

Medtronic

Visualase™ V2

MRI-guided laser ablation system

Unlock the future of LITT

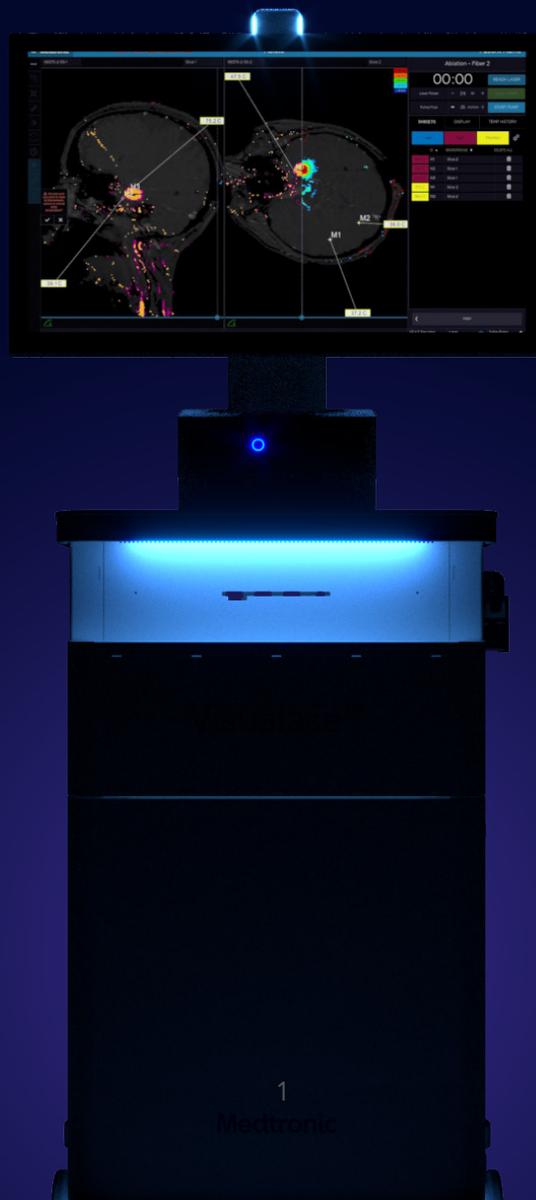
Purposefully engineered to advance the future
of cranial laser ablation – by design.



A legacy of excellence. A future of possibilities.

For nearly 20 years, the Visualase™ portfolio has led the way in MRI-guided laser interstitial thermal therapy (LITT), serving patients with brain tumor and focal epilepsy in more procedures and across more countries than any other system.

The Visualase™ V2 MRI-guided laser ablation system builds on this established global legacy with **precision**, **control**, and **versatility**, raising the bar for what you can expect from laser ablation.



Precision by design

When every millimeter matters, you need confidence knowing that your visualization reflects what's happening within the tissue.

Visualase™ ablation is the only cranial laser ablation system with true sub-millimetric voxel size.

