



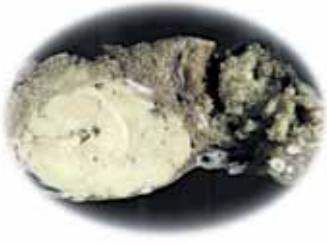
MILESTONE
H E L P I N G
P A T I E N T S



MacroPATH D

Macro digital imaging system
for the grossing room

MacroPATH D



**...Ivory, creamy, arctic white, snow white?
...Pea size, nut size, orange size?**

A picture is worth a thousand words

The MacroPATH D system

A new, innovative, highly visual productivity and quality control tool for the grossing room. MacroPATH D is a user-oriented capture, annotation, and storage system for digital macro images and videos to support macroscopic descriptions and to dramatically reduce specimen turn-around time at the grossing station.

The system serves as a comprehensive method of storing the macroscopic images, with spoken comments, providing an invaluable diagnostic database for routine grossing, teaching and research.

The MacroPATH D benefits

In the Grossing Room:

- A major visual complement to standard descriptions.
- Availability of images eliminates vagueness in description of shape, size and color of specimens.
- Eliminates hand drawings or long descriptions.
- Enables detailed observation and documentation through 10x optical magnification.
- Rapid and accurate sizing/area of specimens.
- Easy and precise labeling of tissue block sample locations.
- Full documentation of specimen "as received".



In the Microscopy Room:

- Macro images are available to all pathologists at time of sign-off.
- Create more informative pathology reports by adding context with macro images.
- Digital files can be retrieved by LIS systems.



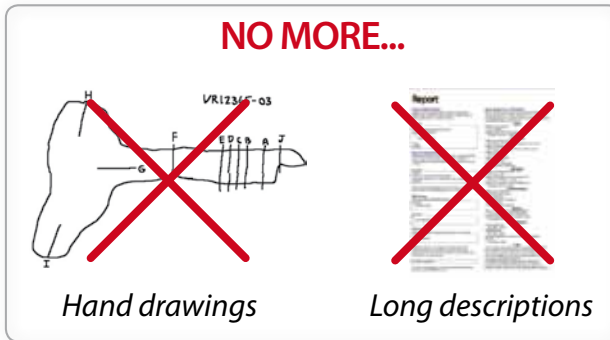
For the Laboratory Manager

- Full documentation of grossing specimens procedures for Quality Assurance.
- Clear, precise, real-life images of for medical/legal purposes.
- Highly efficient supervision in a teaching/training environment.



MacroPATH D

Macro digital imaging system for the grossing room



...Just MacroPATH D.
A rapid sequence of digital
images and spoken comments.



XZY HOSPITAL	Requesting Clinician/ Surgeon ABC	Received Date
	Accepted Date	Time
HISTOPATHOLOGY LAB		
Clinical Data Segment of large colon		

DIAGNOSTIC REPORT

CLINICAL NOTES:
Esophageal neoplasia resected after radiation and anti-blastic therapy.

MACROSCOPIC DESCRIPTION:
Segment of fresh esophagus with attached segment of stomach, measurements and Block Key as indicated in Fig. 1, 2 and 3.

GROSS IMAGING

Figure 1: Specimen Dimensions

Figure 2: Area of Lesion

Figure 3: Representative block key

MICROSCOPIC APPEARANCE
Segment of esophagus with a large area of mucosal ulceration. The base of the ulcer is made up of granulation tissue with intense lympho-plasmocytic infiltration and scattered foreign body giant cells. Gastric mucosa shows moderate inflammatory infiltration in the lamina propria.
No signs of residual tumor are present, neither in the esophageal wall nor in the rare periesophageal lymph nodes

Figure 4: H&E showing ulcerated area with extensive granulation tissue at the base with intense inflammatory with infiltration of lymphocytes and plasma cells.

