



### Continuing Education Course Approval Checklist

Title:

Provider Name:

- Completed Application
  - Open to all Optometrists?     Yes     No
  - Maintain Record Agreement?  Yes     No

Correct Application Fee

Detailed Course Summary

Detailed Course Outline

PowerPoint and/or other Presentation Materials

Advertising (optional)

CV for EACH Course Instructor

License Verification for Each Course Instructor    **Letter of Public Reprimand attached**  
 Disciplinary History?     Yes     No



ASIAN AMERICAN OPTOMETRIC SOCIETY

ASIAN AMERICAN OPTOMETRIC SOCIETY  
PRESENTS

## 2017 Spring Education Symposium

Sheraton Cerritos Hotel - 12725 Center Ct Dr S, Cerritos, CA 90703  
Sunday, April 2, 2017

**5 HOURS OF CONTINUING EDUCATION**

### Agenda:

- |   |  |
|---|--|
| <b>8:00am – 8:10am</b>                  | <b>Welcome</b><br>Andy Kongsakul, O.D.<br>President, AAOS  |
| <b>8:10am – 9:00am</b><br>(1 Hour CE)   | <b>10 LASIK Myth Busters</b><br><b>SMILE – Small Incision Lenticule Extraction</b><br>Tom Tooma, MD, NVision Eye Centers   |
| <b>9:00am – 9:20am</b><br>(20 min)      | <i>Break</i>   |
| <b>9:20am – 11:00am</b><br>(2 Hours CE) | <b>Topography Guided LASIK</b><br>Franklin Lusby, MD, NVision Eye Centers<br><b>Choosing Premium Lenses in Highly Aberrated Corneas</b><br><b>Understanding New Extended Depth of Focus IOLs</b><br>Sheri Rowen, MD, NVision Eye Centers |
| <b>11:00pm – 11:20pm</b><br>(20 min)    | <i>Break</i>   |
| <b>11:20am – 12:10pm</b><br>(1 Hour CE) | <b>An Introduction to Fundus Auto-Fluorescence (FAF)</b><br>Raman Bhakhri, OD, Marshall B Ketchum University   |
| <b>12:10pm – 1:00pm</b><br>(1 Hour CE)  | <b>Updates on Hydroxychloroquine Retinopathy</b><br>Tina Zheng, OD, Marshall B Ketchum University  |



STATE BOARD OF OPTOMETRY  
 2450 DEL PASO ROAD, SUITE 105, SACRAMENTO, CA 95834  
 P (916) 575-7170 F (916) 575-7292 www.optometry.ca.gov



**CONTINUING EDUCATION COURSE APPROVAL APPLICATION**

Cashiering and Board Use Only		
Payor ID	Beneficiary ID	Amount
1-29/16	5414455	996482 50

**\$50 Mandatory Fee**

Pursuant to California Code of Regulations (CCR) § 1536, the Board will approve continuing education (CE) courses after receiving the applicable fee, the requested information below and it has been determined that the course meets criteria specified in CCR § 1536(g).

In addition to the information requested below, please attach a copy of the course schedule, a detailed course outline and presentation materials (e.g., PowerPoint presentation). Applications must be submitted 45 days prior to the course presentation date.

Please type or print clearly.

Course Title 10 LASIK Myth Busters	Course Presentation Date 8:10AM - 8:35 AM 04/02/2017
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**Course Provider Contact Information**

Provider Name John Lee Howard (First) (Last) (Middle)
Provider Mailing Address Street 2575 Yorba Linda Bly city Fullerton State CA Zip 92831
Provider Email Address jlee@ketchum.edu
Will the proposed course be open to all California licensed optometrists? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
Do you agree to maintain and furnish to the Board and/or attending licensee such records of course content and attendance as the Board requires, for a period of at least three years from the date of course presentation? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO

**Course Instructor Information**

Please provide the information below and attach the curriculum vitae for each instructor or lecturer involved in the course. If there are more instructors in the course, please provide the requested information on a separate sheet of paper.

Instructor Name Tom Tooma (First) (Last) (Middle)
License Number 42262 License Type Physician and Surgeon
Phone Number (949) 274-4652 Email Address tom.tooma@nvisioncenters.cc

I declare under penalty of perjury under the laws of the State of California that all the information submitted on this form and on any accompanying attachments submitted is true and correct.

Signature of Course Provider

Date 2/14/2017

## SUMMARY – 10 LASIK Myth Busters

Tom Tooma, MD

There are a lot of misconceptions regarding LASIK, whether in the lay media or advice given in professional settings like doctor's offices. Some of these misconceptions are positive, over-promising what the technology can do while other can be negative, causing undue hesitation, apprehension and erroneous information. Other misconceptions are just wrong. This lecture will review the current technologies of LASIK and reveal the 10 most commonly heard myths regarding refractive surgery to dispel them. The purpose of this lecture is to provide professionals with the best literature and information to better educate our patients about refractive surgery through established research and experience.

**Presenter – Tom Tooma, MD**

**Course Title – 10 LASIK MYTH BUSTERS**

**Course Outline –**

**LASIK MYTHS**

**LASIK SURGEONS WOULD NOT HAVE LASIK**

**YOU SHOULD NOT HAVE IT DONE, YOU ARE GOING TO GET PREGNANT ONE DAY**

**INCREASES THE RISK OF HALOS AND GLARE**

**SAFETY AND EFFICACY HAVE NOT IMPROVED**

**YOU WILL NEED GLASSES ANYWAY**

**LASIK MYTHS**

**EXPENSIVE**

**YOUR EYES ARE NOT STABLE**

**LONG TERM EFFECTS ARE NOT KNOWN**

**DRY EYE IS EXTREMELY COMMON AFTER LASIK**

**CTL ARE SAFER THAN LASIK**

**MYTH NUMBER 1**

**LASIK SURGEONS WOULD NOT HAVE LASIK ON THEIR OWN EYES**

**REFRACTIVE SURGEONS HAVING LASIK**

**5X MORE LIKELY – 65%**

**95% OPERATED ON THEIR OWN FAMILY MEMBER**

**MYTH NUMBER 2**

**YOU SHOULD NOT HAVE IT DONE, YOU ARE GOING TO GET PREGNANT ONE DAY**

**MYTH NUMBER 3**

**LASIK INCREASES THE RISK OF HALOS AND GLARE**

**3 Month Uncorrected Visual Acuity Outcomes**

**No enhancements performed**

**3 Month Acuity and Refractive Safety Outcomes**

**A Lot Of Difficulty With or Inability to Perform Usual Activities Due to Visual Symptoms**  
**Subjects Developing New Dry Eye Symptoms (OSDI Categories) at 3 Months**  
**Overall Satisfaction With Present Vision**

**MYTH NUMBER 4**

**SAFETY + EFFICACY HAVE NOT IMPROVED OVER TIME**

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75 Enterprise, Suite 200, Aliso Viejo, CA 92656

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FDA Approves Summit Laser for PRK

The Evolution of LASIK

FDA VISX Trial Results:

1.0-6.0 Diopters Myopia

58.3% 20/20 or better

93.8% 20/40 or better

9.8% deviated from intended treatment by >1 D

Majority of complications flap related

FDA Summit Trial Results:

1.5-7.0 Diopters Myopia

6.8% of eyes lost 2 or more lines of BCVA

Ablation decentration

Ablation decentration

LVC Problem  LVC Solution

PRK corneal haze

LVC Problem  LVC Solution

Flap complications

Glare and halo

LVC Problem  LVC Solution

Ectasia

LVC Problem  LVC Solution

Dry eye

LASIK – MY OUTCOMES

98.1% UCVA 20/20 WITH PRIMARY LASIK – MYOPIA UP TO -12.00D AND ASTIGMATISM UP TO 6.0D

99% 20/20 WITH BOTH EYES OPEN

POST OP MEAN SE -0.08 +/- 0.24

POST OP MEAN CYL 0.17 +/- 0.21

0.3% WITH S.E. ERROR >1D

MEAN DISTANCE VA 20/17.4 +/- 0.6 LINES

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MYTH NUMBER 5  
YOU WILL NEED GLASSES ANYWAY  
PRESBYOPIA SOLUTIONS

LASIK MONO-VISION  
KAMRA INLAY  
DYSFUNCTIONAL LENS EXCHANGE

MYTH NUMBER 6  
EXPENSIVE

GOOD LIFETIME INVESTMENT  
PRICE PARITY WITH CTL  
EASY FINANCING  
MYTH NUMBER 7  
YOUR EYES ARE NOT STABLE  
EYES BECOME STABLE AT AN EARLY STAGE  
75% BY AGE 15  
91% BY AGE 18  
95% BY AGE 21  
98% BY AGE 25

MYTH NUMBER 8  
LONG TERM EFFECTS ARE NOT KNOWN  
X

Cosmetic Procedures and Patient Satisfaction Rates  
LASIK FACTS

LASIK IS THE SAFEST ELECTIVE PROCEDURE WITH THE HIGHEST PATIENT SATISFACTION IN THE WORLD TODAY

MYTH NUMBER 9  
DRY EYE IS EXTREMELY COMMON AFTER LASIK  
LASIK FACTS

DRY EYE TYPICALLY RESOLVES  
NO DRY EYE PRE OP = NONE POST-OP  
DRY EYE POST-OP = DRY EYE PRE-OP  
Tear Lab  
InflammaDry

MMP-9  
LipiView  
Gland Imaging

Tear Film Assessment Results  
Lipid Layer Insufficiency  
Meibomian Gland Dysfunction  
Studies suggest may be implicated in greater than 80% of dry eye cases

LipiView

Gland Imaging

LipiView

Gland Imaging

Better Dry Eye Diagnosis and Management

Point of service objective dry eye diagnostics.

