# MOSES<sup>TM</sup> 2.0 TECHNOLOGY

# Surgical Excellence, Redefined



# Introducing: MOSES<sup>M</sup> 2.0 TECHNOLOGY

# Making the best even better

- Significant Economic savings<sup>9,23</sup>
- Increased Efficiency<sup>1,9</sup>
- Higher Precision<sup>1,9</sup>
- Optimal Energy Delivery<sup>1,9</sup>

The second part of the pulse is then emitted through the initial bubble, delivering an optimized laser pulse to the target.<sup>1</sup>



The initial controlled laser pulse separates the water, creating a pathway for a second laser sequence

# **MOSES 2.0 Laser Lithotripsy**

## Continuous innovation

Be it a kidney, ureteral or bladder stone, soft or hard - MOSES 2.0 provides you with the speed and power you need for both ureteroscopic and percutaneous stone treatments<sup>1</sup>



# Lithotripsy Performance, Unleashed

Embrace the Best-In-Class Combination of the MOSES 2.0 Laser and Fibers



## 20% **FASTER** PROCEDURES

As shown in a randomized clinical trial, the MOSES Technology reduces procedure time by 20%, making your treatments faster and more efficient.<sup>1</sup>

## **BORE EFFICIENT** FRAGMENTATION

MOSES high precision and optimized impact on the target stone makes the most of every shot, leading to a greater ablation rate compared to regular pulses.<sup>1</sup>

50% RETROPULSION

The MOSES Technology has taken retropulsion reduction to the next level, decreasing retropulsion levels by 50%.<sup>1</sup>

## 120<sub>Hz</sub> END-TO-END EXCELLENCE

From ultra–speed stone dusting, through unprecedented pop–corning settings - MOSES 2.0 offers the speed and energy you need - when you need it .<sup>3</sup>

## MOSES 2.0 Increased efficiencies

85% greater stone ablation at 120Hz



53% greater stone ablation at similar power



Focus on what matters in your percutaneous approach
Standard, Mini and
UltraMini PCNL

Leverage MOSES' advantages to create smaller stone particles, allowing you to miniaturize your percutaneous access.<sup>4</sup>

# PCNL suction handpiece

Allows for simultaneous lithotripsy and aspiration of stone fragments for greater control in Standard PCNL.<sup>5,6,7</sup>



## LEAVE NO STONE BEHIND

MOSES 200 D/F/L flexible fiber is designed to minimize scope deflection loss<sup>1,8</sup>, enabling you to reach difficult-to-access stone locations.



Advanced ball-shaped tip enables a smooth initial insertion of the MOSES 200 D/F/L fiber, through a flexible scope, designed to minimize potential scope damage.

## Fiber Tip Degradation (mm)



IMPROVED FIBER **DURABILITY** 

The unique MOSES pulse, combined with best-in-class surgical fibers, results in minimal fiber burnback and improved control.<sup>3</sup>

# **MOSES 2.0 BPH** Shifting paradigms

Cementing HoLEP as the clinically superior treatment for BPH, the MOSES technology enables same day Catheter Free discharge, and faster procedures.<sup>9,10,11</sup>

The MOSES BPH bubble is a unique optimization for BPH procedures, improving capsule-adenoma separation and blood vessel coagulation.<sup>9</sup>

**90+**% **40**%

Same Day Discharge<sup>9</sup>

Faster Hemostasis<sup>9</sup> **15**% Faster

Enucleation<sup>9</sup>

## MOSES 2.0 for HoLEP Make an impact that lasts



## Same Day Discharge, Catheter Free

With more efficient procedures and minimal bleeding – MOSES BPH results in over 90% of patients being discharged on the same day, and with better bladder voiding outcomes.<sup>9</sup>



### **Faster Procedures**

With 15% faster enucleation and 40% faster hemostasis – MOSES BPH simultaneous cutting and cauterizing significantly reduce surgical time and anesthesia use.<sup>9</sup>

### Enucleation efficiency 9,12,13







### Faster Learning Curve

Become adept at the HoLEP technique after only 20-30 supervised procedures.<sup>14</sup>

With less fiber burnback and improvements in hemostasis - MOSES enables a tapered learning curve by providing better vision clarity and control during the procedure.<sup>9</sup>

With Moses 2.0 the learner can focus on mastering HoLEP without distractions. Minimal fiber burnback and movement and improved hemostasis decreasing surgery interruptions and allowing for more precise laser control

### Dr. Amy E. Krambeck

Professor of Urology at Indiana University School of Medicine

## Lower Reoperation Rates<sup>15, 16, 17</sup>



## Lower Complication Rates<sup>15, 18</sup>



# **A powerful MOSES solution** for accelerated vaporization<sup>3</sup>



Up to 2.2x faster vaporization rate compared to regular pulse.<sup>3,19</sup>



Control hemostasis and keep bleeding minimal with the advanced pulse reshaping and customized dual pedal.<sup>20,21</sup>



Xpeeda<sup>™</sup> side firing fiber is designed to deliver increased energy transmission<sup>3</sup> in full contact without causing deep tissue charring.<sup>22</sup>

I have noticed a significant difference when working with MOSES for vapoization. The vaporization rate was better and I found a smoother vaporization plane. I am looking forward to further exploring the potential benefits of the MOSES technology in BPH treatments.

