



Ablación de Superficie

Miguel A. Teus

Catedrático de Oftalmología
Universidad de Alcalá

Relación con Industria

Miguel A. Teus

- Johnson & Johnson (L, S)
- Alcon (L, C, S)
- Allergan (L, C)
- Novartis (L, S)
- Santen (C)

Cirugía sustractiva Laser corneal

- PRK
- LASIK mecánico
- Femto Lasik (SBKM)
- ASA (Lasek, PRK, Epilasik) + MMC
- Relex (Flex, Smile) (“todo femto”)

Cirugía sustractiva Laser corneal

- **Ablación en Superficie; indicaciones**
 - Deportes de contacto
 - Córneas delgadas (PTA)
 - Topografías sospechosas
 - Ojo seco (?)
 - Pacientes muy jóvenes (fácil retratamiento tardío)
 - Patología corneal asociada (leucomas, DMBE...)

Cirugía sustractiva Laser corneal

- **Ablación en Superficie; Seguridad y eficacia**
 - Comparable a LASIK para alta miopía¹
 - MMC segura para epitelio, estroma y endotelio²
 - Muy predecible incluso en baja miopía³
 - Estable en corneas delgadas, incluso con MMC (CCT postoperatorio rango 339-473)⁴

1- De Benito et al. JRS 2008

2- Teus et al. Survey of Ophthalmology 2009

3- De Benito et al. JRS 2007

4- De Benito et al. JRS 2008

Cirugía sustractiva Laser corneal

- **PRK o LASEK + MMC**
- Resultados finales comparables a FemtoLASIK (levemente inferiores)
- Más lenta recuperación visual
- Postoperatorio molesto

Comparison Between Femtosecond Laser-Assisted Sub-Bowman Keratomileusis vs Laser Subepithelial Keratectomy to Correct Myopia

LAURA DE BENITO-LLOPIS, MIGUEL A. TEUS, RAQUEL GIL-CAZORLA, AND PILAR DRAKE

• **CONCLUSION:** Both FSBK and LASEK are safe and effective procedures to correct myopia. Slightly better visual and refractive results were observed in FSBK-treated eyes in a 3-month follow-up. (Am J Ophthalmol 2009;148:830–836. © 2009 by Elsevier Inc. All rights reserved.)