Better treatments for dry eye disease.

The Future: Dry Eye Pipeline

MYTH NUMBER 10

CTL ARE SAFER THAN LASIK

DAILY WEAR

VS

OVERNIGHT USE

COMPARE RISK

ONE TIME LASIK VS

LIFETIME CTL USE

CTL RELATED INFECTIONS

20% USE DW DISPOSABLE CTL PROPERLY

1/400/YEAR FOR OVERNIGHT USE

20X MORE LIKELY

1,000,000 VISITS ANNUALLY

58,000 VISITS TO ER – 4% OF VISITS

LARGEST SINGLE RISK FACTOR FOR MICROBIAL KERATITIS

CTL RISK FACTORS

NOT WASHING AND DRYING HANDS

OVERNIGHT USE

SWIMMING AND HOT TUBS

USING WATER, SALIVA TO CLEAN CTL

STORING IN WATER

NOT REPLACING CTL

NOT DRYING OR REPLACING CTL CASE

NOT REPLACING CTL SOLUTIONS

CTL AND DRY EYES??

CTL FUNCTIONS AS A BANDAGE

LESS BLINKING

DIGITAL DEVICES

179





STREAM OF INCOME

LASIK VS CTL

CONTACT LENS ECONOMICS

OFFERING LASIK IS IN YOUR BEST INTEREST, AND IN YOUR PATIENT'S BEST INTEREST

40 MILLION CONTACT LENS WEARERS IN THE U.S.

WaveLight® EX500 Excimer Laser

The Future: Better Technology

The Future: Better Technology

LASIK 2016

CONCLUSIONS

LASIK Publications and Public Interest

Is LASIK Worth Saving?

The Facts, Fiction and Future

In spite of LASIK's long clinical and historical presence, misconceptions regarding the risks and benefits of this procedure persist, eroding both the reputation of the procedure and of those in the field that remain its unwavering supporters.

The aim of this lecture is to explore the myths and realities of the LASIK procedure using an evidenced-based approach and to evaluate upcoming advancements.

LASIK - 2016

The Facts, Fiction and Future

MISCONCEPTIONS REGARDING RISKS AND BENEFITS

EVIDENCE BASED APPROACH

LASIK - 2016

conclusions

LASIK IS THE SAFEST, most successful and most studied elective procedure in the world.

LASIK has the highest patient satisfaction rate of any elective procedure.

LASIK results have continually improved as technology and surgical techniques advance and preoperative diagnostic screening and patient selection become more refined.

Refractive Surgery 1985

Loss of >2 lines in 3%

90% prediction interval 4.42D

Hyperopic shifts in 40-50%

Loss of >2 lines in 3%

Hyperopic shifts in 40-50%

FDA Kremer Trial: First LASIK Study

Complications occurred in approximately 5% of cases

Complication rates can be greatly reduced as the surgical team gains experience

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Intraoperative complications, 3.1% to 0.7%

4.7% of eyes lost 2 or more lines of BCVA

LASIK Complications:

Foundation Established

Complications of LASIK higher in patients with over 7 D myopia

Patients being treated with LASIK for up to 25 diopters of myopia

Selecting the Right Patient and Treatment

Patients with large pupils had more quality of vision symptoms in the early postoperative period, but no correlation was observed 6 months after surgery.

There is a significant transient loss of corneal sensation following LASIK

Corneal sensation improves to preoperative levels at 6 months following surgery

Dry eye signs and symptoms statistically return to normal at 6 months following surgery

FDA Public Hearing

140 complaints to the FDA after over 10 million procedures

Anti-LASIK activists wished to ban the procedure

Public testimony included personal stories of depression, suicide or suicidal ideation, and other psychological problems

Dry Eye Rates

Pre- & Post-Operative

LASIK Myth #1:

Physicians Would Not Have LASIK on Their Own Eyes

LASIK Fact:

Physicians have among the highest prevalence of having undergone LASIK of any occupation

Lasik surgeons are 4X more likely to have Lasik than the general population

LASIK Myth #2:

The Long Term Effects of LASIK are Not Known

LASIK Fact:

LASIK has over a 20 year track record

Long term studies have shown refractive stability and safety

LASIK Myth #3:

Contact Lenses are Safer

Than LASIK

LASIK Fact:

Daily wear contact lenses are likely less safe than LASIK when worn for 30 years

Extended wear contact lenses are definitely less safe than LASIK when worn for 30 years

LASIK Myth #4:

LASIK Increases the Risk of Glare and Halo Compared to Glasses

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**LASIK Fact:**

Modern LASIK improves glare and halo for the majority of patients

There are a minority of patients who will develop glare and halo that did not have symptoms preoperatively

**The Future: Better Technology**

Advanced wavefront technology

1200 data points

5 times more resolution than current technology

Advanced wavefront ablations

93.4% UCVA 20/20

79.0% UCVA 20/16

14.0% gained 1 or more lines of BCVA

98.5% patient satisfaction

**Is LASIK Worth Saving? Yes!**

LASIK IS THE SAFEST, most successful and most studied elective procedure in the world.

LASIK has the highest patient satisfaction rate of any elective procedure.

LASIK results have continually improved as technology and surgical techniques advance and preoperative diagnostic screening and patient selection become more refined.

**Moving Forward**

Our goal is continued improvement of patient satisfaction and 100% of patients seeing the same or better following LASIK than prior to surgery.

We need to embrace patients who are dissatisfied with their vision following LASIK and never allow them to feel abandoned.

We need to provide a better informed consent to our patients particularly those with psychiatric disease.


We need to continue to invest resources into improving the safety and efficacy of laser vision correction.

**In Conclusion**

The golden age of laser vision correction is today and tomorrow looks even brighter.

We should be proud of what we have accomplished.

We should never be satisfied.



**Tom Tooma, M.D.**  
 FOUNDER, MEDICAL DIRECTOR  
 NVISION EYE CENTERS

**LASIK MYTHS**

- ◆ LASIK SURGEONS WOULD NOT HAVE LASIK
- ◆ YOU SHOULD NOT HAVE IT DONE, YOU ARE GOING TO GET PREGNANT ONE DAY
- ◆ INCREASES THE RISK OF HALOS AND GLARE
- ◆ SAFETY AND EFFICACY HAVE NOT IMPROVED
- ◆ YOU WILL NEED GLASSES ANYWAY

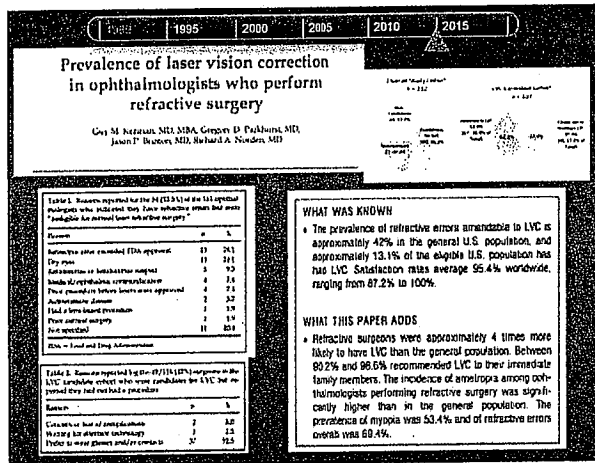
**LASIK MYTHS**

- ◆ EXPENSIVE
- ◆ YOUR EYES ARE NOT STABLE
- ◆ LONG TERM EFFECTS ARE NOT KNOWN
- ◆ DRY EYE IS EXTREMELY COMMON AFTER LASIK
- ◆ CTL ARE SAFER THAN LASIK