> Dr. Fernando Gómez Sancha, Clinica Centro Madrid, Spain

# Heritage of Innovation



## 1990

The World's First Holmium Laser System for Urology 2000 The First

High Power Holmium Laser System for BPH



2014

Suite

Lumenis Pulse

120H - An all-

in-one Urology



2017 MOSES Technology -Reframing the Laws of Physics



## 2018

MOSES BPH - A New Era for HoLEP Treatments **2020** Shifting Paradigms in Urology

Treatments

MOSES

# Impact with Every Interaction



### **Continuous Innovation**

From the first Holmium Laser for Urology to the patent-protected MOSES Technology – Lumenis is Leading Urology innovation



## **Proven Versatility**

Backed by hundreds of clinical papers – the Lumenis Urology Platforms offer 360° solution for both lithotripsy and soft tissue applications



## **Elevating Life**

Continuously striving to provide better technology for better patient care – making an impact on hundreds of thousands of patients every single day



## Peace of Mind

With thousands of global installations and hundreds of supporting clinical publications – Lumenis is your trusted global partner

# **Technical** Specifications

## **MOSES PULSE 120H**

| Moses Technology      | Lithotripsy & BPH 2.0                     |  |  |  |
|-----------------------|---|--|--|--|
| Maximum Optical Power | 120 W                                     |  |  |  |
| Wavelength            | Holmium (2.1 µm)                          |  |  |  |
| Repetition Rate       | 5-120Hz 2.0                               |  |  |  |
| Pulse Energy          | 0.2-6 J                                   |  |  |  |
| Integrated Suction    | Yes                                       |  |  |  |
| Case Saver Mode       | Yes                                       |  |  |  |
| Dual Pedal Footswitch | Yes                                       |  |  |  |
| Pulse Width           | Adjustable<br>(Short, Medium, Long)       |  |  |  |
| Fibers                | Lumenis reusable<br>and single use fibers |  |  |  |

| Smart Identification System (SIS)                            | Yes                            |  |  |  |
|--|--------------------------------|--|--|--|
| Aiming Beam  | Green                          |  |  |  |
| Fiber Support Arm  | Optional                       |  |  |  |
| Weight   | 260 kg                         |  |  |  |
| Dimensions [W / L / H]                                       | 47 x 116 x 105 cm              |  |  |  |
| Voice Confirmation Indicating<br>System's Operational Status | Yes                            |  |  |  |
| Electrical   | 200-240 VAC, <46 Amp, 50/60 Hz |  |  |  |
| Warranty   | One year parts and labor       |  |  |  |



### **Risk Information:**

The use of Moses technology in urology, enabled in the Lumenis Pulse 120H system, is contraindicated for patients who are unable to receive endoscopic treatments or are intolerant to prolonged anesthesia, as well as for resection or excision of large vascularized organs. Holmium lasers are intended solely for use by physicians trained in the use of the Ho:YAG (2.1 µm) wavelength. Incorrect treatment settings can cause serious tissue damage. The laser should be used only on tissues that are fully observable. See the system user manual for a complete list of contraindications and risks.

| 🛀 Lumenis Ltd.   | Lumenis (Germany)   | Lumenis Inc.   | EMEA  | ASIA / PACIFIC  | JAPAN  | LASER CLASS 4///<br>Holmium/14/0 Laser: 2.1um, 6J max, 1200us pulse max  |
|--|---|--|---|---|--|--|
| Yokneam Industrial Park<br>6 Hakidma Street P.O.B. 240<br>Yokneam 2069204, Israel<br>T +972-4-959-9000 | eam Industrial Park<br>kidma Street P.O.B. 240<br>Neam 2069204, Israel<br>CEPMANY | San Jose, CA, USA<br>T +1 408 764 3000<br>+1 877 586 3647<br>F +1 408 764 3999 | Dreieich Dreieichenhain,<br>Germany<br>T +49 6103 8335 0<br>F +49 6103 8335 300<br>Roma (RM), Italy<br>T +39 06 90 75 230<br>F +39 06 90 75 269 | Beijing, China<br>T +86 10 5737 6677<br>Gurgaon, India<br>T +91 124 422 07 95<br>Kowloon, Hong Kong<br>T +852 217 428 00<br>F +852 272 251 51 | Tokyo, Japan<br>T +81 3 4431 8300<br>F +81 3 4431 8301 | LASE CLASS 34 //b<br>DANCER - VISIBLE AND WINSING LASER RADATION<br>AV00 EVE OR SKI LASER RADATION<br>ON SCHUTTERD RADATION<br>CLASS 4 LASER PRODUCT Per<br>21 CR1 10b //bADA 1040.11<br>class 4 V LASER PRODUCT Per<br>21 CR1 10b //bADA 1040.11<br>class 4 LASER 10b //bADA 1050.11<br>class 4 LASER 1000.11<br>class 4 LASER 1000.11<br>class 4 LASER 1000.11<br>class 4 LASER 10 |
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