

**510(k) Summary
for the VERIS System
Prepared November 4, 1998**

FEB 3 1999

Company Name: Electro-Diagnostic Imaging, Inc.
1206-D West Hillsdale Blvd.
San Mateo, California 94403
Telephone 650 341 5054

Contact Person: Erich E. Sutter Ph.D.

A. Legally Marketed Predicate Device

The VERIS System is substantially equivalent to UTAS-E 2000 Visual Electrodiagnostic System (K760199) manufactured by LKC Technologies, Inc., the Tomey PE400 Portable ERG System (K932571) manufactured by Tomey and the Maculoscope and The Espion Systems, (K863956) both manufactured by Doran (aka Diagnosys LLC). These are all hardware and software products. The EDI device is substantially equivalent to the predicate devices with regard to device features and specifications, as well as intended use. All devices are visual evoked response test systems with similar operating requirements, that are based on standard clinical procedures. Devices consist of hardware and software to provide a photic stimulus and an analysis of the evoked response data collected.

B. Device Description

Photic stimuli are presented to the patient on a CRT screen up to 60 degrees at 241 elements in separately stimulated fields. Various modes are available for preferential stimulation of different retinal mechanisms and isolation of signal from different retinal layers. Data is acquired by 2 recording channels using conventional EEG electrodes (not provided with the device). During the period of time that the system is acquiring data (4-16 minutes), there is a real time display of the raw and processed data presented to the user. Once the resulting individual waveforms are acquired, the signals are analyzed by software using algorithms for spatial filtering and artifact rejection. Data may be presented in a number of forms, including waves recorded at each of the points tested, color plots, or 3D topographical representations.

C. Intended Use

The VERIS system is an electrodiagnostic device used to generate photic signals and to measure and display the electrical signals generated by the retina and the visual nervous system. It displays digitized electroretinogram (ERG) and visual evoked potential (VEP) signals, power spectra and topographic maps. These functions are controlled and interpreted by trained medical professionals.

D. Substantial Equivalence

Product Name	Predicate Devices			Submission Device
	Doran Maculoscope and The Espion System (K863956)	UTAS-E 2000 (and 3000) Visual Electrodiagnostic Systems (K760199)	Tomey PE400 Portable ERG and VEP System (K932571)	EDI VERIS ERG and VEP System
Intended Use	Generate photic signals and measure and display the electrical response signals generated by the retina and the visual nervous system	Generate photic signals and measure and display the electrical response signals generated by the retina and the visual nervous system	Generate photic signals and measure and display the electrical response signals generated by the retina and the visual nervous system	Generate photic signals and measure and display the electrical response signals generated by the retina and the visual nervous system
Intended Users	Ophthalmologists and trained medical technicians	Ophthalmologists and trained medical technicians	Ophthalmologists and trained medical technicians	Ophthalmologists and trained medical technicians
Indications for Use	Diagnosis and management of retinal ischemic diseases, diabetic retinopathy, central or branch vein occlusion	Diagnosis and management of retinal ischemic diseases, diabetic retinopathy, central or branch vein occlusion	Diagnosis and management of retinal ischemic diseases, diabetic retinopathy, central or branch vein occlusion	Diagnosis and management of retinal ischemic diseases, diabetic retinopathy, central or branch vein occlusion
Intended Population	Patients with ophthalmic conditions	Patients with ophthalmic conditions	Patients with ophthalmic conditions	Patients with ophthalmic conditions
Site of Use	Hospital, clinics and physician offices	Hospital, clinics and physician offices	Hospital, clinics and physician offices	Hospital, clinics and physician offices
Data Collected	ERG waveforms	ERG waveforms	ERG waveforms	ERG waveforms

E. Performance Data

The VERIS System has been tested for electrical safety and has received a certificate of compliance with EN60601-1-2:1993 and EN55011:1991 Standards.



Food and Drug Administration
9200 Corporate Boulevard
Rockville MD 20850

FEB 3 1999

Sheila W. Pickering Ph.D.
Electro- Diagnostic Imaging, Inc.
2081 Longden Circle
Los Altos, California 94024

Re: K983983
Trade Name: EDI Veris System
Regulatory Class: II
Product Code: 86 HLX
Dated: November 5, 1998
Received: November 9, 1998

Dear Dr. Pickering:

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 (Pre-market 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.

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) 594-4613. 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,



A. Ralph Rosenthal, M.D.

Director

Division of Ophthalmic Devices

Office of Device Evaluation

Center for Devices and

Radiological Health

Enclosure

K983983

FDA Submission Cover Sheet

510(k) Number (if known): K983983
~~Not applicable~~

Device Name: VERIS System

Indications For Use:

The VERIS system is an electrodiagnostic device used to generate photic signals and to measure and display the electrical signals generated by the retina and the visual nervous system. It displays digitized electroretinogram (ERG) and visual evoked potential (VEP) signals, power spectra, and topographic maps. These functions are controlled and interpreted by trained medical professionals. The device is intended for use in the diagnosis and management of retinal ischemic diseases, diabetic retinopathy, and central or branch vein occlusion.

Evelle T. Boem
(Division Sign-Off)
Division of Ophthalmic Devices
510(k) Number K983983

(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 21CFR 801)