**MYTH NUMBER 1**

**LASIK SURGEONS WOULD NOT HAVE LASIK ON THEIR OWN EYES**

NVISION EYE CENTERS



REFRACTIVE SURGEONS  
HAVING LASIK

5X MORE LIKELY – 65%  
95% OPERATED ON THEIR OWN  
FAMILY MEMBER

NVISION EYE CENTERS

MYTH NUMBER 2

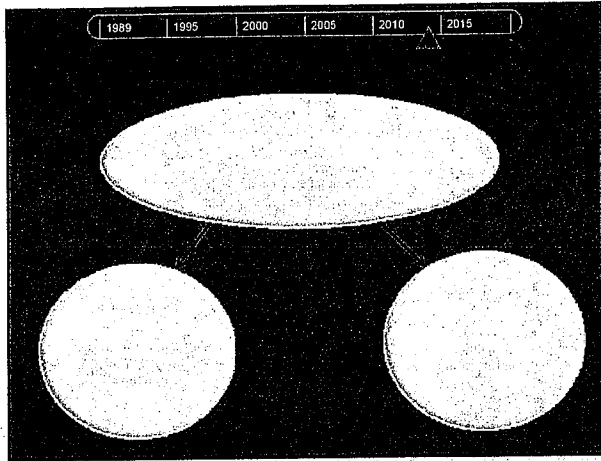
YOU SHOULD NOT HAVE IT  
DONE, YOU ARE GOING TO  
GET PREGNANT ONE DAY

NVISION EYE CENTERS

MYTH NUMBER 3

LASIK INCREASES THE RISK OF HALOS  
AND GLARE

NVISION EYE CENTERS



3 Month Uncorrected Visual Acuity Outcomes

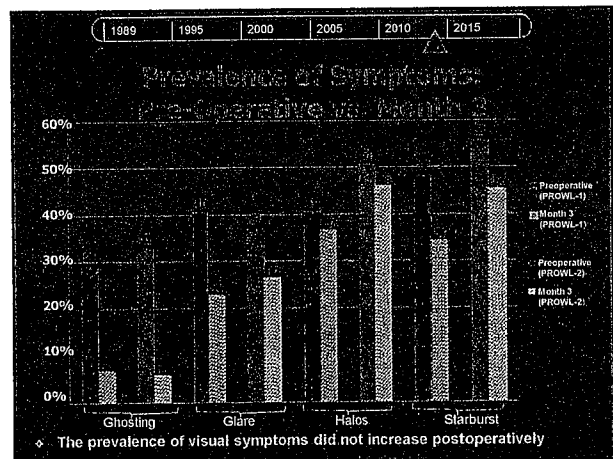
	PROWL-1 N=225	PROWL-2 N=270
UCVA 20/20 or better		
OD	97%	91%
OS	98%	92%
OU	99%	96%

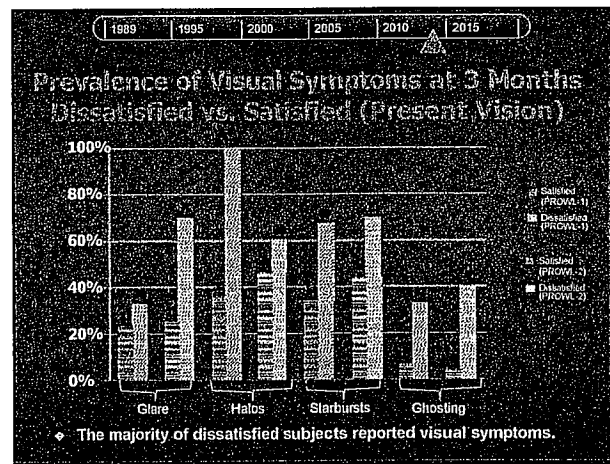
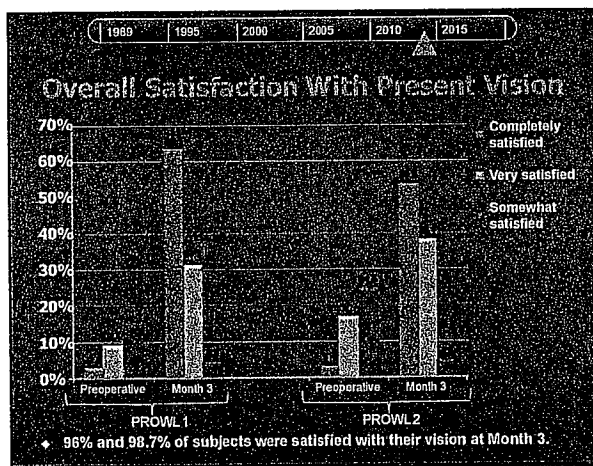
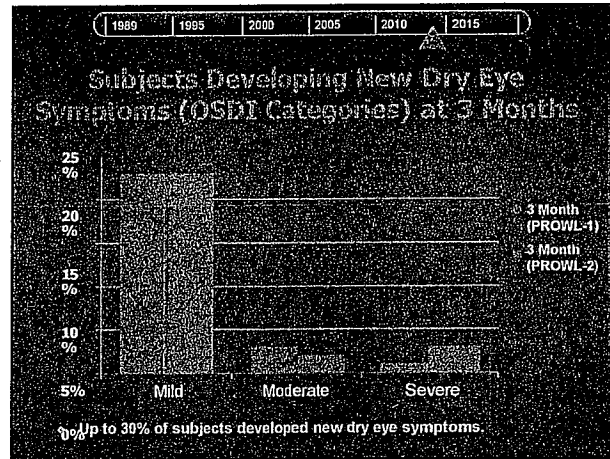
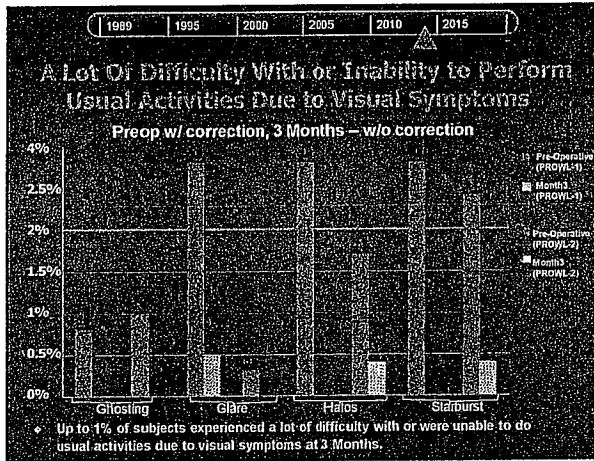
◊ No enhancements performed

3 Month Acuity and Refractive Safety Outcomes

	PROWL-1 N=450 (eyes)	PROWL-2 N=540 (eyes)
Loss of 2 lines or more BCVA	1 (0.2%)	0 (0%)
BCVA worse than 20/40	0 (0%)	0 (0%)
Increase of greater than 2D of cylinder compared to baseline	0 (0%)	0 (0%)
BCVA worse than 20/25 if 20/20 or better pre-op	0 (0%)	0 (0%)

◊ 0.1% of eyes lost 2 lines of BCVA from pre-op to 3 Months





**SAFETY + EFFICACY HAVE NOT  
IMPROVED OVER TIME**

NVISION EYE CENTERS

1989 1995 2000 2005 2010 2015

**FDA Approves Summit Laser for PRK**

DEPARTMENT OF HEALTH & HUMAN SERVICES  
FDA  
Office of Device Evaluation  
Washington, DC 20200

OCT 20


As directed hereunder, the recipient of this letter shall comply with the following conditions:

All promotion and advertising for this device must include the following information on indications, risks and benefits:


- Approval is for the Summit Technology's application for the Summit Laser to correct mild to moderate myopia (0.0 to -7.0 diopters) above noncontact angle keratometry (AK) (dioptric) in a procedure called photorefractive keratectomy (PRK) using an excimer laser that emits light of a wavelength of 193nm.
- PRK is an elective procedure with the alternative being spectacles, contact lenses or radial keratotomy.
- Approval of the application is based on clinical trials of more than 3000 eyes together with safety information through 3 years of follow-up.
- The studies using the Summit Laser show that of the 361 eyes of 6 months, 55% were corrected to 20/20 or better without spectacles or contact lenses, and 65% to 20/25 or better without spectacles or contact lenses. Of 25 eyes of 60 eyes, 61% the best vision that can be achieved with spectacles declined by more than 1 line five years, and no more than 30%.
- These clinical trials showed the following adverse events: corneal swelling, double vision, feeling something in the eye, rhinitis, dry eye, sensitivity, tearing and pupil enlargement. These problems lasted up to several weeks.
- The clinical trials using the Summit Laser show that the following adverse events occurred: loss of vision, loss of the ability to see at intermediate distance, if they have never experienced this type of vision before, loss of vision, loss of the ability to see at intermediate distance, if they have never experienced this type of vision before, loss of vision, loss of the ability to see at intermediate distance, if they have never experienced this type of vision before.

