

# FLUOPTICS®

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Part of Getinge



Advanced  
technology  
to assess  
perfusion

# FLUOBREAM® LM



# Advanced technology to assess perfusion

Over a decade of experience in fluorescence imaging,  
FLUOBEAM® LM is the new innovative solution for  
perfusion and lymphatic assessment.

**FLUOBEAM® LM with indocyanine green (ICG)  
is an integrated fluorescence imaging solution providing  
surgeons with a real-time image of the fluorescence  
in the operative field.**

Its ease of use and ability to analyze images make it  
a major asset for surgeons.



FLUOREAM<sup>®</sup> LM

# Ergonomic and intuitive

The design of the FLUOBEAM® LM optical head was **developed to provide surgeons with a comfortable grip and intuitive handling during surgery.**

Its joystick ensures simplified navigation in software functionalities and gives the surgeon total autonomy when using the device.

- Ease of use
- Intuitive navigation in the acquisition modes
- Ergonomic grip of the optical head
- A joystick to control software functionalities
- Complete autonomy of the surgeon from the sterile field

# High performance and safety

FLUOBEAM® LM has been **designed to offer a high level of technical performance while ensuring the safety of users and patients.**

The homogeneity of the laser excitation allows large areas to be imaged uniformly. This feature provides consistent and reliable information given by the displayed image.

- Safe class I excitation laser
- Optimized real-time display
- High sensitivity
- Homogeneity of the laser excitation

powered by  
**FLUOPTICS®**



FLUOPTICS.



FLUOPTICS.





# Indication-oriented software



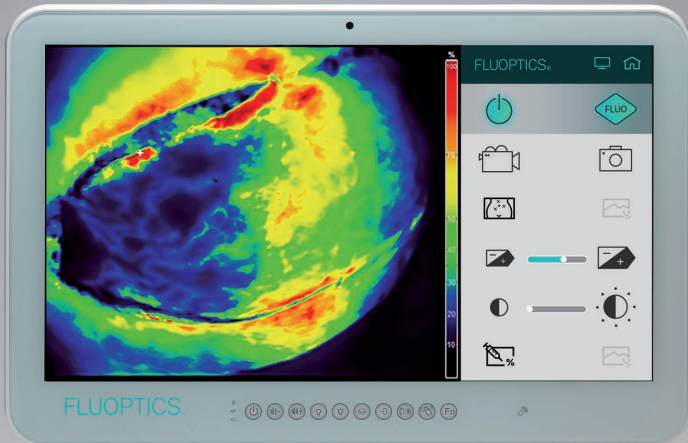
**FLUOSOFT™ LM imaging software offers several acquisition modes depending on clinical indications, so that surgeons can get the expected images.**

- Pseudo-colorization with push of a button to assess perfusion with relative quantification
- Automatic detection of perforator vessels before flap dissection
- Panoramic images of the lymphatic drainage

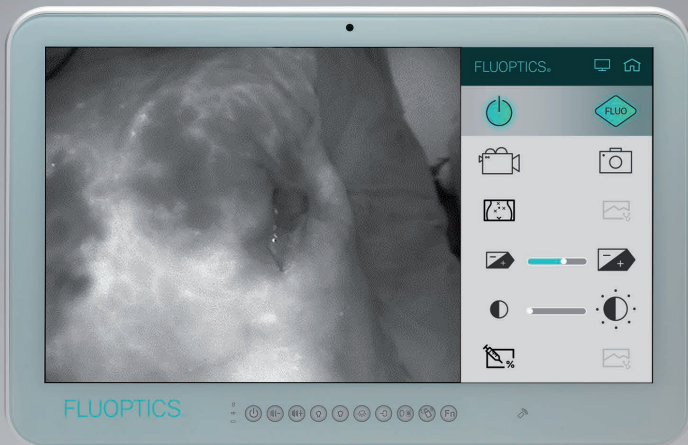
This approach, combined with proven acquisition protocols, **prevents mishandling, and ensures great reliability.**



Perforator identification



Free flap design



Skin perfusion assessment after skin-sparing mastectomy

## FLUOBEAM® LM IN ACTION

# Plastic and Reconstructive surgery

Fluorescence imaging provides qualitative and quantitative information for a better perfusion assessment. **This information enables surgeons to carry out a real-time objective analysis of the perfusion quality.**

During reconstructive surgery with autologous flaps (free or pedicle), perfusion assessment is essential to avoid postoperative complications such as total or partial skin or fat necrosis.

**FLUOBEAM® LM provides surgeons with accurate information to assess tissue perfusion during reconstructive surgery**  
(breast, head and neck reconstruction procedures).

- Help is identifying intraoperatively perforators vessels and perforator angiosome
- Real-time intraoperative tissue perfusion assessment
- More precise flap design according to the perfused areas
- Relative quantification tool  
(additional information to improve the specificity of the method)
- Early identification of complications
- Postoperative monitoring

## FLUOBEAM® LM IN ACTION

# Axillary sentinel lymph node biopsy

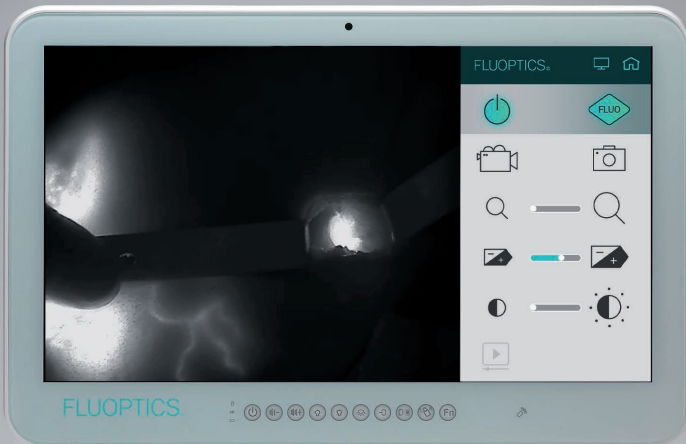
The sentinel lymph node (SLN) procedure aims to detect, dissect and analyze lymph nodes.