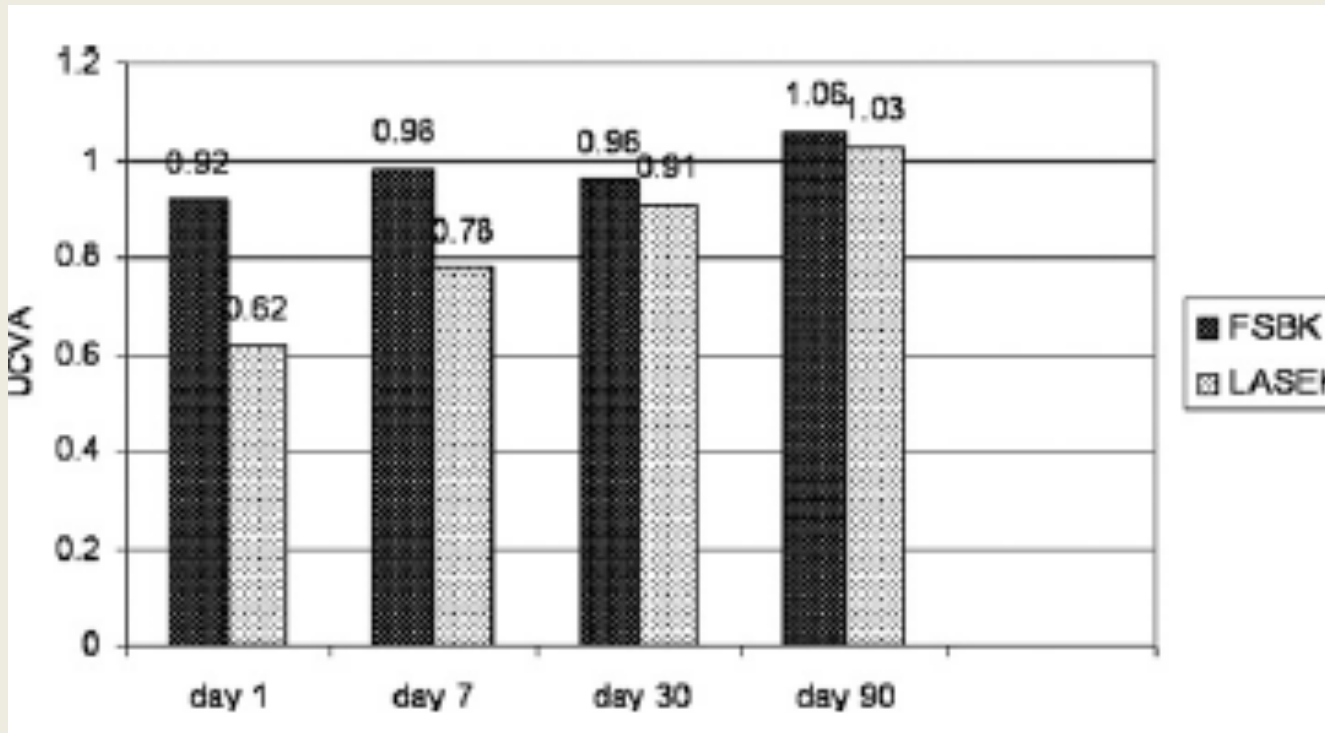
Cirugía sustractiva Laser corneal

TABLE 1. Preoperative Data of the 1,072 Eyes Treated with Femtosecond Laser-Assisted Sub-Bowman Keratomileusis and the 1,036 Eyes Treated with Laser Subepithelial Keratectomy

	FSBK	LASEK	P value
Age (years) (range)	31.03 ± 5.1 (18 to 40)	30.50 ± 4.90 (18 to 40)	.07
Sphere (D) (range)	-3.93 ± 1.9 (0 to -11.75)	-3.87 ± 2.5 (0 to -12.5)	.5
Cylinder (D) (range)	-0.90 ± 0.90 (0 to -5.5)	-1.03 ± 1.04 (0 to -6.5)	.06
Spherical equivalent (D) (range)	-4.38 ± 1.99 (-0.5 to -12.75)	-4.39 ± 2.54 (-0.5 to -13.00)	.9
BSCVA (range)	1.12 ± 0.1 (0.8 to 1.25)	1.12 ± 0.14 (0.8 to 1.25)	.8
Optical zone (mm) (range)	6.36 ± 0.49 (5 to 8)	6.30 ± 0.5 (5.0 to 8.0)	.09

BSCVA = best spectacle-corrected visual acuity; D = diopters; FSBK = femtosecond laser-

Cirugía sustractiva Laser corneal



- 2 ojos (0,19%) en LASEK y 3 (0,28%) en FSBK con pérdida de más de 1 línea de AVCC

SMILE vs FS-LASIK

Topography-Guided LASIK Versus Small Incision Lenticule Extraction (SMILE) for Myopia and Myopic Astigmatism: A Randomized, Prospective, Contralateral Eye Study

Anastasios John Kanellopoulos, MD

CONCLUSIONS: Topography-guided LASIK was superior in all visual performance parameters studied, both subjective and objective. The main difference between the two techniques likely derives from the eye tracking, cyclorotation compensation, and active centration control in the LASIK technology studied in contrast to the current technology available with SMILE-like procedures. This difference appears to affect refractive and visual aberration performance outcomes.

[*J Refract Surg.* 2017;33(5):306-312.]