Very truly yours,  
FDA

**The Evolution of LASIK**




Jose Barraquer




Steve Trokel

**Technology Advances**


- Blind Zones
- Pupil Tracking
- Centroid Shift Compensation
- Cyclotorsion
- Prolate Ablations
- Wavefront Ablations
- Topographic Ablations
- Improved Microkeratomes
- Femtosecond Laser Flap Formation
- Crosslinking
- Diagnostic Equipment




Microkeratome  
1958



Excimer Laser  
1985



New Generation  
Excimer Lasers



Femtosecond  
Lasers

1989 1995 2000 2005 2010 2015

**FDA WFLM Trial Results:  
10-6.0 Myopia (Myopia)**

Study	10-6.0 Myopia		10-5.0 Myopia		10-4.0 Myopia		10-3.0 Myopia		10-2.0 Myopia		10-1.0 Myopia	
	n	%	n	%	n	%	n	%	n	%	n	%
Barraquer	100	58.3	100	58.3	100	58.3	100	58.3	100	58.3	100	58.3
Trokel	100	93.8	100	93.8	100	93.8	100	93.8	100	93.8	100	93.8
WFLM	100	58.3	100	93.8	100	93.8	100	93.8	100	93.8	100	93.8

**Deviation From Intended Correction**

Study	n	%	n	%	n	%	n	%
Barraquer	100	58.3	100	93.8	100	93.8	100	93.8
Trokel	100	93.8	100	93.8	100	93.8	100	93.8
WFLM	100	58.3	100	93.8	100	93.8	100	93.8

- ◆ 58.3% 20/20 or better
- ◆ 93.8% 20/40 or better
- ◆ 9.8% deviated from intended treatment by >1 D



1989 1995 2000 2005 2010 2015

SURVEY OF OPHTHALMOLOGY VOLUME 44 NUMBER 7 SEPTEMBER/OCTOBER 2007

## LASIK Complications: Etiology, Management, and Prevention

Samir A. Melki, MD, PhD,<sup>1,2</sup> and Dimitri T. Azar, MD<sup>1</sup>

**Outline**

- I. Anatomic considerations
  - A. Thin overlying, buttonhole flap
  - B. Incomplete flap
  - C. Undercut flap
  - D. Free cap
  - E. Flap folds
  - F. Epithelial implantation and ingrowth
  - G. Intraocular debris
  - H. Epithelial defects
  - I. Corneal perforation
  - J. Corneal edema
- II. Refractive complications
  - A. Central islands
  - B. Decentration
  - C. Over- and under-corrections
  - D. Residual-induced astigmatism
  - E. Regression
  - F. Halos and glare
  - G. Loss of contrast sensitivity
- III. Unpredictable refracted visual acuity (BVA)
- IV. Dry eye
- V. Intraocular infection and sterile inflammation
- VI. Diffuse lamellar keratitis
- VII. Other complications
- VIII. Conclusions

Majority of complications flap related

1989 1995 2000 2005 2010 2015

## FDA Summit Trial Results: 1.5-7.0 Diopters Myopia

Re-epithelialization Occurred in 93.4% of eyes within 72 hours, 100% of eyes within 1 week

**6 Months**

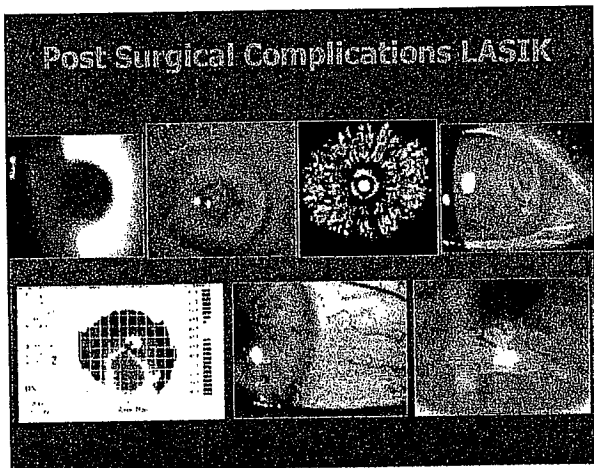
- Uncorrected visual acuity 20/20 or better 66.0%
- Uncorrected visual acuity 20/40 or better 79.0%
- Predictability: % of eyes within +/- 0.5 D 64.8%
- Predictability: % of eyes within +/- 1.0 D 80.4%
- Success\* 91.8%

**1 Year**

- Uncorrected visual acuity 20/20 or better 80.4%
- Uncorrected visual acuity 20/40 or better 96.3%
- Predictability: % of eyes within +/- 0.5 D 51.2%
- Predictability: % of eyes within +/- 1.0 D 80.6%
- Success\* 97.6%

\*For this clinical investigation success was defined as an uncorrected visual acuity of 20/40 or better. Any patients who met this criteria but had a loss of best spectacle corrected visual acuity of more than 1 line and a best spectacle corrected visual acuity of 20/25 or worse were considered failures. Also any patients with major visual/acuity complications were considered failures.

6.8% of eyes lost 2 or more lines of BCVA



### LVC Problem → LVC Solution

Ablation decentration →


- ◆ Pupil tracking
- ◆ Centroid shift compensation
- ◆ Cyclotorsion compensation
- ◆ Z tracking

OS  
20160  
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Aslat Map

LVC Problem → LVC Solution

Ablation decentration →

- ◇ Pupil tracking
- ◇ Cyclotorsion compensation
- ◇ Centroid shift



Power: 42.5 D  
 I: 0.00 mm  
 From vertex  
 OS: 0.00 mm  
 S-Brand: 0°

Spherical Values  
 43.370 0.74  
 41.500 0.74

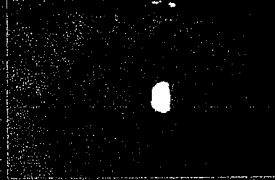

OS  
 8/17/01  
 8:02 AM

Asiat Map

LVC Problem → LVC Solution

PRK corneal haze →

- ◇ Mitomycin C

Mitomycin-C for post-PRK corneal haze



Journal of Cataract & Refractive Surgery  
 Volume 28, Number 5, August 2002, Pages 1160-1161

14 North Hill Plaza, Birmingham, AL 35292-7700, Phone: 205-975-1000

LVC Problem → LVC Solution

Flap complications →




- ◇ Femtosecond laser
- ◇ Better microkeratomes

LVC Problem → LVC Solution

Glare and halo →

- ◇ Blend Zones
- ◇ Customized Ablations
- ◇ Optimized Ablations
- ◇ Topography-guided ablations

Power: 38.00 D  
 I: 0.00 mm  
 System: 4800  
 OS: 0.00 mm  
 S-Brand: 0°

Spherical Values  
 39.500 0.74  
 37.500 0.74

OS  
 03/23/04  
 7:42 AM

Asiat Map

Done

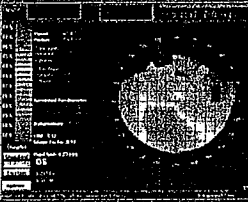

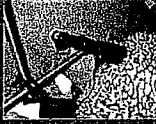
Instantaneous Right

14 North Hill Plaza, Birmingham, AL 35292-7700, Phone: 205-975-1000

**LVC Problem → LVC Solution**

**Ectasia →**


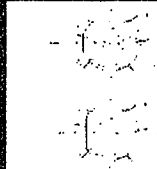
- ◊ Better diagnostic equipment/patient selection
- ◊ Crosslinking

**LVC Problem → LVC Solution**

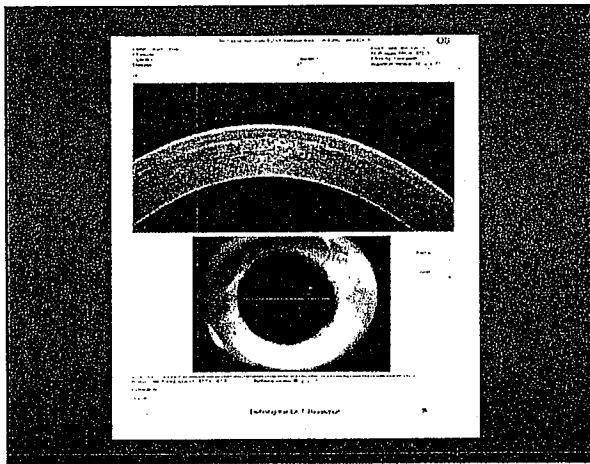
**Dry eye →**

- ◊ Pre-op tear film testing and treatment
- ◊ Thinner flaps
- ◊ Smaller flaps
- ◊ Topical cyclosporine

Donnenfeld, ED, Solomon, K, Perry HD, et al. The Effect of Hinge Position on Corneal Sensation and Dry Eye Following LASIK. *Ophthalmology* 2003.

