

LUMOHS™ IS A CLASS I MEDICAL DEVICE UNDER 21 CFR §878.4800 AND IS 510(K)-EXEMPT. THIS DEVICE IS INTENDED FOR USE BY LICENSED HEALTHCARE PROFESSIONALS TO CUT TISSUE DURING SURGICAL PROCEDURES. DESCRIPTIONS ARE FOR INFORMATIONAL PURPOSES ONLY AND DO NOT CONSTITUTE PERFORMANCE CLAIMS OR GUARANTEES OF CLINICAL OUTCOMES. IMAGES ARE FOR ILLUSTRATIVE USE AND DO NOT IMPLY SUPERIORITY. AVAILABILITY SUBJECT TO REGULATORY AND MANUFACTURING TIMELINES. FOR MORE INFORMATION OR TO REPORT A DEVICE ISSUE, VISIT [WWW.LUMOHS.COM](http://WWW.LUMOHS.COM) OR EMAIL [INFO@LUMOHS.COM](mailto:INFO@LUMOHS.COM).

# lumohs™

THE LIGHT IS IN YOUR HANDS

2025

**lumohs™**

# **The First Self-Illuminated, Sterile, Single-Use Scalpel**

The light is in Your Hands.  
Where You Need It.



## **Engineered for Precision**

Unlike standard flat-handled disposable scalpels, Lumohs features a premium, weighted design to enhance a surgeon's grip, and provide control and comfort.

# ABOUT LUMOHS

## Dr. Steven Hacker, MD

- Board-certified Mohs surgeon and dermatologist
- Selected at age 19 for the University of Florida Junior Honors Medical Program
- M.D. from University of Florida College of Medicine
- Completed internal medicine training at University of Michigan Hospitals
- Chief Resident, Dermatology at University of Florida/Shands Hospital
- 35+ years in dermatology; performed 25,000+ Mohs procedures
- Inventor with 14+ medical device patents
- Founder of Hacker Dermatology (est. 1994)
- Published author with 20+ peer-reviewed articles and textbook chapters
- Named a Castle Connolly "Top Doctor" for 25+ consecutive years



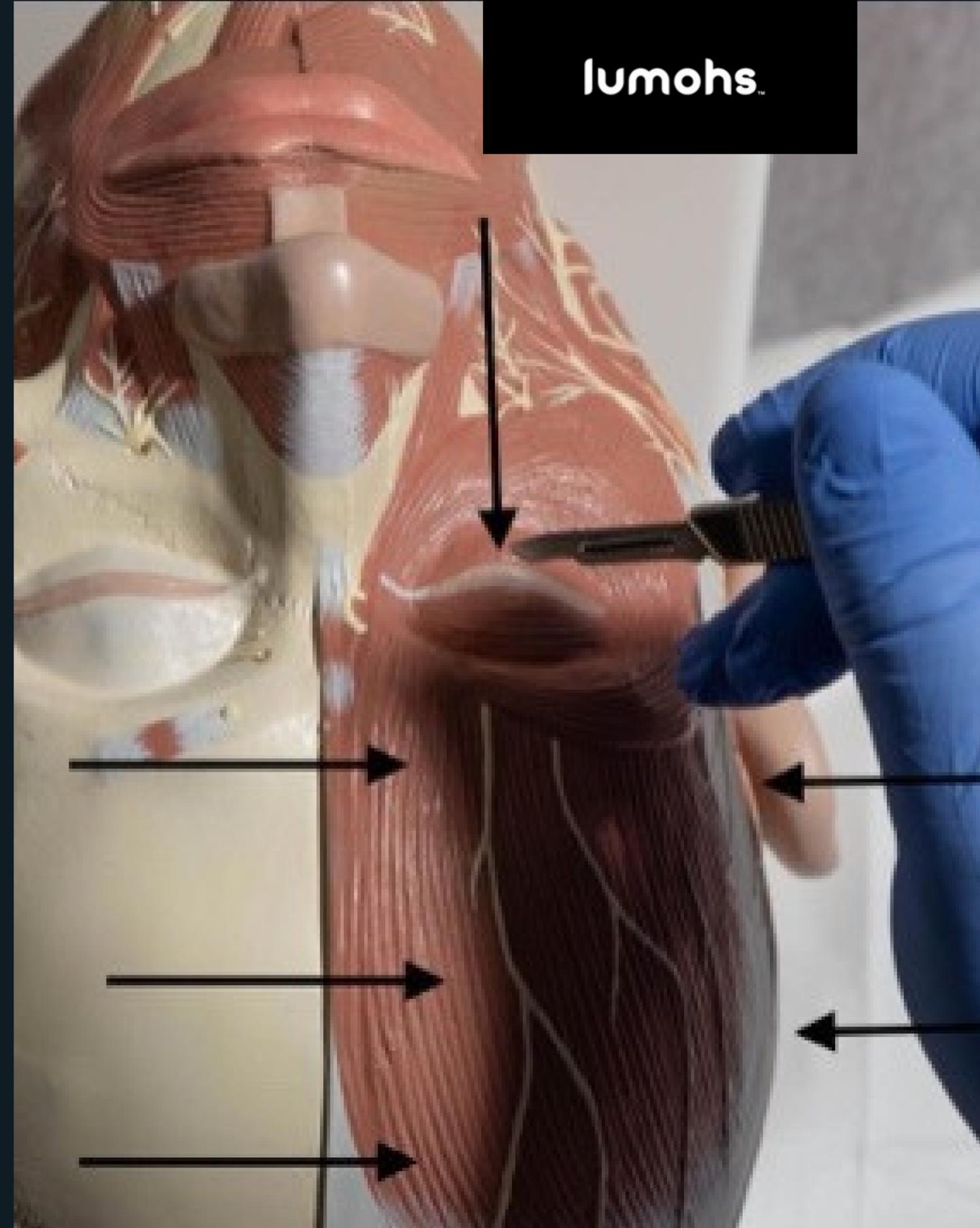
**"Every Artist has more than one paint brush, every mechanic more than one tool, but if a surgeon had only one instrument, Lumohs would be it"**  
– Dr. Steven Hacker