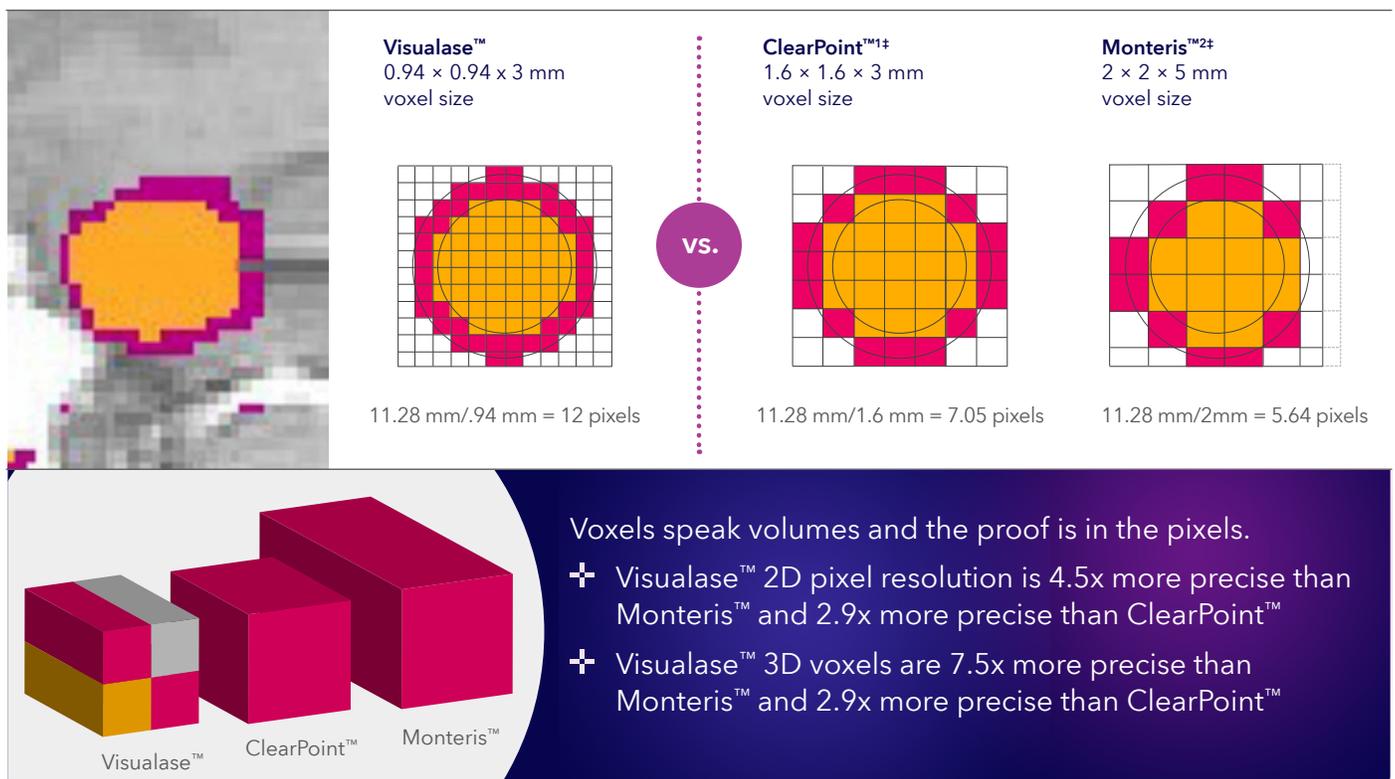
Every voxel represents real data – not interpolated estimates – giving you reliable information for confident decision-making.

- + **Confidence in the ablation zone:** More raw data points for unparalleled visualization and control, so that you can ablate only the tissue that matters, preserving healthy brain structures.
- + **Reliable damage estimates:** Validated histology-based thermal damage models for accurate calculation of necrosis and transitional tissue.
- + **Expanded visualization options:** Zoom, pan, and TDE opacity features for improved visualization of background images and thermal damage estimate.†

† Compared to Visualase™ V1 MRI-guided laser ablation system

Best-in-class thermal image resolution delivers the precision you need.

Visualase™ is the only LITT system to offer raw voxel size $1 \times 1 \times 3$ mm and a thermal image refresh every 5-7 seconds, which allows surgeons to monitor the ablation with unmatched precision and speed.



‡ Interpolated down to a $0.8 \times 0.8 \times 3$ mm voxel.

Control by design

Real-time safety checks for peace of mind and a streamlined procedure

Multiple safety checks integrated throughout the procedure help ensure any potential issues are identified and communicated in real time. This approach minimizes disruptions and reduces the complexity of procedural tasks, allowing for a streamlined setup.

- ✦ **Fully automated MRI drift correction:** Improved thermometry accuracy for entirety of the procedure.[†]
- ✦ **Streamlined workflow:** Intuitive, linear task flow improves overall software usability and consistency throughout the surgical workflow.
- ✦ **Smart automation:** Bidirectional hardware and software controls reduce manual tasks and simplify troubleshooting.