Donnenfeld, ED, Ehrenhaus M, Solomon R, et al. The Effect of Hinge Width on Corneal Sensation and Dry Eye Following LASIK. *JCRS* 2004.



**AccuTarget HD**

OD	OS
<p>AccuTarget HD</p> <p>BARCEL JAVAK 455413</p> <p>Wavefront</p> <p>OSI: 0.9</p> <p>Planned VA: 20/20</p>	<p>AccuTarget HD</p> <p>BARCEL JAVAK 455413</p> <p>Wavefront</p> <p>OSI: 0.5</p> <p>Planned VA: 20/20</p>

Diagrams illustrating flap thickness and wavefront maps for OD and OS. The OD side shows a thicker flap and higher OSI (0.9), while the OS side shows a thinner flap and lower OSI (0.5).

## LASIK - MY OUTCOMES

- ◇ 98.1% UCVA 20/20 WITH PRIMARY LASIK - MYOPIA UP TO -12.00D AND ASTIGMATISM UP TO 6.0D
- ◇ 99% 20/20 WITH BOTH EYES OPEN
- ◇ POST OP MEAN SE -0.08 +/- 0.24
- ◇ POST OP MEAN CYL 0.17 +/- 0.21
- ◇ 0.3% WITH S.E. ERROR >1D
- ◇ MEAN DISTANCE VA 20/17.4 +/- 0.6 LINES

YOU WILL NEED GLASSES ANYWAY

NVISION EYE CENTERS

LASIK MONO-VISION  
KAMRA INLAY  
DYSFUNCTIONAL LENS EXCHANGE

NVISION EYE CENTERS

EXPENSIVE

NVISION EYE CENTERS

**GOOD LIFETIME  
INVESTMENT**  
**PRICE PARITY WITH CTL**  
**EASY FINANCING**

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**MYTH NUMBER 7**  
**YOUR EYES ARE NOT STABLE**

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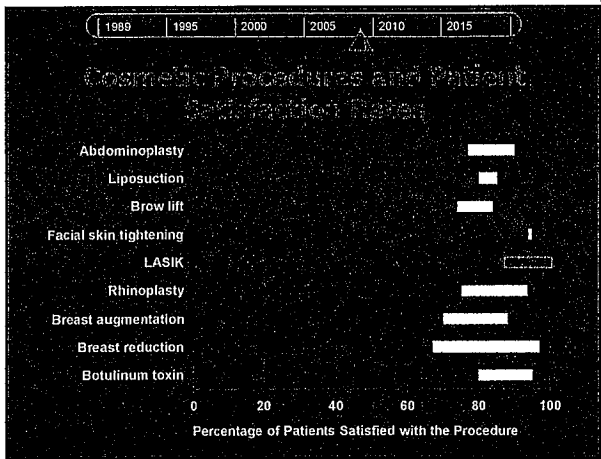
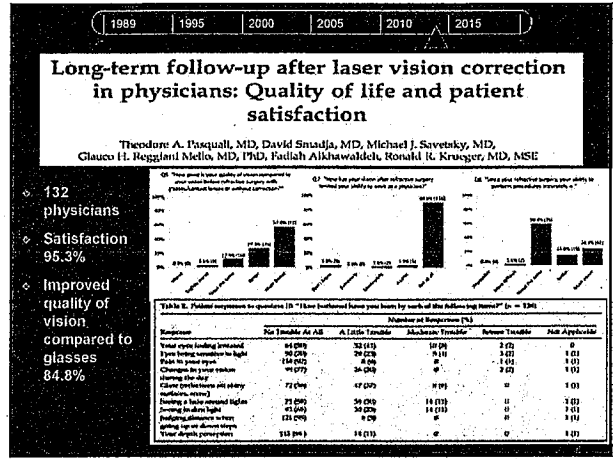
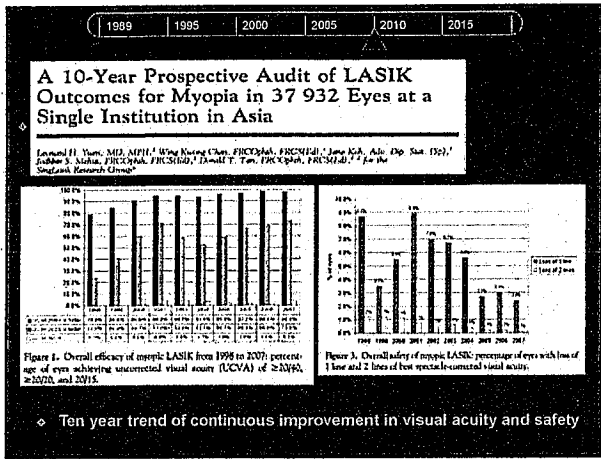
**EYES BECOME STABLE AT  
AN EARLY STAGE**

- 75% BY AGE 15**
- 91% BY AGE 18**
- 95% BY AGE 21**
- 98% BY AGE 25**

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**MYTH NUMBER 8**  
**LONG TERM EFFECTS ARE NOT  
KNOWN**

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### LASIK FACTS

- ◇ LASIK IS THE SAFEST ELECTIVE PROCEDURE WITH THE HIGHEST PATIENT SATISFACTION IN THE WORLD TODAY

**MYTH NUMBER 9**


**DRY EYE IS EXTREMELY COMMON AFTER LASIK**

VISION EYE CENTERS

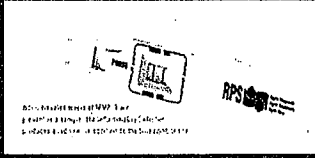
**LASIK FACTS**

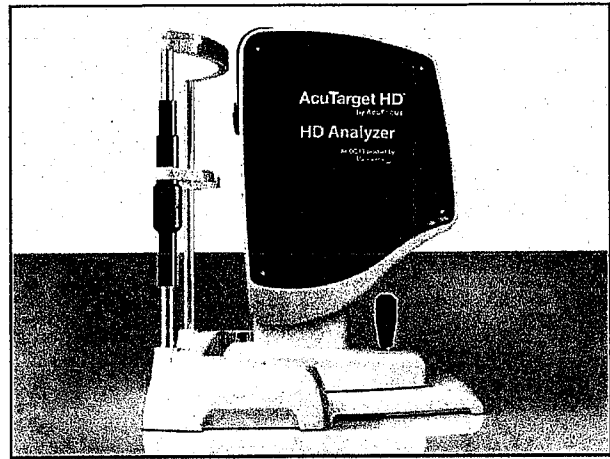
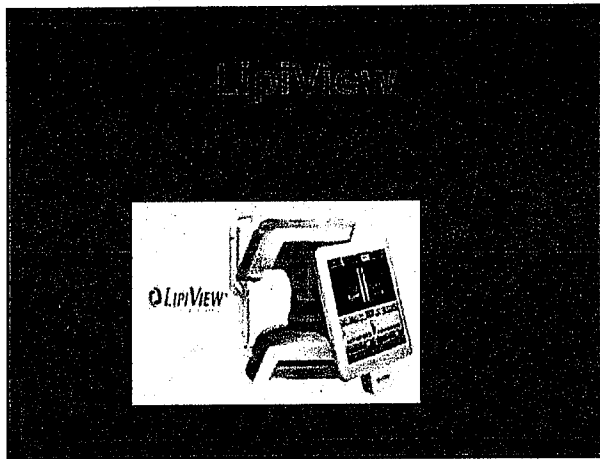
- ▣ DRY EYE TYPICALLY RESOLVES
- ▣ NO DRY EYE PRE OP = NONE POST-OP
- ▣ DRY EYE POST-OP = DRY EYE PRE-OP

**Tear Lab**



**InflammADry**





## Tear Film Assessment Results

Provided metrics:

- Mean OSI (OSI number +/- std dev)
- Inter-Blink Interval (determine using graph)
- Low and High OSI (identify the beginning and end times of longest inter-blink interval and take the high and low OSI score)