## Clinical Challenge:

- Scalpel often used for less than 2 minutes during initial incision
- Overhead lighting may not provide consistent, focused illumination
- Hand positioning and instruments can cast shadows
- Visibility may be limited in outpatient or field settings during critical steps

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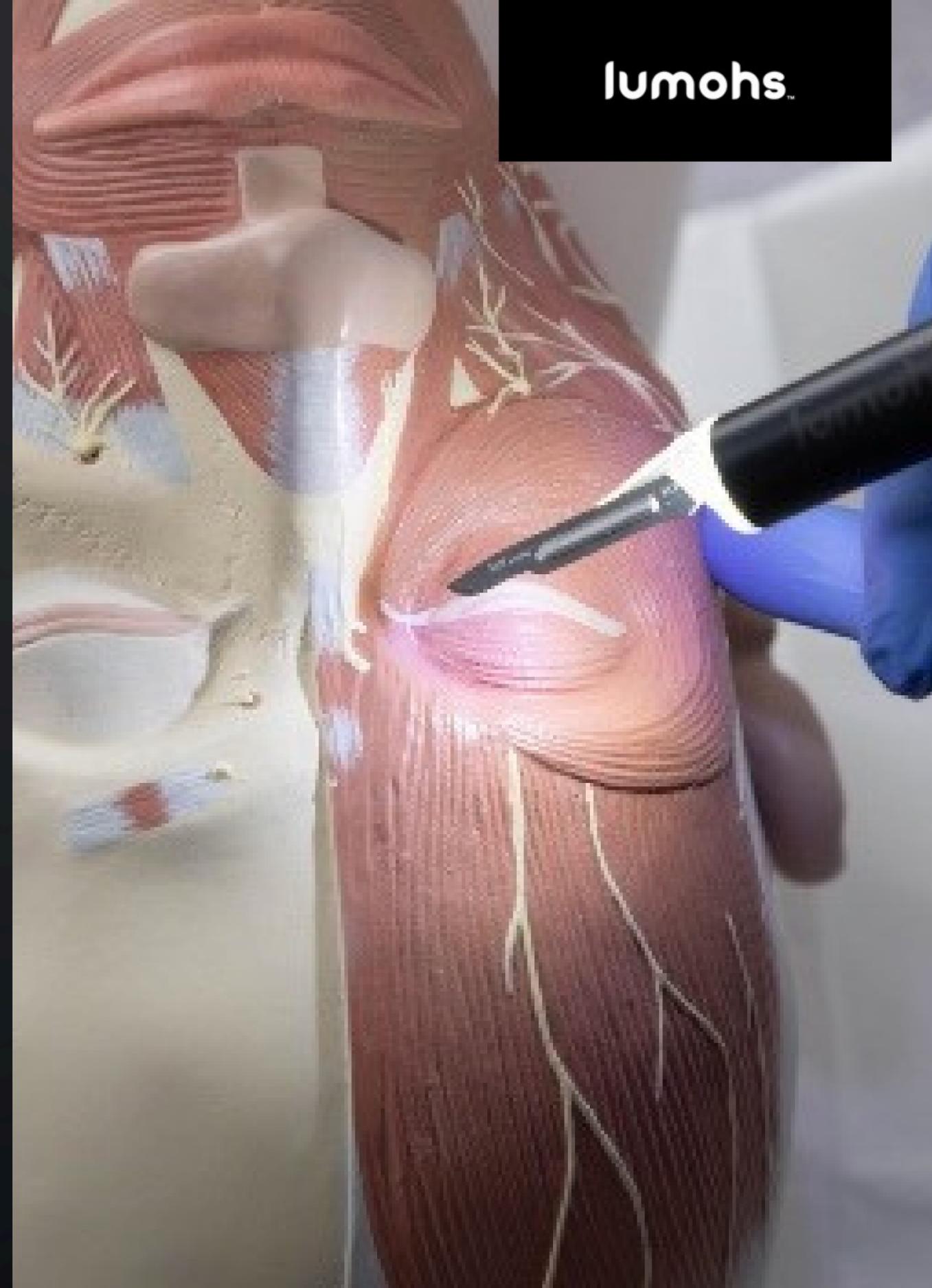




