

From Eye to Insight



TRANSFORM YOUR TUMOR VISUALIZATION

GLOW400

Augmented Reality Fluorescence Application

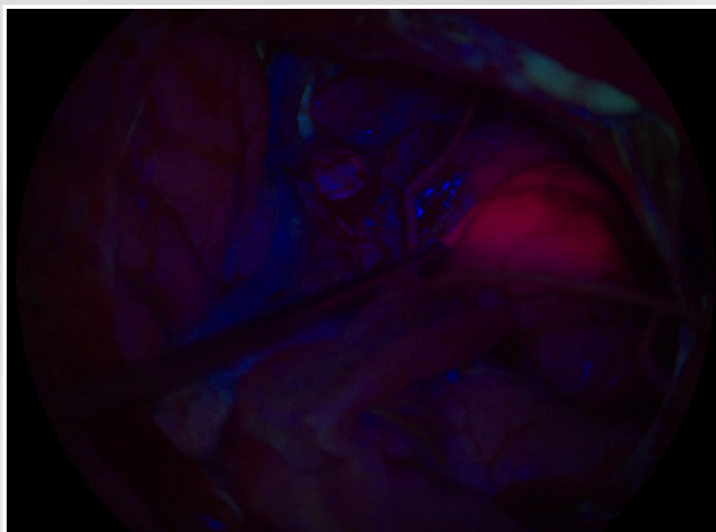
FL400

GLOW400

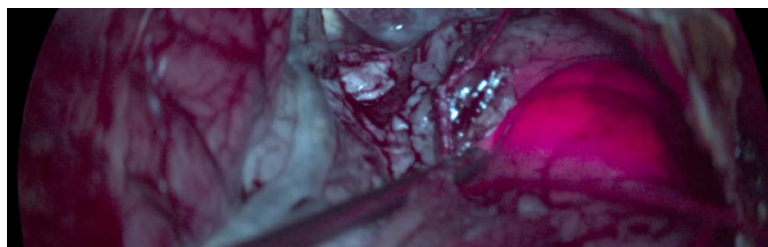
GLOW400

TRANSFORM YOUR TUMOR VISUALIZATION

The GLOW400 Augmented Reality (AR) fluorescence application for brain tumor surgery is taking visualization of suspected grade III and IV gliomas to another level. With advanced multispectral imaging from Leica Microsystems, GLOW400 offers multiple views that transform tumor visualization, helping you to stay focused and make more confident surgical decisions.



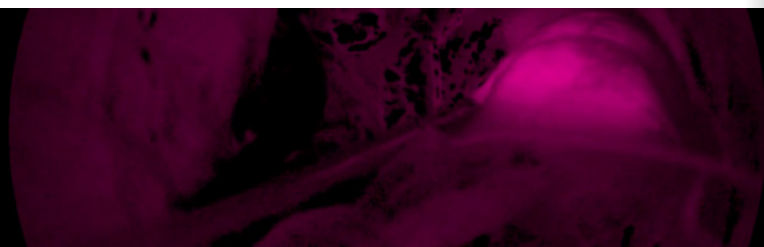
FL400 from Leica Microsystems



SEE CLEARER ANATOMICAL DETAILS

See a highlighted visualization of the fluorescence with enhanced anatomical structures in the GLOW400 Anatomy view.