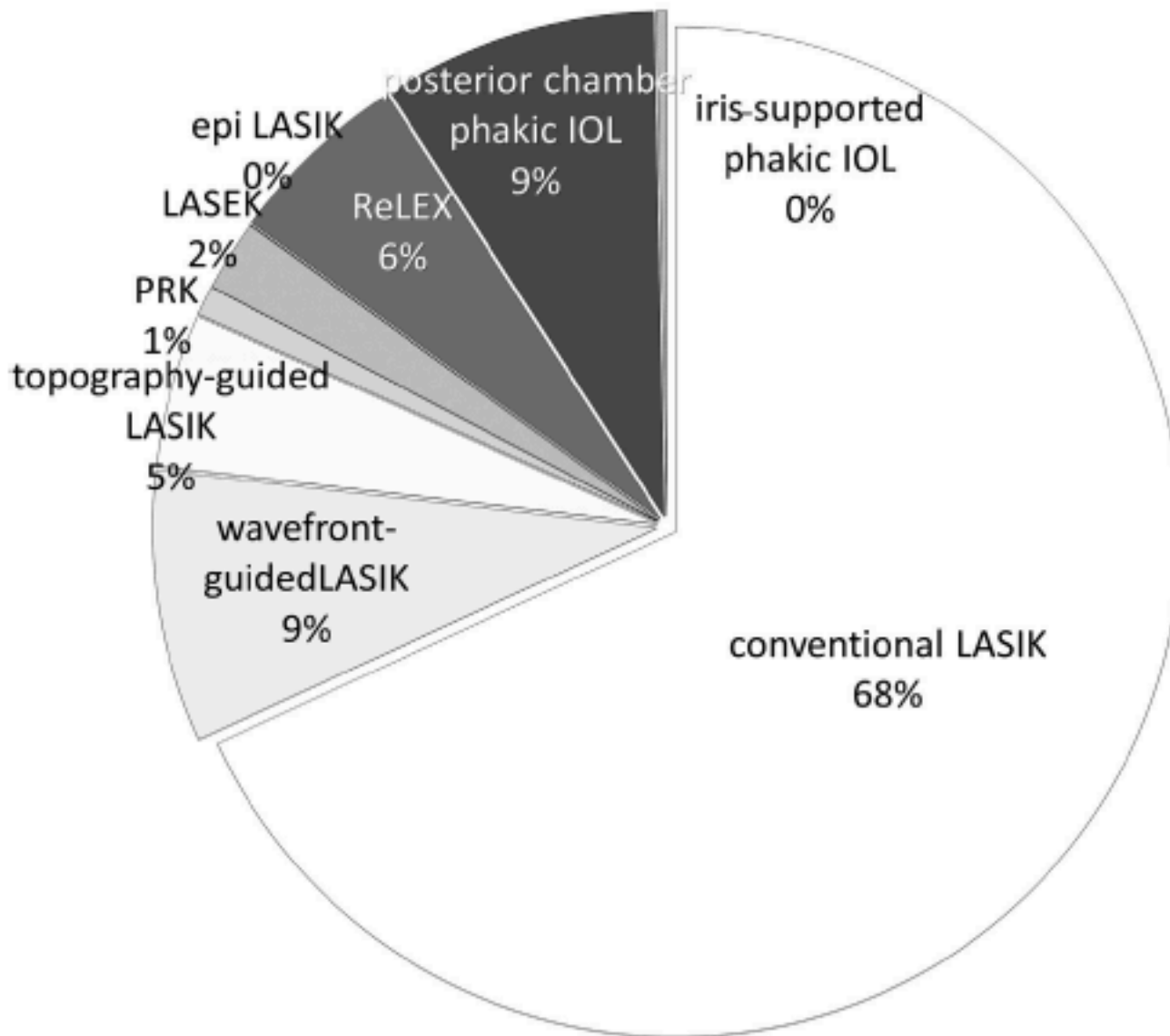
SMILE vs FS-LASIK vs PRK

A Multicenter Prospective Cohort Study on Refractive Surgery in 15 011 Eyes

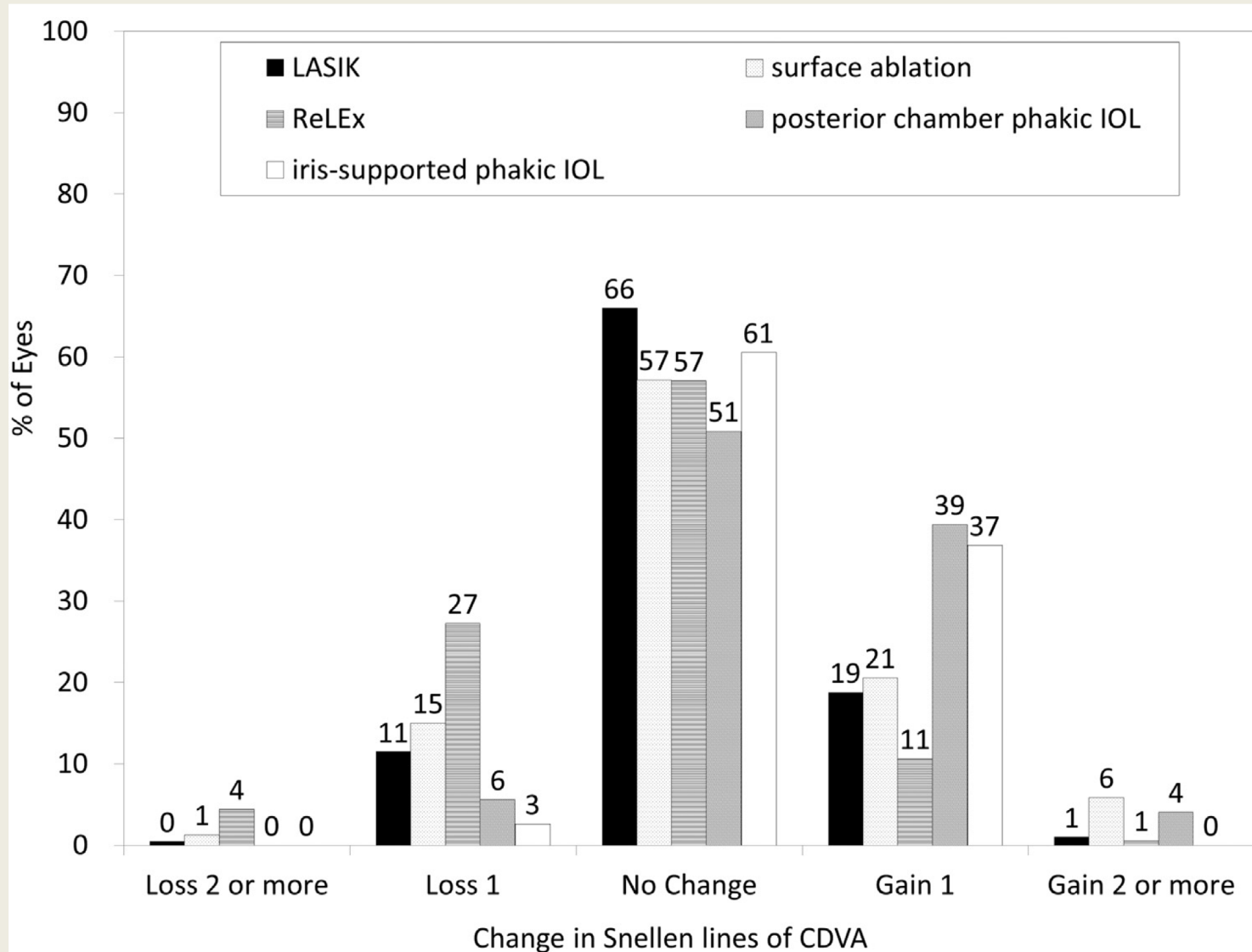


KAZUTAKA KAMIYA, AKIHITO IGARASHI, KEN HAYASHI, KAZUNO NEGISHI, MASAKI SATO, AND HIROKO BISSEN-MIJAJIMA, ON BEHALF OF THE SURVEY WORKING GROUP OF THE JAPANESE SOCIETY OF CATARACT AND REFRACTIVE SURGERY