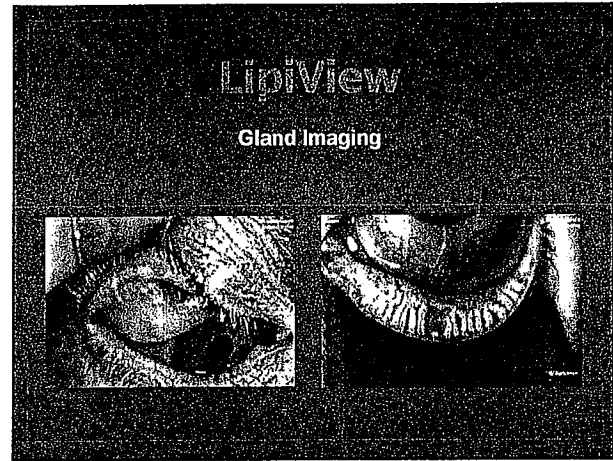
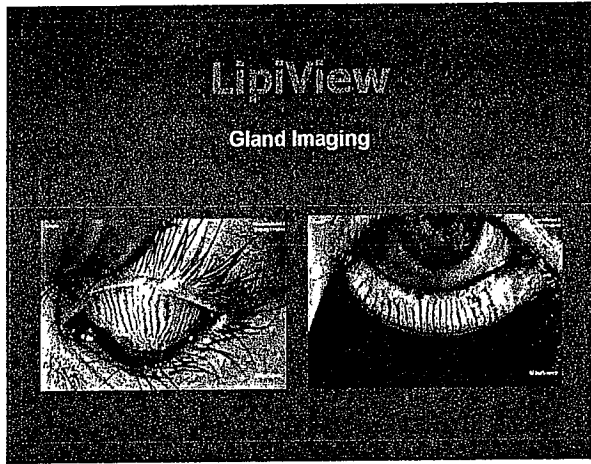
Results Screen

Results Print Out - 61

## Lipid Layer Insufficiency

- ◆ Meibomian Gland Dysfunction
- ◆ Studies suggest may be implicated in greater than 80% of dry eye cases





1989 | 1995 | 2000 | 2005 | 2010 | 2015

## Better Dry Eye Diagnosis and Management

- ◆ Point of service objective dry eye diagnostics.
- ◆ Better treatments for dry eye disease.

## The Future: Dry Eye Pipeline

Drug	Company	Mechanism of Action	Phase
Cyclokat	Santen	Immunosuppressive	EMA approval 3/15
Lifitegrast	Shire	LFA-1 antagonist	Phase 3 (OPUS 3) top line complete
Mim-03	Menotogen	Cyclokat (keritis)	Phase 3
SE-674	Seikagaku	Modified HA	Phase 3
KPI-421	Kala	Immunosuppressive	Phase 3
SKQ1	Miletech	Mitochondria-targeted antioxidant	Phase 3
Dexamethasone punctal plug	Ocular Therapeutix	Slow-release dexamethasone	Phase 2
Cross-linked HA	Jade	Modified HA	Phase 2
CycloASol	Novartis	Immunosuppressive	Phase 2
On-UCA	Horanika	Anti-inflammatory, protective effect to UVB stress	Phase 2
EBI-005	Eli Lilly	IL-1 antagonist	Phase 3
RON-289	ReGenTree	Thymosin beta-4	Phase 3

CONTACT LENSES

**CTL ARE SAFER THAN LASIK**

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CONTACT LENSES

**OVERNIGHT USE**

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**ONE TIME LASIK VS  
LIFETIME CTL USE**

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CONTACT LENSES

**CTL RELATED INFECTIONS**

- ◇ 20% USE DW DISPOSABLE CTL PROPERLY
- ◇ 1/400/YEAR FOR OVERNIGHT USE
- ◇ 20X MORE LIKELY
- ◇ 1,000,000 VISITS ANNUALLY
- ◇ 58,000 VISITS TO ER – 4% OF VISITS
- ◇ LARGEST SINGLE RISK FACTOR FOR MICROBIAL KERATITIS

### CTL RISK FACTORS

- ◆ NOT WASHING AND DRYING HANDS
- ◆ OVERNIGHT USE
- ◆ SWIMMING AND HOT TUBS
- ◆ USING WATER, SALIVA TO CLEAN CTL
- ◆ STORING IN WATER
- ◆ NOT REPLACING CTL
- ◆ NOT DRYING OR REPLACING CTL CASE
- ◆ NOT REPLACING CTL SOLUTIONS

### CTL AND DRY EYES

CTL FUNCTIONS AS A BANDAGE  
LESS BLINKING  
DIGITAL DEVICES

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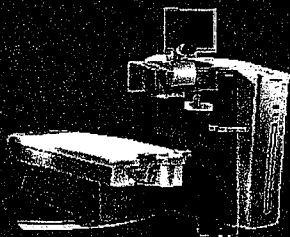
179

STREAM OF INCOME  
LASIK VS CTL

NVISION EYE CENTERS

OFFERING LASIK IS IN YOUR BEST  
 INTEREST, AND IN YOUR PATIENT'S  
 BEST INTEREST

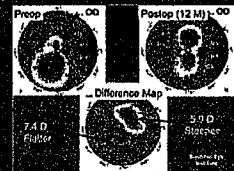
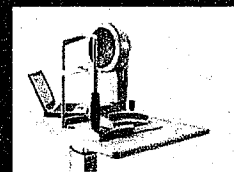
WaveLight® EX500 Excimer Laser



1989 1995 2000 2005 2010 2015

The Future: Better Technology

- ◆ Topographic laser ablations
  - 92.7% UCVA 20/20
  - 68.8% UCVA 20/16
  - 31.6% UCVA 20/12.5
  - 29.6% gained 1 or more lines of BCVA
- ◆ Ability to treat irregular corneas including keratoconus



1989 1995 2000 2005 2010 2015

## The Future: Better Technology

- ◆ SMILE
  - Femtosecond small incision lenticule removal
  - Potentially less dry eye

Small Incision Lenticule Extraction (SMILE) in 2015

PHK LASIK Flapless SMILE

PHK LASIK Flapless SMILE

# LASIK 2016

## CONCLUSIONS

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## LASIK Procedures

### In U.S.

### In Europe

## LASIK Publications and Public Interest

### Publications, Pubmed

### Interest by state over time

### Interest over time, Google Trends

## Is LASIK Worth Saving? The Facts, Fiction and Future

- ◆ In spite of LASIK's long clinical and historical presence, misconceptions regarding the risks and benefits of this procedure persist, eroding both the reputation of the procedure and of those in the field that remain its unwavering supporters.
- ◆ The aim of this lecture is to explore the myths and realities of the LASIK procedure using an evidenced-based approach and to evaluate upcoming advancements.

## LASIK - 2016 The Facts, Fiction and Future

- ◆ MISCONCEPTIONS REGARDING RISKS AND BENEFITS
- ◆ EVIDENCE BASED APPROACH

## LASIK -- 2016 conclusions

- ◆ LASIK IS THE SAFEST, most successful and most studied elective procedure in the world.
- ◆ LASIK has the highest patient satisfaction rate of any elective procedure.
- ◆ LASIK results have continually improved as technology and surgical techniques advance and preoperative diagnostic screening and patient selection become more refined.

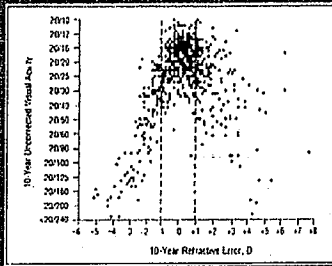
## Refractive Surgery 1985



### Results of the Prospective Evaluation of Radial Keratotomy (PERK) Study 10 Years After Surgery

George O. Waring III, MD, Michael J. Lynn, MS, Peter J. McDonnell, MD, and the PERK Study Group

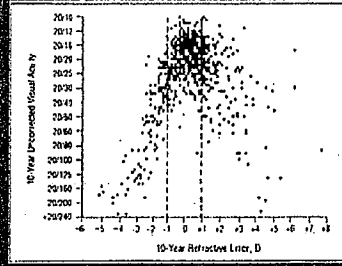
- Loss of >2 lines in 3%
- 90% prediction interval 4.42D
- Hyperopic shifts in 40-50%



### Results of the Prospective Evaluation of Radial Keratotomy (PERK) Study 10 Years After Surgery

George O. Waring III, MD, Michael J. Lynn, MS, Peter J. McDonnell, MD, and the PERK Study Group

- Loss of >2 lines in 3%
- Hyperopic shifts in 40-50%



### FDA Kremer Trial: First LASIK Study

- Myopia -1 to -15 D, astigmatism up to 5 D
- Loss of > 2 lines BCVA:
  - 0.4% < 7 D
  - 6.0% > 7 D
- UCVA 20/20 or better:
  - 45% < 7 D
  - 14% > 7 D