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## Clinical Solution:

- Integrated light source delivers focused illumination at the incision site
- Single-use, portable design supports use in diverse care settings
- Functions independently of external light sources or equipment
- Minimizes shadows from obstructions ie hands, tools, etc.



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# EXAMPLE - WITHOUT LUMOHS:



# WITH LUMOHS:

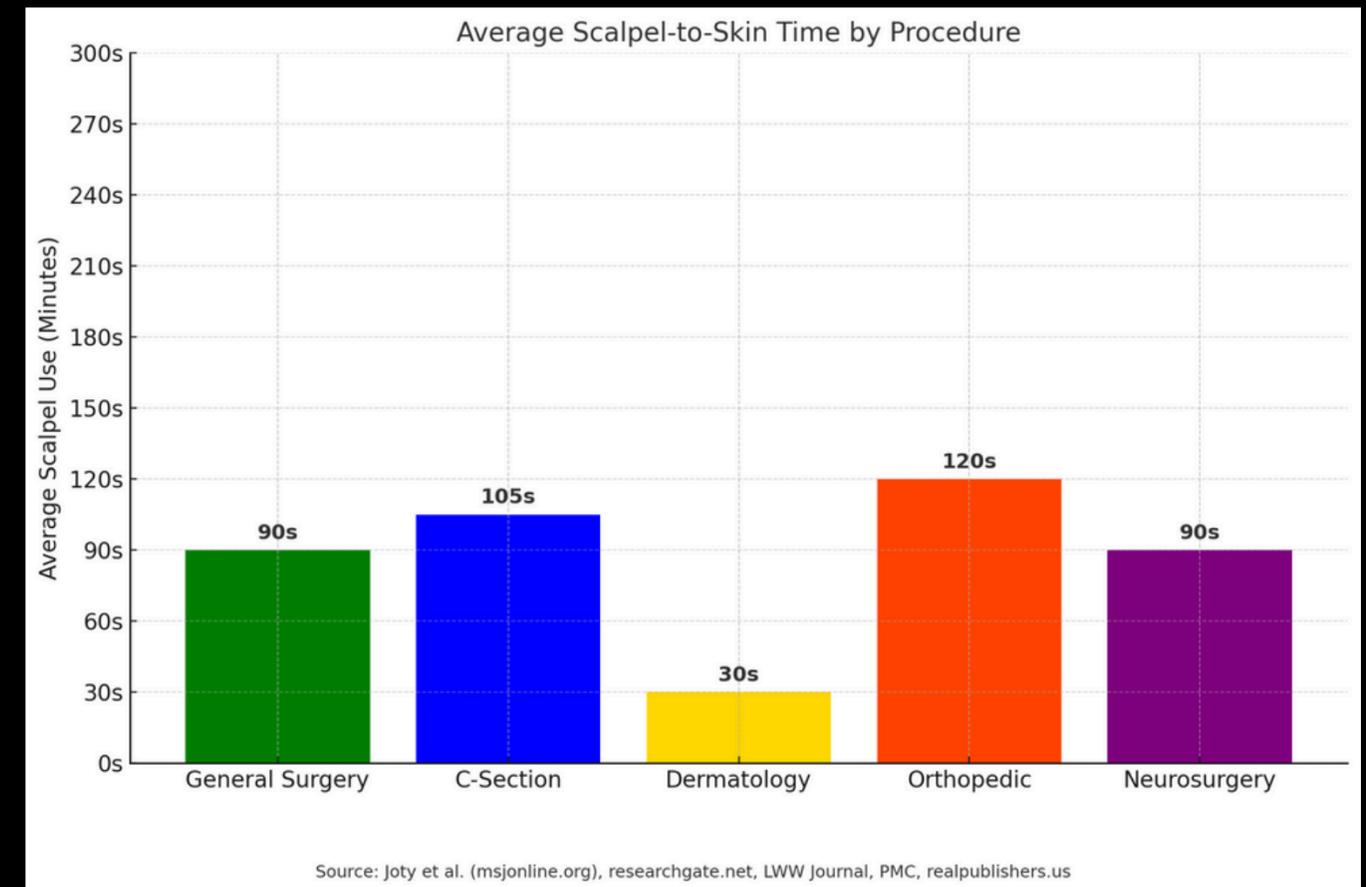
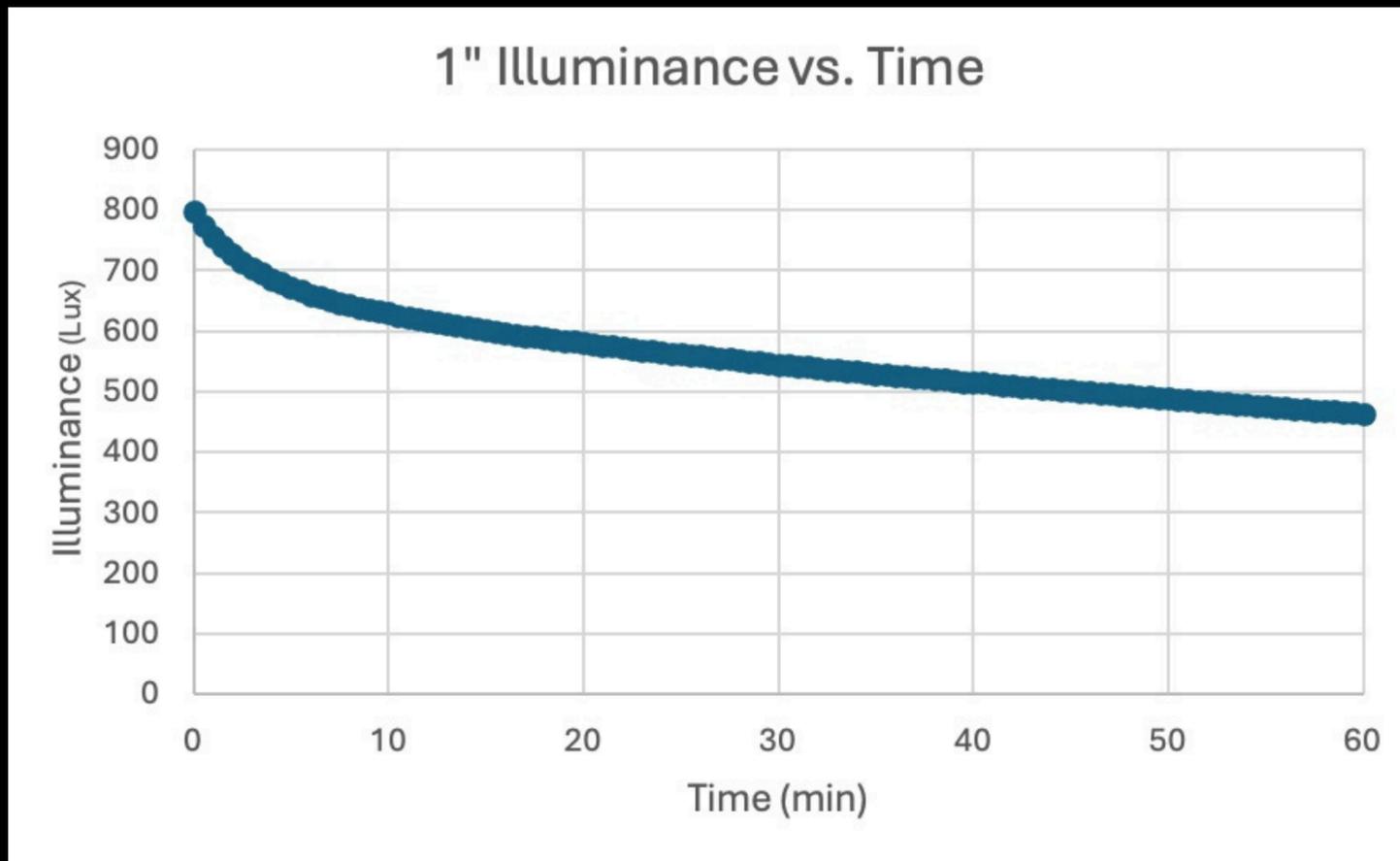


