YOUR COMPLETED FORM TO THE PRA STAFF EMAIL ADDRESS BELOW.\*

The burden time for this collection of information is estimated to average 79 hours per response, including the time to review instructions, search existing data sources, gather and maintain the data needed and complete and review the collection of information. Send comments regarding this burden estimate or any other aspect of this information collection, including suggestions for reducing this burden, to:

Department of Health and Human Services Food and Drug Administration Office of Chief Information Officer Paperwork Reduction Act (PRA) Staff PRAStaff@fda.hhs.gov

"An agency may not conduct or sponsor, and a person is not required to respond to, a collection of information unless it displays a currently valid OMB number."



# 510(k) Summary

#### **K210066**

**Company:** KONICA MINOLTA, INC.

1 Sakura-machi, Hino-shi, 191-8511 Japan

Contact: Tsutomu Fukui

Senior Manager of Regulatory & QMS Division 1 Sakura-machi, Hino-shi, 191-8511 Japan

Telephone: +81 42 589 8429

Email: tsutomu.fukui1@konicaminolta.com

Date Prepared: May 06, 2021

**Device Name:** 

Trade Name: ImagePilot Version: Version 1.92

Common Name: Medical Image Management and Processing System

Regulation Number: 21 CFR 892.2050

Regulatory Class: Class II Product Code(s): LLZ

**Primary Predicate Device:** K071436 - REGIUS Unitea

KONICA MINOLTA MEDICAL & GRAPHIC, INC.

Regulation Number: 21 CFR 892.2050

**Product Codes: LLZ** 

Secondary Predicate Device: K133730 - CO Pilot/REGIUS Unitea

KONICA MINOLTA, INC.

Regulation Name: 21 CFR 892.2050

Product Codes: LLZ

## **Device Description**

The ImagePilot software is intended for installation on an off-the-shelf PC meeting or exceeding minimum specifications. The ImagePilot software primarily facilitates



processing and presentation of medical images on display monitors suitable for the medical diagnostics task being performed. The ImagePilot software can process and display medical images from the following modality types: Plain X-ray Radiography, X-ray Computed Tomography, Magnetic Resonance imaging, Ultrasound, Nuclear Medicine and other DICOM compliant modalities including mammography. When used for mammography the ImagePilot should never be used as a diagnostic tool.

#### **Indications for Use**

The ImagePilot software is intended for installation on an off-the-shelf PC meeting or exceeding minimum specifications. The ImagePilot software primarily facilitates processing and presentation of medical images on display monitors suitable for the medical task being performed. The ImagePilot software can process and display medical images from the following modality types: Plain X-ray Radiography, X-ray Computed Tomography, Magnetic Resonance imaging, Ultrasound, Nuclear Medicine and other DICOM compliant modalities. The ImagePilot must not be used for primary image diagnosis in mammography.

# **Comparison Table**

The comparison to the predicate decides was summarized in the table blow.

	Subject Device	Predicate Device 1 (PD1)	Predicate Device 2 (PD2)
	ImagePilot	REGIUS Unitea	CO Pilot/REGIUS Unitea
510(K) Number	K210066	K071436	K133730
Indications for	The ImagePilot software	The REGIUS Unitea	The CO pilot is intended
Use	is intended for installation on an off-the-shelf PC	software is intended for installation on an off-the-	for installation on an off- the-shelf PC (REGIUS
	meeting or exceeding	shelf PC meeting or	Unitea /510(K) number:
	minimum specifications. The ImagePilot software primarily facilitates	exceeding minimum specifications. The REGIUS Unitea software	K071436) meeting or exceeding minimum specifications. The CO
	processing and	primarily facilitates	pilot software primarily
	presentation of medical	processing and	facilitates processing and
	images on display	presentation of medical	presentation of medical
	monitors suitable for the	images on display	images on display
	medical task being	monitors suitable for the	monitors suitable for the
	performed. The	medical task being	medical task being
	ImagePilot software can	performed. The REGIUS	performed. The CO pilot
	process and display	Unitea software can	software can process and
	medical images from the	process and display	display images from the
	following modality types:	medical images from the	following modality types:
	Plain X-ray Radiography,	following modality types:	Plain X-ray Radiography,