Preoperative	1st Postoperative	2nd Postoperative	3rd Postoperative	4th Postoperative
Mean	Mean	Mean	Mean	Mean
SD	SD	SD	SD	SD
95% CI	95% CI	95% CI	95% CI	95% CI

Table 101. Summary of Key Safety Variables After 1 year Treatment at 6 Months Stratified by Preoperative SE

Safety Variable	Cohort 2 (4%)		Cohort 1 (4%)		P Value
	-7 D	-7 D	-7 D	-7 D	
BCVA					
Loss of ≥2 lines	2/477 (0.4)	12/188 (6.3)	2/483 (0.4)	10/254 (4.1)	0.001
Worse than 20/40	1/477 (0.2)	3/188 (1.6)	0/483 (0)	11/254 (4.3)	0.001
Worse than 20/25 with 20/20 or better preop.	0/477 (0.0)	12/188 (6.4)	0/483 (0)	12/254 (4.7)	0.001
Increase of ≥10 cylinder	0/743 (0)	7/76 (9.2)	0/552 (0)	10/118 (8.5)	0.001

### Complications of Laser In Situ Keratomileusis for the Correction of Myopia

R. Doyle Stilling, MD, PhD, Jonathan D. Carr, MD, FAACOph, Keith P. Thompson, MD, George O. Waring III, MD, FRCOphth, Wendy M. Wiley, BA, Emily G. Walker, LPK

- Complications occurred in approximately 5% of cases
- Complication rates can be greatly reduced as the surgical team gains experience
  - Intraoperative complications, 3.1% to 0.7%
  - 4.7% of eyes lost 2 or more lines of BCVA

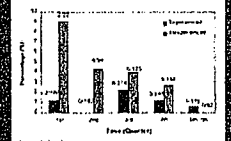


Figure 1. Incidence of intraoperative, postoperative, and total complications in a series of eyes with myopia treated with LASIK.

Table 3. Postoperative Complications\*

Type	No.	% Eyes	% Lines Lost BCVA
Postoperative haze	8	1.6	0
Postoperative glare	1	0.2	0
Postoperative eye redness	2	0.4	0
Postoperative eye pain	1	0.2	0
Total	12	2.4	0





1989 1995 2000 2005 2010 2015

## The Effect of Hinge Position on Corneal Sensation and Dry Eye after LASIK

Eric D. Donnenfeld MD,<sup>1,2,3,4</sup> Kerry Solomon MD,<sup>5</sup> Henry D. Perry, MD,<sup>1,2,4</sup> Smit J. Doshi, MD,<sup>1,2,4</sup> Michael Eshelman, MD,<sup>6</sup> Rosic Solomon, MD,<sup>6</sup> Seth Flax, MD<sup>7</sup>

- There is a significant transient loss of corneal sensation following LASIK
- Corneal sensation improves to preoperative levels at 6 months following surgery
- Dry eye signs and symptoms statistically return to normal at 6 months following surgery

Figure 1. Mean central corneal thickness (µm) at 1, 3, 6, and 12 months post-LASIK.

1989 1995 2000 2005 2010 2015

## Risk Assessment for Ectasia after Corneal Refractive Surgery

J. Dudley Kraker, MD,<sup>1,2</sup> Maria Wiersma, MD,<sup>1</sup> Michael J. Lynn, MS,<sup>1</sup> R. Doyle Stang, MD, PhD<sup>1,2</sup>

Table 5. Ectasia Risk Factor Score System

Parameter	Points
Preoperative cornea	0-20
Age (yr)	0-10
WAX	0-10
WAXE (µm)	0-10

Table 7. Ectasia Risk Factor Score Categories

Category	Score Range	Number of Patients	Percentage
Low	0-10	100	10.0%
Medium	11-20	200	20.0%
High	21-30	100	10.0%

Figure 2. Risk Factor Score distribution.

1989 1995 2000 2005 2010 2015

## Laser in situ keratomileus versus long-term contact lens wear: Decision analysis

Hall T. McCee, MD, MS, William D. Mathers, MD

Figure 3. Decision tree analysis of LASIK versus contact lens wear.

1989 1995 2000 2005 2010 2015

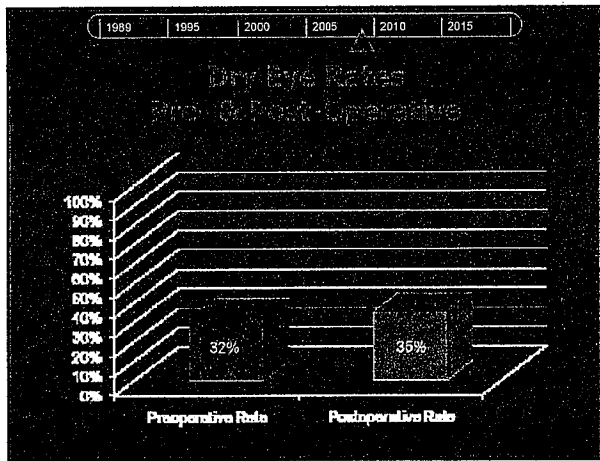
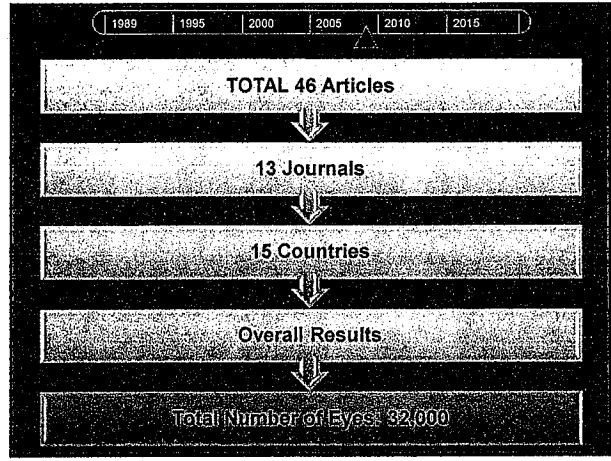
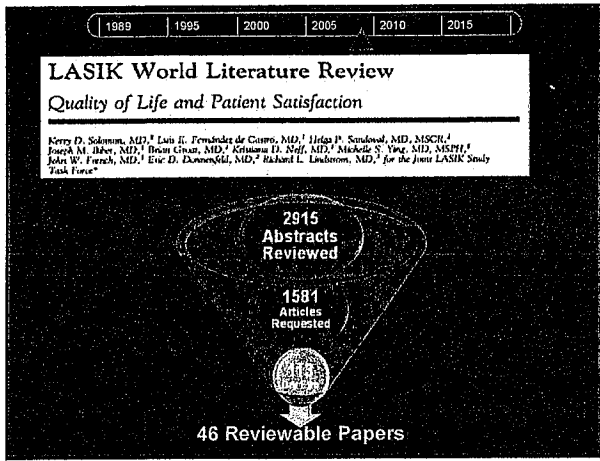
## FDA Public Hearing

When is LASIK not for me?

- 140 complaints to the FDA after over 10 million procedures
- Anti-LASIK activists wished to ban the procedure
- Public testimony included personal stories of depression, suicide or suicidal ideation, and other psychological problems

When is LASIK not for me?

- You are probably NOT a good candidate for refractive surgery if:
  - You are not a risk taker. Corneal refractive surgery is irreversible in a percentage of patients, and there are no long-term data available for contact lens wear.
  - If you have had any previous corneal refractive surgery, you should discuss the risks of repeat surgery with your ophthalmologist before undergoing any procedure.
  - Corneal in situ keratomileus is not a surgical procedure, although the procedure is irreversible.
  - You require a change in your contact lens or glasses prescription in the past year. This is not an objective finding. Patients who are:
    - in their age 20s or 30s and
    - whose refractive error is changing rapidly with each exam
    - who are pregnant or breastfeeding, or
    - who are taking medications that may cause refractive changes
  - You are currently taking glaucoma medication and should discuss the procedure with your ophthalmologist.
  - You have a disease or any medications that may affect wound healing. Contact lens wear, both as a preoperative step and as a postoperative step, may increase the risk of infection and may temporarily delay wound healing after a refractive procedure.
  - You actively participate in contact sports. The potential for injury, especially with other activities in which blows to the face and eyes are a normal occurrence.
  - You are not an adult. Currently, minors are not approved for LASIK procedures under the age of 18.