DIAGNOSIS:
Segment of esophagus without signs of neoplastic involvement. Mucosal ulcer of esophageal mucosa with granulation tissue and lympho-plasmocytic infiltration at its base. Sections of gastric wall with moderate inflammatory infiltration in the lamina propria (negative for Helicobacter Pylori). Periesophageal lymph nodes (2) with mild hyperplasia, without metastases.



7

Enhanced diagnostic reporting.

The ability of MacroPATH D to easily capture, annotate, and store high quality images enables the building of enhanced patient reports with additional context for the clinician, surgeon and oncologist.

6

Correlation of labeled cassettes and sampled tissues.

Eliminates potential mismatching of cassettes labeled/number of blocks, sampled tissues. Valuable documentation in educational/training environment.



1

Start a new file.

Enter specimen/patient data by keyboard or scan bar code.



1D



2D

Program automatically opens.

2

Digitizing the requisition form.

Capture a digital image of the requisition form to exclude potential mismatch errors when manually entering the patient/specimen data. Ideal documentation for Quality Assurance.



3

Create a library of images.

Capture real size, close up images of excised specimens in rapid sequence. Saved images appear as thumbnails on the right side of the screen.



5

Automatic block key indication.

Pick the image of interest. Select "Scalpel" icon. Draw on specimen to indicate sampled areas. The tool will label sequentially.

4

Automatic sizing/area.

Select image of interest. Choose appropriate Sizing tool (linear, area, perimeter) and select area of interest. The tool will automatically calculate the length or area of your annotation.

Audio recording.

MP3 audio file saved and associated to the images.



Interfacing the MacroPATH D

In addition to stand-alone operations, MacroPATH D can interface with a PACS or LIS through dedicated or TWAIN protocols.

Stand-alone system



Saved locally



Saved in a network location

Interfacing with PACS (Picture Archiving and Communications System)



Software running in the background monitors a network location for image additions.

Interfacing with LIS (Laboratory Information System)



MacroPATH D acts as a secondary application to the LIS. Patient case identifier is held by LIS.

- 1 LIS launches MacroPATH D.
- 2 User completes image acquisition and annotation.
- 3 Assets are transferred to the LIS.
- 4 Additional operations by the user (image manipulation, selection of images for inclusion into patient reports, etc).

Use as TWAIN device



MacroPATH D acts as a secondary application launched via TWAIN protocol. Multiple images are taken and manipulated and then transferred to the primary application (LIS or other program with TWAIN import capability).

MileVIEWER: the state-of-the-art digital system for telepathology



MacroPATH D can be connected via internet to share all relevant information of the grossing procedures with remotely located pathologists through the new MileVIEWER software package.



Highest security standard

The MacroPATH D remote connection features completely secure data channels with key exchange and AES (256 Bit) session encoding, the same security standard used by https/SSL.

The simplicity of MacroPATH D

Digital Camera

Control Terminal

Keyboard

Mobile cart

Foot control module



Digital Camera

The 9 megapixel industrial digital camera with autofocus, auto light adjustment, and 10x optical magnification, captures outstanding quality images, in JPG format. Camera magnification range allows for capture of large to minute details.



Waterproof Keyboard

USB keyboard with IP68 dust/water protection.



Foot Control Module

Heavy duty foot control system to zoom in/out, voice recording and save features.



Waterproof Control Terminal

The Point Of Care (POC) unit features 17" color touch-screen TFT-LCD in a splash and dust-proof enclosure. 80GB hard drive with 4 USB ports.

MILESTONE



HELPING PATIENTS

MILESTONE Srl - Via Fatebenefratelli, 1/5 - 24010 Sorisole (BG) - Italy
Tel: +39 035 4128264 - Fax: +39 035 575498
www.milestonemedsrl.com - email: medical@milestonesrl.com

UNI EN ISO 9001: 2008 CERTIFIED - Registration N° 0513907

MILESTONE MEDICAL TECHNOLOGIES, INC.
6475 Technology Avenue, Suite F, Kalamazoo, MI 49009 - USA
Tel: 269-488-4950 - Toll-free: 866-995-5300 - Fax: 269-488-4949
www.milestonemed.com - email: info@milestonemed.com

In your country:

