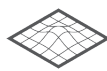
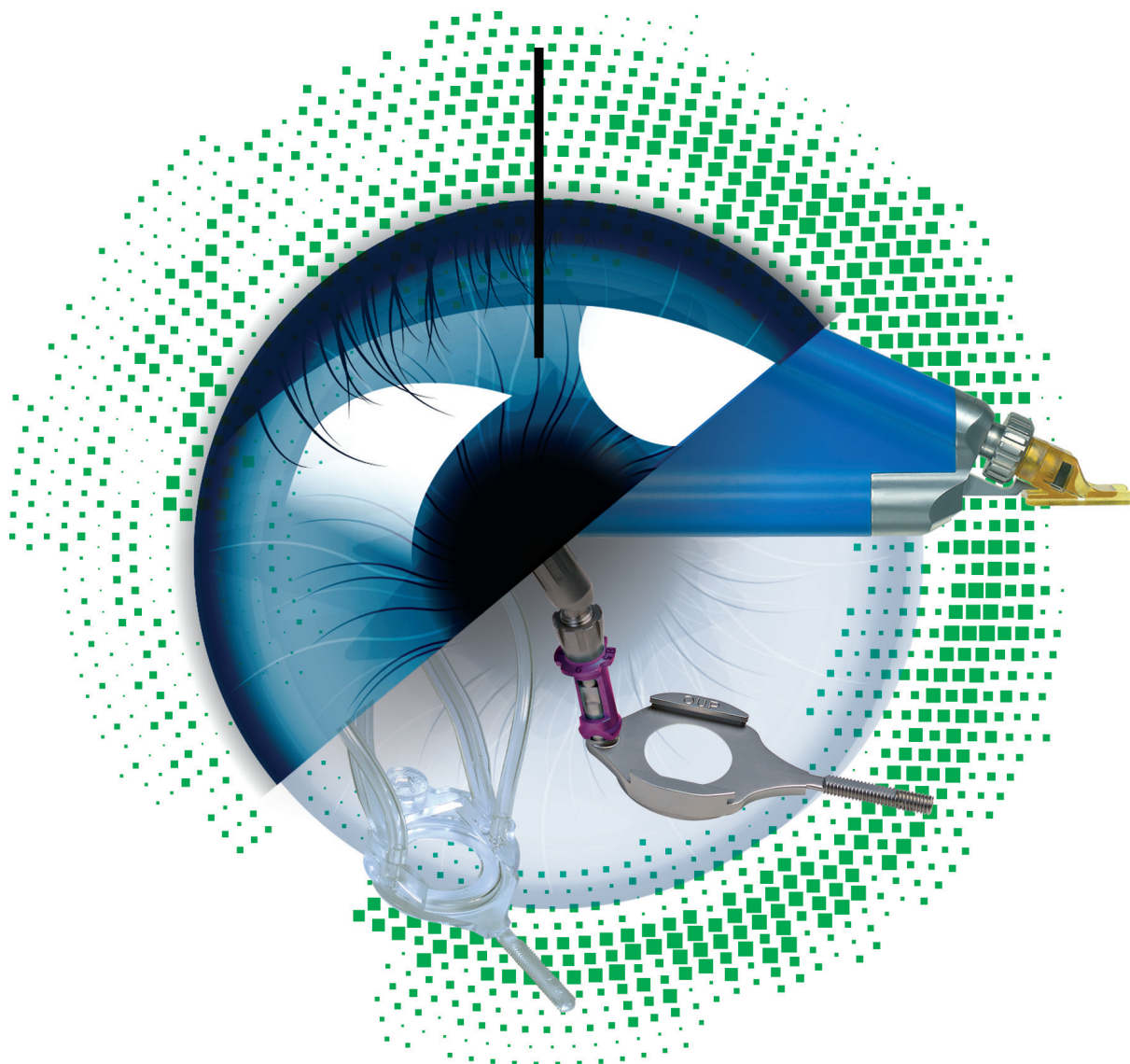


# Refractive LASIK



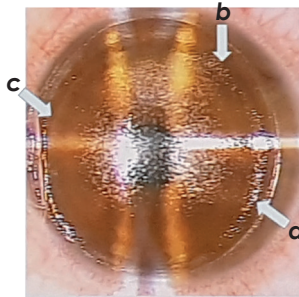
Expert-Focus on large LASIK flaps  
for hyperopia & wide treatments

## Hyperopic Single-Use Large-Cut Kit For **LARGE** to **EXTRA-LARGE** stromal beds



With latest generation of excimer lasers offering **larger optical zones** and **smoother transition zones**<sup>1</sup>, hyperopic LASIK is now gaining more and more popularity even if **challenges still remain**:

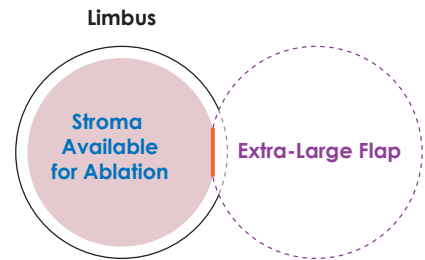
- hyperopic eyes often present with an unusually large angle Kappa ( $\kappa$ ), resulting in a **nasally displaced light reflex**<sup>2</sup>
- **size of the transition zone** of latest excimer lasers varies according to the magnitude of hyperopia to be treated<sup>3</sup>



**Specifications for an ideal flap sizing<sup>4</sup>:**

to be large enough to treat:

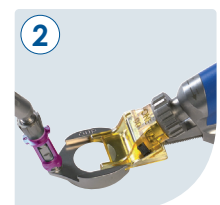
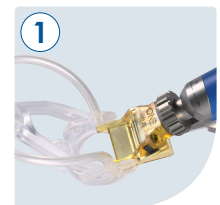
- a** - the optical zone
- b** - & the transition zones
- c** - & some additional peripheral tissue while not compromising flap edges



That's why Moria specifically proposes a **Hyperopic Single-Use Large-Cut Kit**:

- the -1 Large-Cut single-use suction ring for regular cases from 39 to 44  $\delta$
- the -1 Large-Cut reusable suction ring for very flat Ks or extra-large flaps

Suction ring		Single-use -1 Large-Cut ①	Reusable -1 Large-Cut ②
Moria nomogram		#65058	#65074XX
Calibrated Large-Cut head		110- $\mu$ m & 130- $\mu$ m	
Vertical flap diameter based on K readings (assumptions, mm)	37	-	9.3
	38	-	9.4
	39	9.3	>9.7
	40	9.5	>10.0
	41	9.8	>10.2
	42	10.0	>10.3
	43	10.3	-
	44	10.5	-

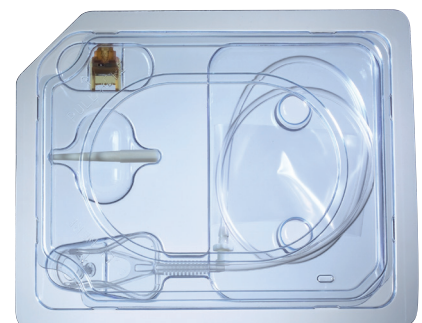


**Suction ring:**

- ① **UU -1LC** → single-use plastic ring, size -1 Large-Cut, coming from single-use pack (head & ring): #19354/110
- ② **RU -1LC** → reusable metallic ring, size -1 Large-Cut, with a purple-colored stopper: #19519/-1

**Cutting head:**

- 110 LC** → 110-micron calibrated Large-Cut head, coming from single-use pack (head & ring): #19354/110
- 130 LC** → 130-micron calibrated Large-Cut head, coming from single-use pack (head & ring): #19354/130





## My Technique

**Dr Laurent Gauthier-Fournet**  
(Saint-Jean de Luz, France)

## Hyperopia & large treatments

### Rationale for One Use-Plus microkeratome to allow large treatment zones

The treatment of high hyperopia in corneal refractive surgery has always been a challenge<sup>1</sup>

With latest excimer laser platforms, such as the Amaris by Schwind (Germany), the size of the transition zone varies according to the magnitude of the hyperopia to be treated:

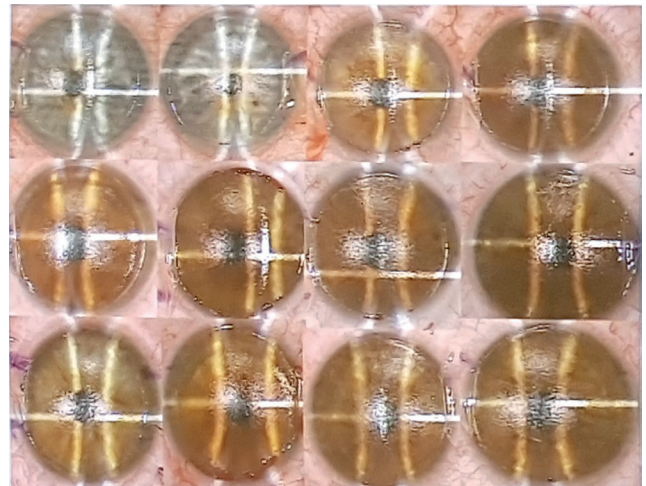
- +1.50 D hyperopia: OZ = 6.70 mm → total treatment zone = 7.81 mm
- +6.00 D hyperopia: OZ = 6.70 mm → total treatment zone = 9.20 mm\*

\* For such large treatment zones, **a LASIK flap size of at least 10 mm is recommended.**

The higher the amount of ablation in the periphery, the more important it is to optimize the optical quality and therefore to use a keratome to safely make so large LASIK flaps.

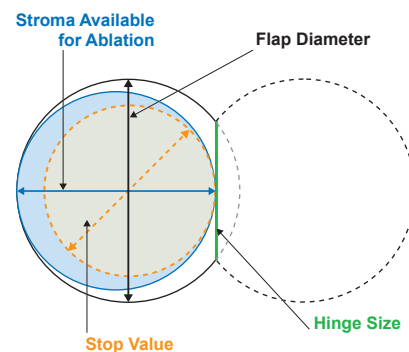
To achieve this, **we systematically use the One Use-Plus** (Moria SA, France) linear automated microkeratome<sup>2-5</sup> because:

- it comes with a **unique choice of Large-Cut heads & rings**
- a **nasal hinge is beneficial** in the way:
  - it allows to expose a larger corneal surface compared to the superior hinge
  - it is **less disturbed by the rolling movements of the eye**, more pronounced in hyperopic patients during surgery.



# My Nomogram for Hyperopia\*: choice of ring type and stop value based on Horizontal K

Horizontal Keratometry	110 LC head		Flap Diameter (mm)	Stroma available (mm)	Hinge size (mm)
	SU ring -1LC	RU ring -1LC			
39		8.5	9.8	9.2	2.4
39.5		8.5	10.0	9.5	2.6
40		9	10.2	9.7	2.4
40.5		9	10.3	9.7	2.5
41		9	10.4	9.8	2.6
41.5		9	10.4	9.8	2.6
42		9	10.4	9.8	2.6
42.5	9		10.2	9.7	2.3
43	9		10.3	9.7	2.5
43.5	9		10.4	9.8	2.6
44	9		10.5	9.9	2.7
44.5	9		10.7	10.0	2.8
45	9		10.8	10.1	3.0
45.5	9		>10.8	>10.1	>3.0
46	9		>10.8	>10.1	>3.0
46.5	9		>10.8	>10.1	>3.0
47	9		>10.8	>10.1	>3.0



\* Extract from marketing brochure #66105INT - My Nomogram - Gauthier - OUP (EN-FR)

## Notes:

- Both -1 Large-Cut single-use suction ring and -1 Large-Cut reusable suction ring :
  - can only be used with the 110- and 130- $\mu$ m Large-Cut single-use calibrated heads coming from packs #19354/110 and #19354/130 respectively;
  - can not be used with the 90- and 130- $\mu$ m single-use calibrated heads coming from boxes #19393/XXX (XXX = 90/130) and from packs #19336/XXX (XXX = 90/130) and #19337/XXX (XXX = 90/130).
- Both -1 Large-Cut single-use suction ring and -1 Large-Cut reusable suction ring can only be used by refractive surgeons having extended surgical experience with the use of the One Use-Plus microkeratome.

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- Gauthier-Fournet et al.** Six-month outcomes after high hyperopia correction using LASIK with a large ablation zone. *Cornea* 2019;38:1147-1153

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