

# One Use-Plus SBK The Moria Option for SBK







# Accuracy and predictability equivalent

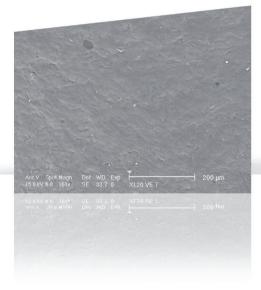
to Femto-SBK

	One Use-Plus SBK Flap thickness using ultrasound pachymetry <sup>1</sup>	Flap thickness with Femto-SBK 60 kHz <sup>2</sup>
Surgeon	Richard Duffey, MD (Mobile, AL, USA)	Guy Kerizian, MD (Paradise Valley, AZ, USA)
Intended thickness	100 microns	100 microns
Average	103 microns	109 microns
Standard Deviation	9 microns	10 microns
Minimum	83 microns	N/A
Maximum	123 microns	131 microns

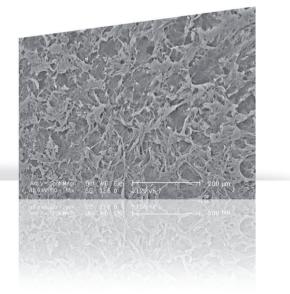
# **Smoother stromal bed surface**

#### with One Use-Plus SBK than with Femto-SBK<sup>1</sup>

Scanning Electron Microscopy x160<sup>1</sup> After cutting a flap with One Use-Plus SBK with an intended flap thickness of 100 microns



Scanning Electron Microscopy x160<sup>1</sup> After cutting a flap with a 60 kHz femtosecond laser with an intended flap thickness of 100 microns

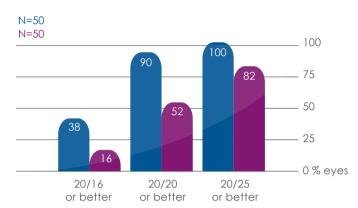


# Faster visual recovery

#### With One Use-Plus SBK than with Femto-SBK

One Use-Plus SBK - Dr. Duffey (Mobile, AL, USA)<sup>1</sup>
 Femto-SBK - Dr. Durrie (Overland Park, KS, USA)<sup>3</sup>

#### UCVA at 1 day postoperative

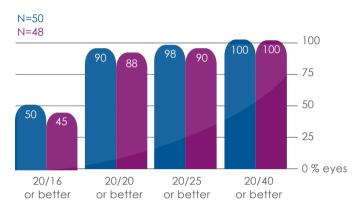


# **Equivalent visual outcomes**

#### to Femto-SBK at 1 month

One Use-Plus SBK - Dr. Duffey<sup>1</sup> Femto-SBK - Dr. Durrie<sup>3</sup>

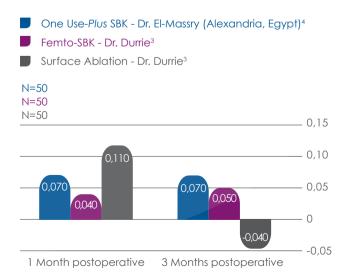
#### UCVA at 1 month postoperative



# Equivalent quality of vision

to Femto-SBK

# Changes in High Order Aberrations after wavefront-guided treatments<sup>3,4</sup>

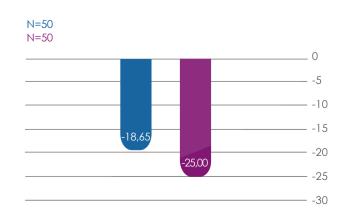


# **Better biomechanical stability**

With One Use-Plus SBK than with Femto-SBK

Ocular Response Analyzer Results Difference in Corneal Hysteresis after SBK from preop to 1 month postop<sup>3,4</sup>

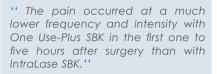
- One Use-Plus SBK Dr. El-Massry<sup>4</sup>
- Femto-SBK Dr. Durrie<sup>3</sup>



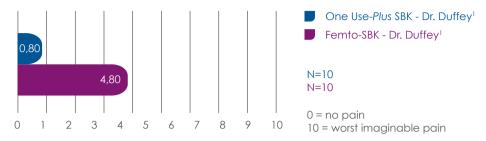
### **Greater patient comfort**

with One Use-Plus SBK than with Femto-SBK

#### Pain score at 1 to 5 hours post surgery



Richard J. Duffey, MD Mobile, AL, USA



### None of the reported complications of Femto-LASIK

#### Intraoperative:

- Potential laser eye tracking difficulties<sup>5</sup>
- Macular haemorrhage<sup>6,7</sup>
- Suction loss<sup>8</sup>
- Strong adhesions, requiring manual cut-downs or recuts 9,10,11
- Interface gas bubbles escape<sup>6,11</sup>
- Vertical gas breakthrough: subepithelial or anterior chamber gas bubble<sup>5, 9, 12, 13</sup>
- Opaque bubble layer<sup>14</sup>
- Interface debris<sup>8</sup>