44%

reduction in number of tasks completed manually, with no software prompting, during a Visualase™ case.^{‡,3}

46%

reduction in the number of tasks required to set up a pullback ablation on the same fiber.^{‡,3}

Versatility by design

Investing in your patients today and tomorrow

Visualase™ V2 is designed to evolve, ensuring care teams are staying at the forefront of laser ablation technology.

- ✦ **Upgradeable platform:** Designed to integrate new features and capabilities via software updates.
- ✦ **Flexible, mobile design:** Supports use across multiple onsite MRI scanners.
- ✦ **FDA cleared with pediatric indication (children ages 2 and older):** Expands ability to serve a broader range of patients.[‡]



[†] As compared to no drift correction.

[‡] Compared to Visualase™ V1 MRI-guided laser ablation system

Why Visualase™ MRI-guided laser ablation?

When you choose Visualase™ laser ablation, you unlock technology and deep technical expertise with hands-on support for every procedure – all working together to advance patient care.

Partnership beyond products

Medtronic is the global leader in medical technology, services, and solutions – serving millions of people around the world every day.

Medtronic Visualase™ MRI-guided laser ablation is backed by

- + Decades of research and experience
- + World-class technical support provided by our laser ablation surgical consultants (LASC)

Global impact

11,000+
patients served since 2012

Now available in
50+
countries



200+
hospitals

500+
neurosurgeons

How can Visualase™ MRI-guided laser ablation benefit patients?

Visualase™ MRI-guided laser ablation is a minimally invasive alternative to open craniotomy for patients with focal epilepsy or brain tumors.

Focal epilepsy	Visualase™	Craniotomy
 Hospital stay ⁴	1.18 days	3.34 days
 Recovery time ⁵	<1 week	4-6 weeks
 30-day readmission ^{6,7}	0%	13.9%

Brain tumor	Visualase™	Craniotomy
 Hospital stay ⁸	2.33 days	4.71 days
 Discharge to home ^{8,†}	79%	66%
 30-day readmission ^{9,10}	1.8%	7.5%
 Complication rate ^{11,‡}	5.7%	13.9%

† Percentage of patients go home after leaving the hospital and don't enter a rehab or other transitional facility

‡ Percentage of people who are admitted to the hospital for a complication related to the procedure within 30 days.

What's new with Visualase™ V2

For nearly two decades, Visualase™ has been the trusted leader in MRI-guided LITT.

The Visualase™ V2 platform builds on this leadership with updated automation, advanced laser safety capabilities, and greater system flexibility designed to support evolving workflow needs and operational efficiency.



Visualase™ V2 system

Precise lesions with 980 nm laser	
Automatic MRI drift correction without impact to partial damage when temps reset	
Automatically turns pump on with the laser if not already on	
Automatic flow sensing and laser shutoff in no flow condition	
Automatically sets appropriate test dose and max power based on LDF type	
Automatic TDE accumulation and replacement of targets between pullbacks	
Ability to restore a previous TDE frame after an unexpected noise event	
Ability to zoom, move, recenter, and adjust brightness / contrast images in viewpoints	
Upgradable hardware and software, designed to unlock the future of LITT	

References

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Ready to unlock the future of LITT?



With V2, you're not just at the forefront, you're shaping the future of LITT.

Visit medtronic.com/V2 or scan to learn more



The Visualase™ V2 MRI-guided laser ablation system is a neurosurgical tool and is indicated for use to ablate, necrotize, or coagulate intracranial soft tissue, including brain structures (for example, brain tumor, radiation necrosis, and epileptic foci as identified by non-invasive and invasive neurodiagnostic testing, including imaging) through interstitial irradiation or thermal therapy in pediatrics and adults with 980 nm lasers. The intended patients are adults and pediatric patients from the age of 2 years and older.

Caution: Federal Law (USA) restricts these devices for sale by or on the order of a physician. Refer to the product instruction manual/package insert for instructions, warnings, precautions, and contraindications. Healthcare professionals must review the product technical manual prior to use for detailed disclosure. For information on Indications, Safety, and Warnings, call Medtronic at 1-800-328-0810. For further information, please contact Medtronic Neurosurgery at 1-877-242-9504, and/or consult Medtronic's website at medtronic.com.

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