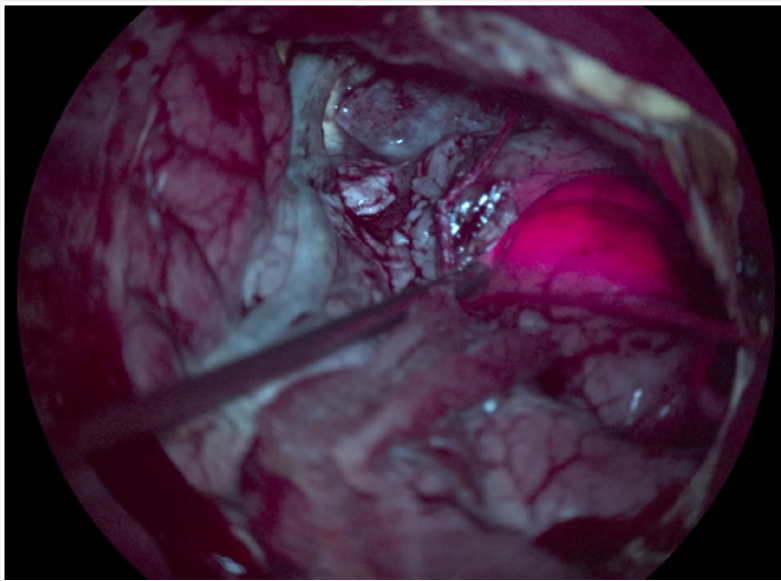
> page 04



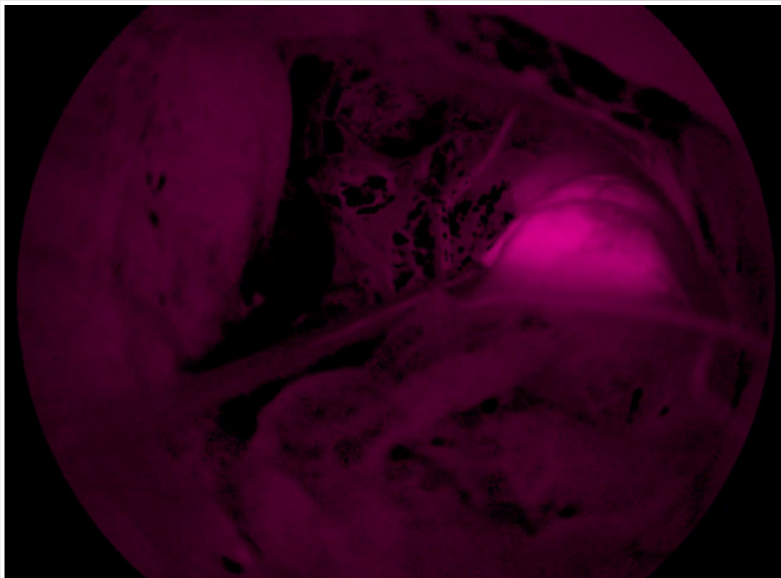
REVEAL LOWER-INTENSITY FLUORESCENCE SIGNALS

See previously less visible tumors in the GLOW400 Highlighted Fluorescence view, with a wider range of fluorescence intensities.

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GLOW400 Anatomy view



GLOW400 Highlighted Fluorescence (HiFluo) view



STAY **FOCUSED**

You can see all GLOW400 views directly in front of your eyes with 3D depth perception using the MyVeo all-in-one surgical headset, as well as a 3D heads-up monitor.

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SEE CLEARER ANATOMICAL DETAILS

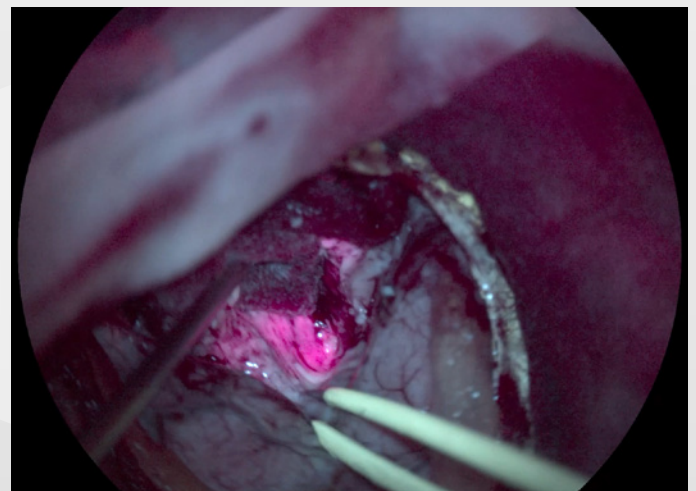
Enhanced visual information is key to making precise and well-informed decisions during brain tumor surgery of suspected grade III and IV gliomas.



GLOW400 utilizes the illumination and observation filters of the classic FL400 blue light fluorescence application and is fully compatible with the ARveo 8 digital visualization microscope.



The Anatomy view of GLOW400 now combines the information of fluorescent and non-fluorescent tissues as well as anatomical structures—all in a single real-time image. This enhanced visualization of the fluorescence-marked tumor gives a clear view of the surrounding anatomical details.

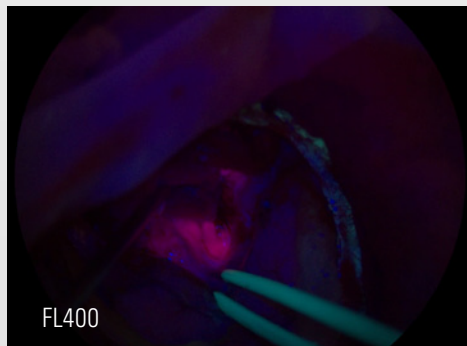


Advantages of the GLOW400 3D Anatomy view

- > Augmented view of the fluorescence marked tumor with an enhanced view on surrounding anatomical details
- > Not having to recall the differences between the white light image and FL400 may reduce fatigue and minimize surgical interruptions
- > Seeing more details such as vessels and bleeding that were previously hidden