#### **Postoperative:**

- Photophobia due to light hypersensitivity or TLS Syndrome 6,8,13,15,16,17
- Energy-related Diffuse Lamellar Keratitis1<sup>2,15,16,18</sup>
- Significant interface haze, involving retreatments<sup>8</sup>
- Difficulties to lift the flap atraumatically for retreatments<sup>6</sup>
- Post-operative pain 1-5 hours after surgery associated with gas diffusion through corneal tissue<sup>1</sup>

### The most economical platform for SBK

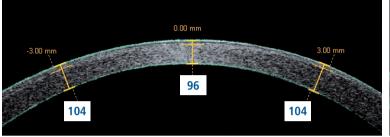
The cost of equipment, disposables and maintenance of the One Use-Plus SBK are a fraction of the costs associated with the femtosecond laser.

Make your own comparisons between the One Use-*Plus* and a femtosecond laser in terms of capital investment, disposables per patient, and annual maintenance.

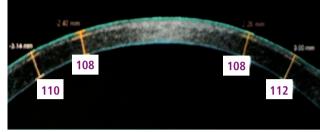


# creates thin, planar, predictable flaps and stromal beds of unrivaled smoothness

- Thin flaps
- Planar architecture
- Beveled edges
- Customized diameters
- Unrivaled bed smoothness
- Accuracy and predictibility equivalent to Femto-SBK



Flap thickness profile with One Use-Plus SBK Courtesy of James S. Lewis, MD, Elkins Park, PA, USA



Flap thickness profile with Femto-SBK 60 kHz<sup>2</sup> Slide of Dr. Guy Kerizian's presentation at ISRS / ESCRS Fall 2006

### Visual outcomes at 1 month postop equivalent to reported Femto-SBK results

- with faster visual recovery
- with greater patient comfort
- and at a fraction of the cost.

"Flap thickness predictability, speed of visual recovery, high order aberrations in custom treated eyes, and smoothness of stromal bed as determined by scanning electron microscopy in eyes undergoing SBK (thin flap LASIK) using the Moria One Use-Plus SBK microkeratome all compare favorably or equally to femtosecond laser SBK flap technology... at a fraction of the cost and with less postoperative pain and potentially fewer postoperative complications."

Richard J. Duffey, MD Mobile, AL, USA

#### Reported Advantages of SBK compared to conventional LASIK

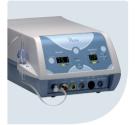
- Less weakening of corneal biomechanics, less risk of ectasia, better stability
- Faster visual recovery
- Better quality of vision
- Fewer higher order aberrations
- Better contrast sensitivity
- Fewer complications, less glare, fewer halos
- Less incidence of post-operative dry eye
- Reduced loss of corneal sensitivity
- Greater flap thickness predictability
- Ability to treat more patients, and higher levels of myopia
- Can treat thinner corneas
- Reduced enhancement rate

#### Rationale

- Anterior third of the stroma is the strongest region of cornea. Less flap disruption in this region causes less weakening of the cornea
- Cuts fewer nerves









- Linear and automated microkeratome
- Pre-assembled and one-handed usage possible
- Outstanding ergonomics
- Safety and reliability of two independent motors:
  - one for head advancement
  - one for blade oscillation
- Design of suction ring makes the use of a speculum unnecessary on small fissures
- Translucent ring enables visual confirmation of suction
- Adjustable stops for customized hinge length
- Intra-operative visibility
- Evolution3E operates Epi-K<sup>™</sup>, the DSAEK system and all other Moria microkeratomes

# A Single-Use head means unrivalled simplicity, safety, convenience, and ease-of-use:

- Protected blade to avoid potential damage
- Eliminates complications and risks linked to damaged or improperly maintained reusable heads
- Eliminates sterilization and maintenance
- More rapid patient turnover, leading to greater efficiency
- Lower initial investment costs
- Disposable heads and rings facilitate compliance with ASCRS guidelines -- which recommend not using flash sterilization

#### References:

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- 7. Principe AH, Lin DY, Small KW, Aldave AJ. Macular hemorrhage after laser in situ keratomileusis with femtosecond laser flap creation. Am J Ophthalmol. 2004;138:657-659.
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