Images shown are for illustrative purposes only and represent simulated lighting conditions. No claims of clinical performance or outcomes are implied.

# Lumohs Lighting Performance vs Average Scalpel to Skin

Based off Source: Joty et al., MSJ Online, ResearchGate, LWW Journal, PMC  
 (Pre-Sterilization Data - Subject to Change)

Pre-sterilization lux values shown; final brightness may vary pending age and sterilization testing.



# WHY LUMOHS?

*"At Lumohs, we're not just building surgical tools—we're designing solutions that fit the way surgeons already work."*  
— Anna Dunford, VP of Sales



- Enhances visibility in challenging or obstructed fields
- Sterile, single-use design supports infection control standards
- No setup required—ready to use out of the package
- Includes select recycled components for sustainability
- Supported by a team focused on service and compliance

The image features a surgical scalpel as the central focus. The scalpel is positioned diagonally, with its handle extending from the upper right towards the lower left. The handle is illuminated from within, creating a bright, glowing effect. The blade is sharp and pointed towards the bottom left. The background is dark, with a textured surface that appears to be skin or a similar material, which is also illuminated by the light from the scalpel. In the top right corner, there is a black rectangular box containing the brand name 'lumohs' in white lowercase letters. On the left side, the title 'APPLICATIONS FOR LUMOHS' is written in large, white, uppercase letters.

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# APPLICATIONS FOR LUMOHS

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# NEUROSURGERY & ORTHOPEDIC

## Neurosurgery

Lumohs delivers integrated illumination to support visibility in deep or narrow surgical spaces, such as during cranial or spinal procedures. It may reduce reliance on overhead lighting and aid visualization during tasks like dural exposure or tumor access. The ergonomic design supports precision in delicate neuroanatomy.

## Orthopedic

In orthopedic procedures with deep or obstructed sites—like spinal fusions, joint replacements, or fracture repair—Lumohs provides built-in light at the incision point to assist visibility. Its wide grip and sterile, ready-to-use design support ease of use in challenging surgical environments.

# MILITARY FIELD OPERATIONS

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In field operations or mobile surgical units with limited lighting, Lumohs offers built-in illumination at the incision site to support visibility. Its compact, sterile, peel-to-open packaging allows for rapid use in trauma or damage control cases where speed and clarity are critical.