REVEAL LOWER-INTENSITY FLUORESCENCE SIGNALS

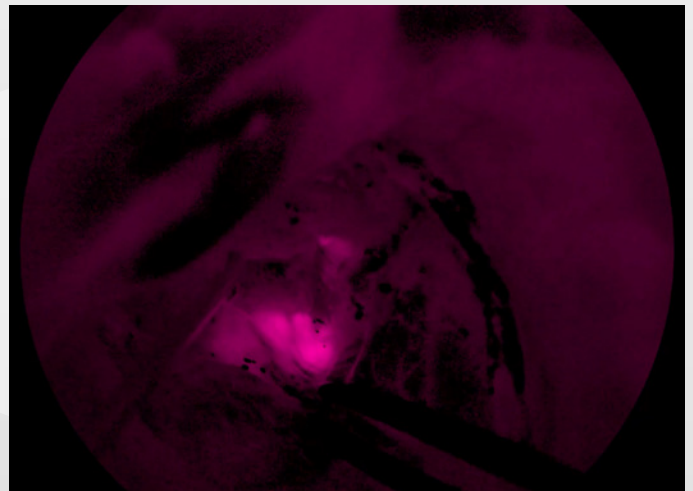
During tumor resection, you need to repeatedly check for traces of remaining visible fluorescence, particularly lower-intensity fluorescence signals on the marked tumor.



Transform your tumor visualization by getting a better view of suspected grade III and IV glioma tissue compared to the classic FL400 filter.



This is where the GLOW400 Highlighted Fluorescence (HiFluo) view further transforms your visualization of suspected grade III and IV glioma tissue. You can now feel more confident during surgery by seeing a broader representation of fluorescence intensities, that you may have previously missed.



Advantages of the GLOW400 3D Highlighted Fluorescence view

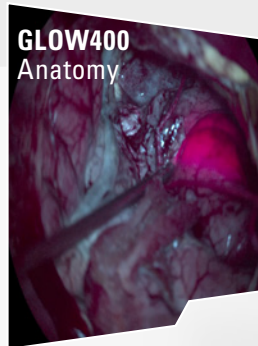
- > Broader representation of fluorescence intensities
- > Enhancing visibility of low fluorescence signals to observe traces of remaining fluorescence
- > Showing a pure fluorescence view by separating fluorescent from non-fluorescent blue light signals, on a dark background

All GLOW400 images shown in this brochure are courtesy of Tim Jacquesson, MD, PhD Hospices Civils de Lyon, France.

STAY FOCUSED

Choose how you want to view the surgery with GLOW400. You can visualize the application on a 2D*or 3D monitor for you and your entire team or even use the MyVeO surgical headset to view everything directly in front of your eyes in 3D. Also, enhance understanding with the GLOW400 viewing combinations.

Mono views



Side-by-side view



Get a more comprehensive understanding of suspected grade III and IV glioma tissues: toggle through multiple real-time GLOW400 views

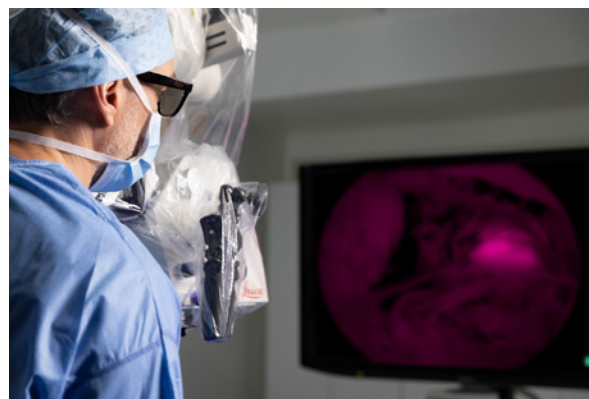
With just a click on the microscope handle or footswitch, you can smoothly toggle through the mono and side-by-side views of GLOW400 Anatomy and HiFluo. These views are helpful for evaluating your surgical course of action. The combination of different views can reduce surgical interruptions and mental fatigue.



Share your GLOW400 views with your entire team in 3D high resolution

GLOW400 allows for seamless integration into your procedure workflow, thanks to its compatibility with the ARveo 8 digital visualization microscope, providing you with the full benefits of integration. You and your team can utilize and interchange between different viewing devices for surgery with GLOW400:

- > 3D visualization directly in front of the eyes with the MyVevo headset for up to three operators
- > 3D view via optional 55-inch 4K 3D cart-mounted external monitor
- > 3D view via the microscope-mounted 32-inch 4K 3D monitor*



*Integrated microscope monitor not intended for HUD surgery, only for observation

TECHNICAL DATA

GLOW400 COMPATIBILITY

Microscope	Evolved ARveo 8
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You can buy a GLOW400 license later through your Leica representative if it wasn't purchased with the ARveo 8 initially. A Leica service technician will activate it for you on site.

GLOW400 FILTER SET CHARACTERISTICS

Fluorescence excitation	~380 – ~430 nm (blue)
Fluorescence signal	≥ 444 nm



Leica Microsystems (Schweiz) AG
Max Schmidheiny-Strasse 201
9435 Heerbrugg, Switzerland



Class IIa GLOW400

Class I surgical microscope ARveo 8 incl. accessories, such as MyVeo

Not all products or services are approved or offered in every market and approved labeling and instructions may vary between countries. Please contact your local Leica representative for details.



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