	Subject Device	Predicate Device 1 (PD1)	Predicate Device 2 (PD2)
	ImagePilot	REGIUS Unitea	CO Pilot/REGIUS Unitea
510(K) Number	K210066	K071436	K133730
	X-ray Computed Tomography, Magnetic Resonance imaging, Ultrasound, Nuclear Medicine and other DICOM compliant modalities. The ImagePilot must not be used for primary image diagnosis in mammography.	Plain X-ray Radiography, X-ray Computed Tomography, Magnetic Resonance imaging, Ultrasound, Nuclear Medicine and other DICOM compliant modalities. The REGIUS Unitea must not be used for primary image diagnosis in mammography.	X-ray Computed Tomography, Magnetic Resonance imaging, Ultrasound, Nuclear Medicine and other DICOM compliant modalities. The CO pilot must not be used for primary image diagnosis in mammography.
Operating System	Microsoft Windows 10	Microsoft Windows XP	Microsoft Windows 7
Importable images	<ul> <li>CR images         (REGIUS110/190/Σ1/Σ2         /210/110HQ)</li> <li>DR Images (AeroDR         System, AeroDR         System2, SKR3000,         SKR4000)</li> <li>DICOM Images (CT,         MRI, US, etc.)</li> <li>Generic format images</li> </ul>	<ul> <li>CR images         (REGIUS110/190/110H         Q)</li> <li>DICOM (CT, MRI, US, etc.)</li> <li>Generic format images</li> </ul>	<ul> <li>CR images         (REGIUS110/190/Σ1/Σ2         /210/110HQ)</li> <li>DR Images (AeroDR         System)</li> <li>DICOM Images (CT,         MRI, US, etc.)</li> <li>Generic format images</li> </ul>
Image Processing	Automatic tone     adjustment     Sharpness processing     Equalization processing     Noise suppression     function     Automatic customize     function     Initial display     optimization     processing (DR only)     Grid Suppression     Masking     Re-sampling and     Resizing     Stitching     Bone suppression     function	<ul> <li>Automatic tone adjustment</li> <li>Sharpness processing</li> <li>Equalization processing</li> <li>Noise suppression function</li> <li>Automatic customize function</li> <li>Grid Suppression</li> <li>Masking</li> <li>Re-sampling and Resizing</li> <li>Stitching</li> </ul>	<ul> <li>Automatic tone adjustment</li> <li>Sharpness processing</li> <li>Equalization processing</li> <li>Noise suppression function</li> <li>Automatic customize function</li> <li>Initial display optimization processing (DR only)</li> <li>Grid Suppression</li> <li>Masking</li> <li>Re-sampling and Resizing</li> <li>Stitching</li> </ul>

# **Technological Characteristics**

The subject and predicate devices use the same fundamental scientific technology to perform their intended use. Those modifications are for software modifications to the identified predicate device to update the Windows 10. In addition, the Bone Suppression



function cleared by via the KONICAMINOLTA Di-X1 (K182431) is incorporated into the subject device. The subject device also adds the cleared Konica Minolta Digital Radiography Systems (AeroDR System2, SKR 3000, and SKR 4000).

These differences were found to not affect safety or effectiveness via design verification activities.

#### **Performance Data**

All the verification activities required by the specification and the risk analysis for the ImagePilot were performed and the results demonstrated that the predetermined acceptance criteria were met. No clinical studies were required to support the substantial equivalence.

### Conclusion

The modifications raised no new issues of safety or effectiveness as compared to its legally marketed predicate devices. Performance tests demonstrate that the ImagePilot performs according to specifications and functions as intended. Therefore, the ImagePilot is substantially equivalent to its predicate devices (K071436 and K133730).