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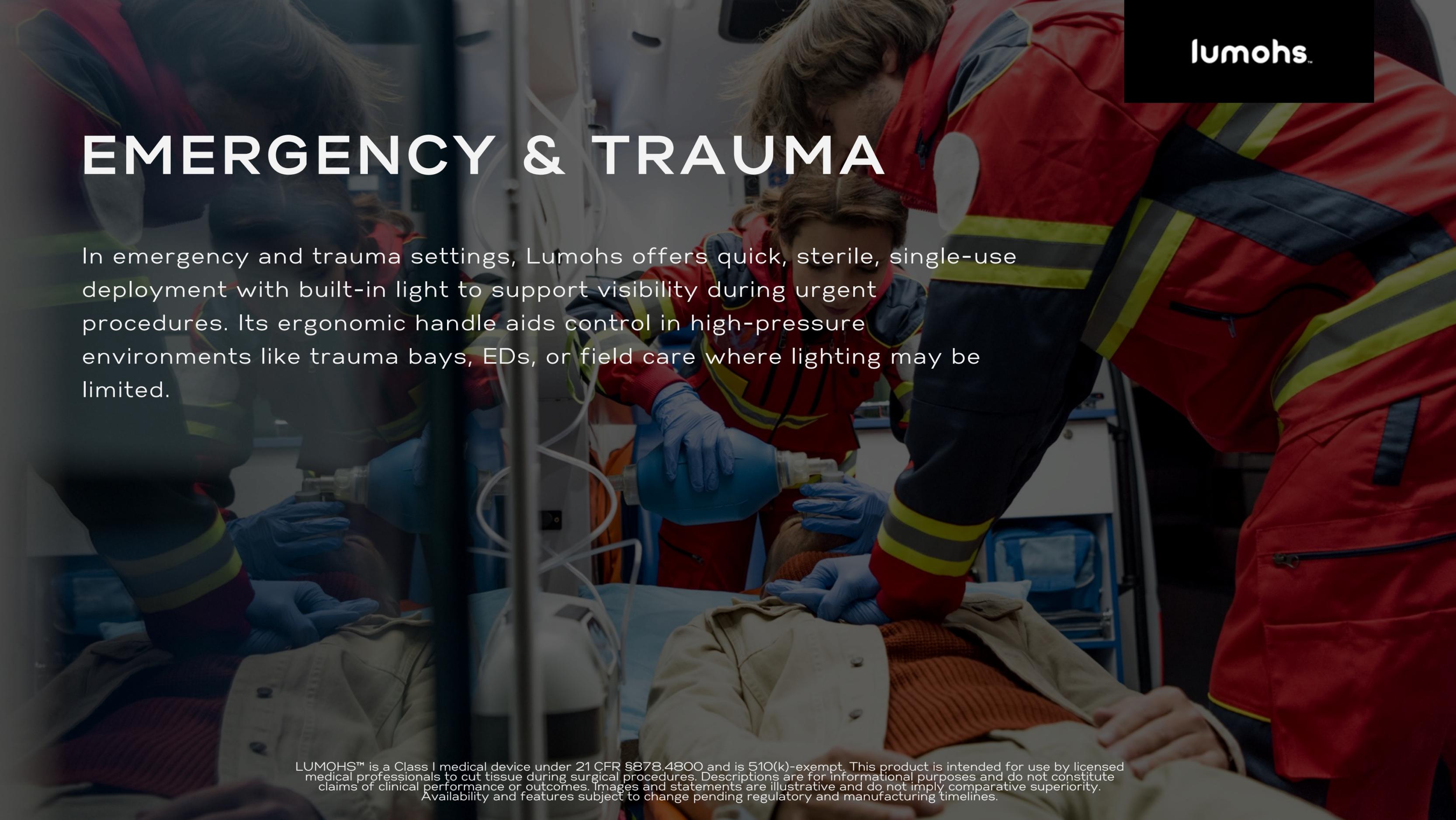
# DERMATOLOGY AND PLASTICS

## Dermatology

Lumohs delivers targeted light at the incision site to assist dermatologic procedures in shadowed or contoured areas, like behind the ears or along the scalp. Its sterile, single-use design supports infection control and may reduce the need to adjust overhead lighting. Ideal for Mohs surgery, lesion excisions, and graft harvesting.

## Plastics

Lumohs provides focused light at the blade tip to support visibility in detailed plastic and reconstructive procedures, including facial contours and flap work. Its wide, contoured handle supports control, while the sterile, no-setup design enables immediate use in outpatient or OR settings.



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# EMERGENCY & TRAUMA

In emergency and trauma settings, Lumohs offers quick, sterile, single-use deployment with built-in light to support visibility during urgent procedures. Its ergonomic handle aids control in high-pressure environments like trauma bays, EDs, or field care where lighting may be limited.

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# CENTRAL & PERIPHERAL LINE ACCESS

Lumohs supports precise skin and vessel access with built-in light for enhanced visibility during central line placement, IV access, or port exposure—especially in low-light or field settings. Its sterile, single-use design enables fast deployment without external equipment in critical care or bedside procedures.

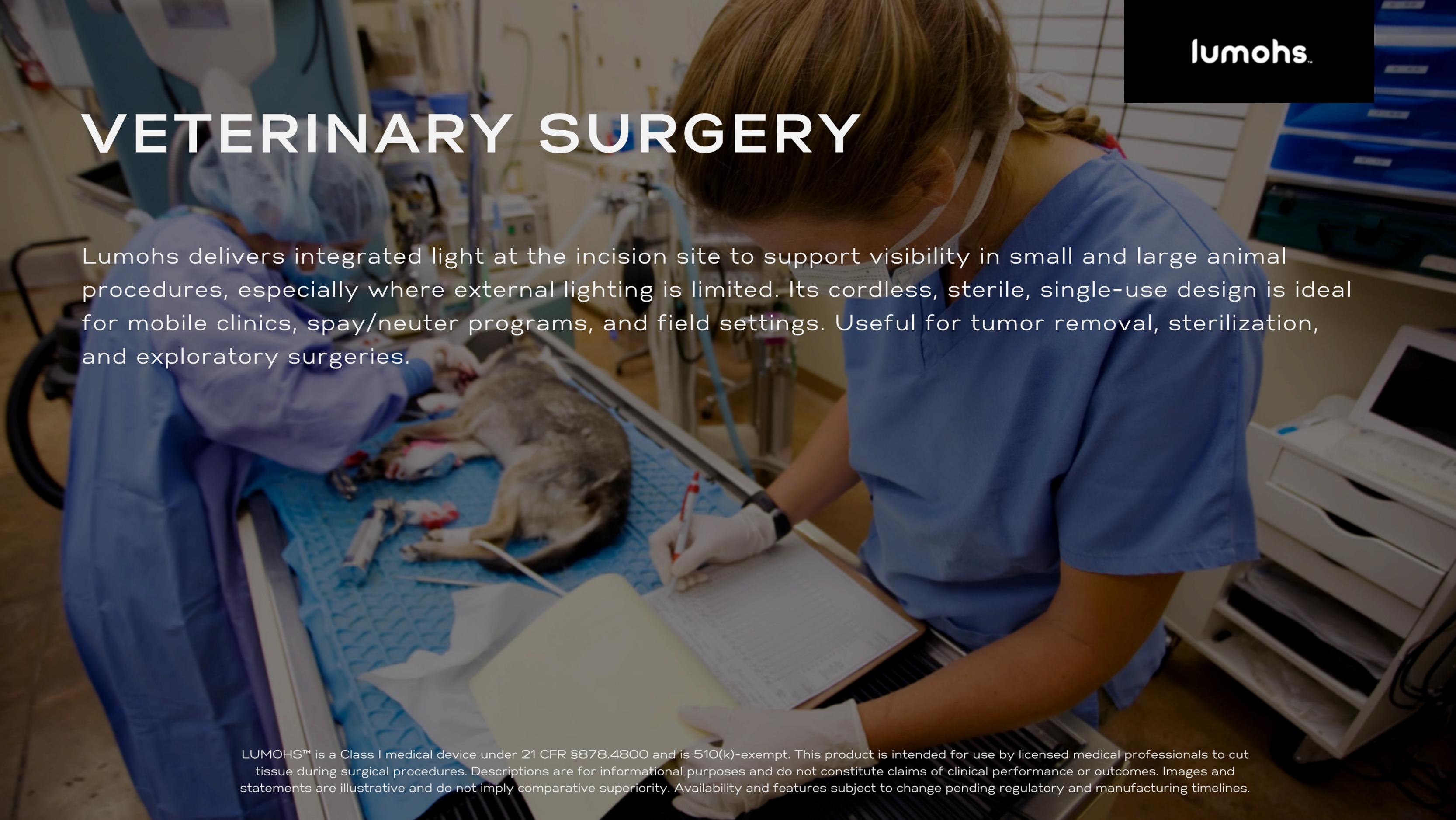


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# DENTAL & ORAL SURGERY

Lumohs provides built-in light for soft tissue procedures in the oral cavity, where space and angles can limit overhead lighting. Its cordless, sterile, single-use design is ideal for mobile or outpatient dental settings. Useful for gingivectomy, crown lengthening, and periodontal surgeries requiring clear visualization.

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# VETERINARY SURGERY

Lumohs delivers integrated light at the incision site to support visibility in small and large animal procedures, especially where external lighting is limited. Its cordless, sterile, single-use design is ideal for mobile clinics, spay/neuter programs, and field settings. Useful for tumor removal, sterilization, and exploratory surgeries.

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# Surgical Lighting Literature

**Street et al.,  
European Archives  
of Oto-Rhino-  
Laryngology  
(2014) Study Type:  
Level I –  
Randomized  
Controlled Trial  
(RCT)**

- **Comparison:** General-purpose LED headlight vs. surgical-grade LED headlight
- **Findings:** No significant difference in visual acuity or color discrimination
- **Conclusion:** Affordable, portable lighting can meet surgical visual needs
- DOI: 10.1007/s00405-014-3045-2

**Hignett et al.,  
Journal of  
Perioperative  
Practice (2019)  
Study Type: Level  
III –  
Interdisciplinary  
Literature Review**

- **Focus:** Limitations of overhead lighting across surgical environments
- **Key Insight:** Overhead systems often create shadows and lack adaptability
