VivaScope® **2500** Multilaser

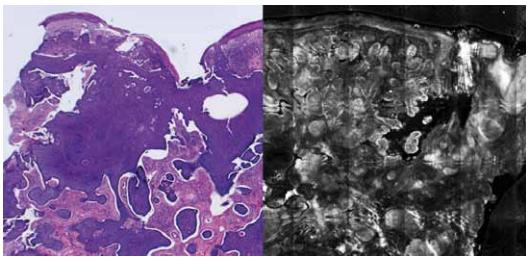
Confocal Laser Scanning Microscope for ex vivo use (830 nm, 658 nm, 488 nm)

- Prompt assessment of excised tissue
- Minimal preparation
- During surgery

The **VivaScope 2500 Multilaser** is used for the depiction and reliable analysis of tissue within a short time after excision. Tissue does not undergo any complex preparation and preservation procedures. The complete scan of an excised tissue sample, depending on tissue type and specimen size, may take approx. 7 minutes.

Such an analysis performed during surgery to control the margins between pathogenic and healthy tissue may potentially help avoid a second operation, for example, in case of Mohs surgery.

Nodular Basal Cell Carcinoma

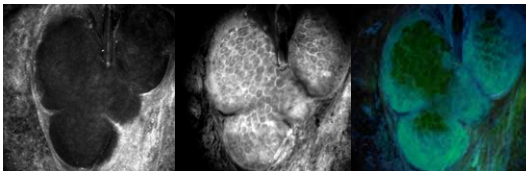


H & E Section *Confocal Image*

© S. Ziefle, Prof. M. Möhrle, Universitäts-Hautklinik Tübingen, Germany

The **VivaScope 2500 Multilaser** may also be suitable for multiple applications due to the availability of several wavelengths and fluorescent dyes.

Sebaceous Gland



Reflectance Image *Fluorescence Image (fluorescein)* *Multi Channel Fluorescence Image* *(slight image manipulation with Photoshop)*

© R. Kästle, Prof. J. Welzel, Klinikum Augsburg, Germany

MAVIG VivaScope

VivaScope® **2500** Multilaser

Although confocal laser scanning microscopy makes it possible in many cases to avoid a biopsy, ex vivo tissue samples are still very important. Previous methods included time-consuming procedures and many materials to prepare and preserve the specimens for analysis. The time between extracting the sample and providing a diagnosis was therefore relatively long.

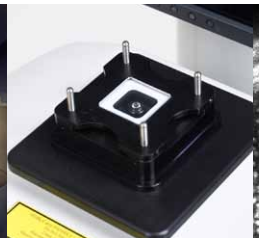
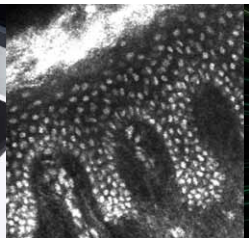
Ex vivo examinations with the help of confocal laser scanning microscopy do not require traditional preparations. The prompt assessment of the excised tissue in precisely defined optical horizontal cross-sections is therefore possible.

The **VivaScope 2500 Multilaser** uses two lasers with wavelengths of 658 nm (red) and 488 nm (blue) in addition to the infrared laser (830 nm or 785nm) integrated into the standard in vivo VivaScope devices. A fluorescent dye may be applied to the tissue to be examined prior to using the VivaScope. The dye is excited by the respective laser light. Due to the dye distribution, the emitted fluorescence produces a contrast during the imaging process that helps to display cellular detail comparable to conventional histology. The generated image is characterized not only by the cell morphology but also by the direct properties of the fluorophore.

Users of the **VivaScope 2500 Multilaser** can apply each of the three lasers, one after another, for the same tissue sample and switch between the lasers anytime. Standard filter sets are integrated for the following fluorescent dyes: **Methylene blue** (red laser) as well as **acridine orange** and **fluorescein** (blue laser). When performing Mohs surgeries, the physician may benefit from these additional options, especially concerning the precise detection of margins between tumors and healthy tissue, as indicated in the studies which have been published so far.

Technical Data	**VivaScope® 2500 Multilaser**
Optical section thickness	≤ sections that are microtomed for routine histology
Imaging depth	up to 200 µm (depends on tissue type)
Viewable section	Individual image 750 µm x 750 µm (usable screen section)
Magnification	400x
Image resolution	1000 x 1000 pixels (individual image)
Mapped field	+/– 8.0 mm in direction of x and y (16-mm square)
Frame rate	9 frames per second
Monitor	19“, 1280 x 1024 pixels, color flat panel display
Software	VivaScan®
Optical operating power	EU Class 2 (for EU Class 2 lasers, viewing the laser output with certain optical instruments within 100 mm may pose an eye hazard)
Imaging wavelength	830 nm, 658 nm, 488 nm
Imaging head	Benchtop, inverted microscope setup
Included objective	Lucid StableView™ water immersion
Operating temperature range	55°F to 85°F (13°C to 30°C)
Power source	110 – 230 VAC, 50 – 60 Hz
Operating humidity	non-condensing
Certifications	FCC Class A, CE-marked

Technical specifications are subject to change without notice. Status 08/2010


MAVIG GmbH
VivaScope Systems
Stahlgruberring 5
81829 Munich, Germany
Phone: +49 (0) 89 - 420 96-280
Email: info@vivascope.eu

www.vivascope.eu

MAVIG VivaScope