**FLUOBEAM® LM allows the visualization of superficial lymphatic drainage and the detection of sentinel lymph nodes after skin incision.**

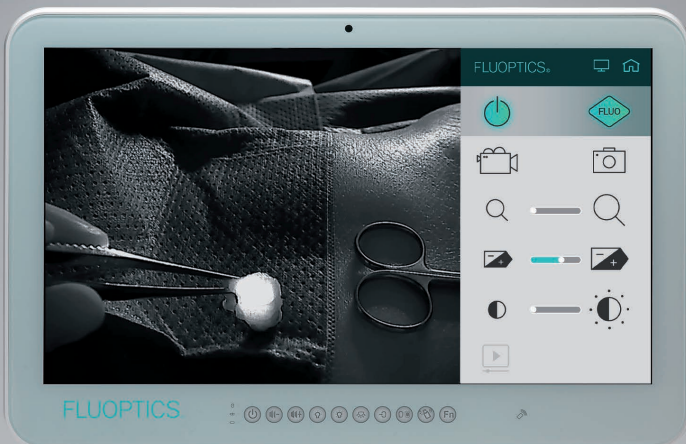
- High detection rate (similar to radioisotope)
- Direct visualization (lymphatic drainage and SLN)
- Simple patient care pathway (one injection only on the day of surgery)
- No need for radioactive marker injection
- Early identification of complications



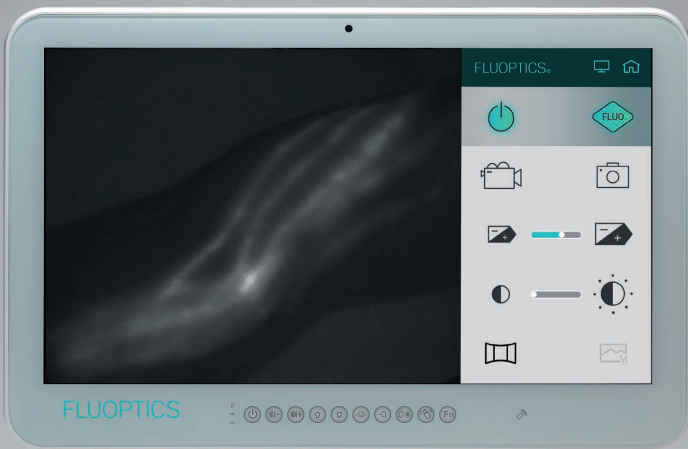
Superficial lymphatic drainage visualization



Fluorescent sentinel lymph node in situ



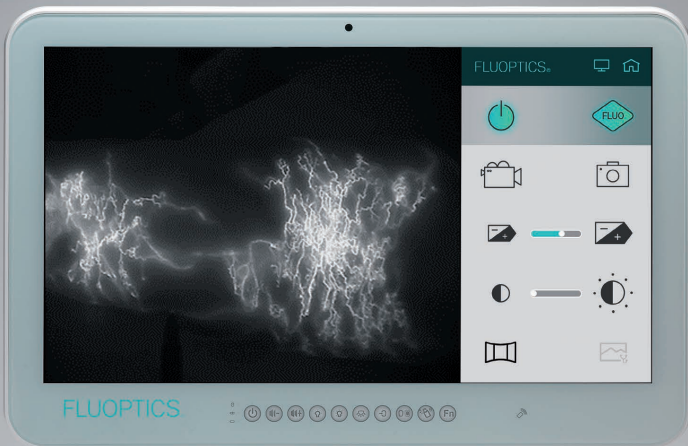
Fluorescent sentinel lymph node ex vivo



Functional lymphatic vessels



Mapping before LVA



Small lymphatic vessels

## FLUOBEAM® LM IN ACTION

# Lymphatic drainage visualization

During consultation or during surgery,  
**FLUOBEAM® LM is used to image in real-time functional superficial lymphatic vessels. It helps surgeons to select the most appropriate treatment,** especially for lymphedema patients.

- Early identification and localization of lymphatic drainage deficiencies to establish appropriate treatment (surgical or not)
- Accurate visualization of functional lymphatic vessels before lymphaticovenous anastomosis (LVA)
- Accurate location of lymph nodes during lymph node transfer surgery
- Post-treatment monitoring
- Reverse mapping capability





**FLUOBEAM<sup>®</sup> LM**  
integrated solution

**FLUOBEAM® LM is a Class IIa medical device,  
manufactured by Fluoptics.**



FLUOBEAM® LM is indicated to visualize on a screen the flow, the distribution and/or the accumulation of Indocyanine green (ICG) before, during and after surgery for the indications such as:  
visualization of the blood flow, visualization of the lymphatic flow, visualization and identification of the bile ducts during hepatobiliary surgery, visualization and detection of primary liver tumors and/or hepatic metastases. FLUOBEAM® is also indicated to facilitate the visualization of parathyroid glands by auto-fluorescence (natural fluorescence without ICG injection) during thyroid and parathyroid surgeries.



As an imaging system used in capturing and viewing fluorescent images for the visual assessment of blood flow in adults as an adjunctive method for the evaluation of tissue perfusion, and related tissue-transfer circulation in tissue and free flaps used in plastic, micro and reconstructive and organ transplant surgeries.

Before the first use, user must read the medical device instructions for use and its label.

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life  
behind  
light



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