- **Recommendation:** Supports need for flexible, site-specific lighting—especially in minimally invasive and outpatient settings
- DOI: 10.1177/1750458919849315

**Feuchtinger et al.,  
Journal of Clinical  
Nursing  
(2018) Study Type:  
Level II-III –  
Systematic  
Literature Review**

- **Focus:** Impact of suboptimal lighting on surgical accuracy, team fatigue, and efficiency
- **Key Insight:** Highlighted need for focused, shadow-free illumination at the point of care
- **Recommendation:** Support for consistent lighting solutions independent of overhead sources
- DOI: 10.1111/jocn.14325

**AORN Guidelines  
for Perioperative  
Practice (2023)  
Study Type: Level  
IV-V – Expert  
Consensus  
Guidelines**

- **Source:** AORN (Association of periOperative Registered Nurses)
- **Focus:** Lighting expectations in the surgical field
- **Key Insight:** Emphasizes adequate, shadow-minimizing illumination to support procedural accuracy
- **Relevance:** Considered a gold standard in perioperative safety; often cited in hospital policy

# Redefining Surgical Tools – With the Planet in Mind



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A greener cut  
– Lumohs  
Handles are  
Made with  
Recycled  
Plastics



Each Lumohs  
handle diverts  
waste from landfills  
– reducing the  
carbon footprint

Every small  
effort makes  
a difference!

Our  
Environmental  
Commitment is  
Scalable

Spread  
awareness  
and take  
action.



# Q & A

## Lumohs isn't just a different kind of scalpel.

It's a step toward a surgical experience defined by clarity, efficiency, and readiness — anytime, anywhere.

No wires. Minimal setup. Designed for ease of use.

This is the next generation of surgical lighting. Let's bring it to every OR, clinic, and care team. Ready to explore the future of surgical lighting? Let's talk.

1

What makes Lumohs different from traditional scalpels ?  
→ Lumohs integrates light directly at the incision site — no external power or positioning required.

2

Is it reusable or single-use?  
→ Lumohs is available in both single-use and reusable formats.

3

**Am I able to use different types of blades?**

→ Lumoh's is able to accomodate orders with different types of blades.

4

**What are possible use settings?**

→ Lumohs is intended for use in any setting where a precision scalpel is needed, including clinics, operating rooms, ambulatory centers, emergency care, mobile units, and field-based environments.

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**THANK YOU**