- Kamiya et al. Am J Ophthalmol 2017

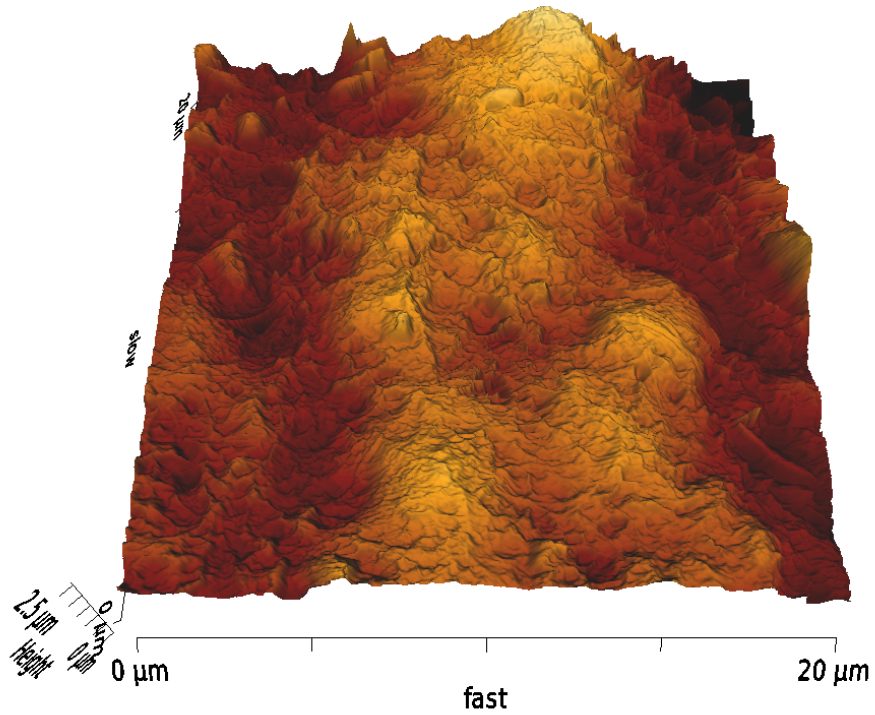


SMILE vs FS-LASIK vs PRK

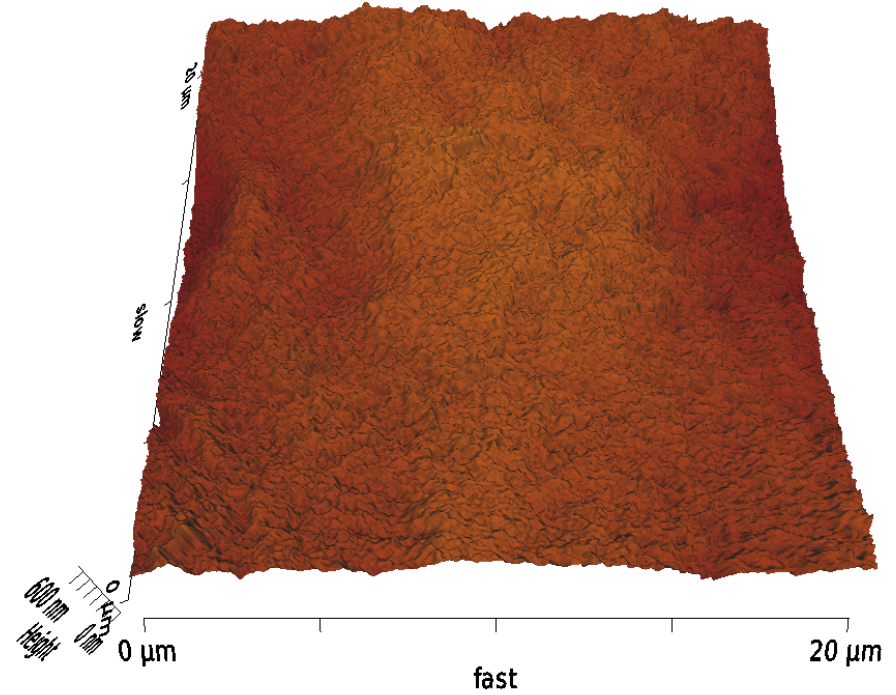


SMILE vs FS-LASIK vs PRK

360 ± 120 nm



110 ± 20 nm





Muchas Gracias

miguelteus@gmail.com