**1989 1995 2000 2005 2010 2015**

### Femtosecond Lasers for LASIK Flap Creation

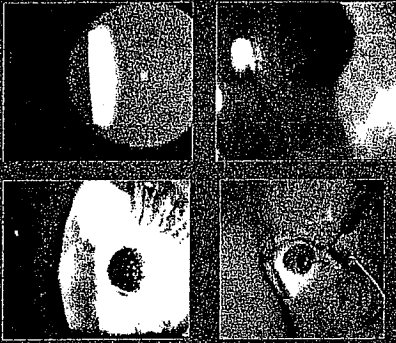
*A Report by the American Academy of Ophthalmology*

Apud A. Forju, MD,<sup>1</sup> Alan Singer, MD, MS,<sup>2</sup> Steven C. Schalksorn, MD,<sup>1</sup> Parag A. Maitra, MD,<sup>3</sup> David J. Tanzer, MD,<sup>4</sup> William H. Trumble, MD,<sup>5</sup> John B. Cason, MD,<sup>6</sup> Kendrick H. Donnellon, MD, MS,<sup>7</sup> George D. Kymnstein, MD, PhD<sup>8</sup>

*Table 1. International Literature on Pre- and Post-Operative Dry Eye Rates in LASIK and SMILE*

Author (Year)	Country	Study Population	n	Pre-Operative Dry Eye Rate (%)	Post-Operative Dry Eye Rate (%)	Notes
Wang et al (2008)	China	1000 patients	1000	10.0	15.0	Pre- and post-operative dry eye rates were significantly higher in the femtosecond laser group compared to the microkeratome group.
Chen et al (2009)	China	1000 patients	1000	10.0	15.0	Pre- and post-operative dry eye rates were significantly higher in the femtosecond laser group compared to the microkeratome group.
...	...	...	...	...	...	...

## Surgical Complications LASIK



## LASIK Myth #1: Physicians Would Not Have LASIK on Their Own Eyes

- ◆ LASIK Fact:
  - Physicians have among the highest prevalence of having undergone LASIK of any occupation
  - Lasik surgeons are 4X more likely to have Lasik than the general population

## LASIK Myth #2: The Long Term Effects of LASIK are Not Known

- ◆ LASIK Fact:
  - LASIK has over a 20 year track record
  - Long term studies have shown refractive stability and safety

## LASIK Myth #3: Contact Lenses are Safer Than LASIK

- ◆ LASIK Fact:
  - Daily wear contact lenses are likely less safe than LASIK when worn for 30 years
  - Extended wear contact lenses are definitely less safe than LASIK when worn for 30 years

**LASIK Myth #4:**  
**LASIK Increases the Risk of Glare and**  
**Halo Compared to Glasses**

◇ **LASIK Fact:**


- ▣ Modern LASIK improves glare and halo for the majority of patients
- ▣ There are a minority of patients who will develop glare and halo that did not have symptoms preoperatively

Tanzer LASIK in Pilots JCRS 2013  
 Price LASIK vs Contact Lens

1989 1995 2000 2005 2010 2015

**The Future: Better Technology**

- ◇ **Advanced wavefront technology**
  - ▣ 1200 data points
  - ▣ 5 times more resolution than current technology
- ◇ **Advanced wavefront ablations**
  - ▣ 93.4% UCVA 20/20
  - ▣ 79.0% UCVA 20/16
  - ▣ 14.0% gained 1 or more lines of BCVA
  - ▣ 98.5% patient satisfaction



**Is LASIK Worth Saving? Yes!**

- ◇ LASIK IS THE SAFEST, most successful and most studied elective procedure in the world.
- ◇ LASIK has the highest patient satisfaction rate of any elective procedure.
- ◇ LASIK results have continually improved as technology and surgical techniques advance and preoperative diagnostic screening and patient selection become more refined.

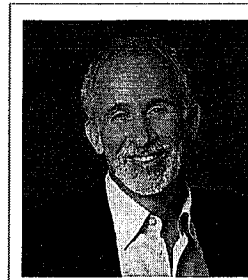
**Moving Forward**

- ◇ Our goal is continued improvement of patient satisfaction and 100% of patients seeing the same or better following LASIK than prior to surgery.
- ◇ We need to embrace patients who are dissatisfied with their vision following LASIK and never allow them to feel abandoned.
- ◇ We need to provide a better informed consent to our patients particularly those with psychiatric disease.
- ◇ We need to continue to invest resources into improving the safety and efficacy of laser vision correction.

## In Conclusion

- ◆ The golden age of laser vision correction is today and tomorrow looks even brighter.
- ◆ We should be proud of what we have accomplished.
- ◆ We should never be satisfied.

NVISION



## Dr. Tom Tooma

Medical Director NVISION Laser Eye Centers

Dr. Tooma has performed more than 100,000 LASIK procedures and believes that laser vision correction at NVISION is as safe as it can be. In fact, he has performed LASIK surgery on hundreds of doctors, including 250 eye doctors. That's why NVISION and Dr. Tooma are The Eye Doctors' #1 Choice for their eyes and their patients' eyes. Dr. Tooma believes that the combination of experience and technology gives NVISION's patients the highest possible likelihood of achieving 20/20 or better vision through LASIK procedures.

A pioneer in the world of LASIK surgery, Dr. Tooma has been a principal investigator in the field of laser vision correction since 1993. He helped several excimer laser manufacturers obtain FDA approvals for their lasers in the United States. He holds the record for many firsts: he was the first doctor in California to perform LASIK surgery and was the first to perform custom Wavefront-guided LASIK. He was also the first in the U.S. to use the FemtoSecond Laser (IntraLase FS30 – bladeless all laser LASIK), which is safer and more precise than a traditional blade.

In 2010, Dr. Tooma purchased TLC's interest in the 8 Southern California locations and formed NVISION Laser Eye Centers. At NVISION, Dr. Tooma provides his patients with a lifetime commitment, giving them the assurance that if they need any enhancement surgeries in the future, they can be performed at any NVISION center, for life and at no cost.

Dr. Tooma received his M.D. from Loma Linda University School of Medicine, where he also completed his internship in internal medicine and residency in ophthalmology. He completed his fellowship in Corneal and Refractive Surgery at the Emory University Department of Ophthalmology in Atlanta, Georgia. He has been board certified in ophthalmology for more than 25 years.

For Dr. Tooma, helping patients achieve their vision goals is his passion. "I feel privileged and blessed to participate in what is a life-changing experience for my patients," he said.

In his spare time, Dr. Tooma has served on medical teaching missions to Romania, Bulgaria, China and Fiji, helping teach local ophthalmology doctors new surgical techniques. In 2008, he and his wife, Marta Tooma, D.D.S., founded the Mission at Natuvu Creek in Fiji. The Mission serves the 250,000 people living on the island, with medical, dental and eye care provided by visiting physicians, including the Toomas.

1-877-91-NVISION | [NVISIONCenters.com](http://NVISIONCenters.com)

# Biography

## Education

- 1975 B.S. in Biochemistry, Magna Cum Laude, Loma Linda University  
1979 M.D., Loma Linda University School of Medicine

## Professional Training

- 1980 Internship in internal medicine, Loma Linda University Medical Center  
1983 Completed a residency in ophthalmology, Loma Linda University  
Department of Ophthalmology

## Fellowships

- 1984 Fellow in Corneal Surgery & External Disease, Emory University Department  
of Ophthalmology, Atlanta, GA

## Board Certification

- 1984 American Board of Ophthalmology

## Professional Affiliations

- American Society of Cataract & Refractive Surgery
- International Society of Refractive Surgery
- Castroviejo Corneal Society
- American Academy of Ophthalmology
- And many others

## University & Hospital Positions

- Chief, Department of Ophthalmology, Loma Linda University Community Hospital
- Director of Cornea Service, Department of Ophthalmology, Loma Linda University
- Director of Refractive Surgery, Department of Ophthalmology, Loma Linda University

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## Medical Doctor Curriculum Vitae

As of July 17, 2015

Thomas Tooma, MD

Dr. Tooma has performed more than 100,000 LASIK procedures and believes that laser vision correction at NVISION is as safe as it can be. In fact, he has performed LASIK surgery on hundreds of doctors, including 250 eye doctors. That's why NVISION and Dr. Tooma are The Eye Doctors' #1 Choice for their eyes and their patients' eyes. Dr. Tooma believes that the combination of experience and technology gives NVISIONS's patients the highest possible likelihood of achieving 20/20 or better vision through LASIK procedures.

A pioneer in the world of LASIK surgery, Dr. Tooma has been a principal investigator in the field of laser vision correction since 1993. He helped several excimer laser manufacturers obtain FDA approvals for their lasers in the United States. He holds the record for many firsts: he was the first doctor in California to perform LASIK surgery and was the first to perform custom Wavefront-guided LASIK. He was also the first in the U.S. to use the FemtoSecond Laser (IntraLase FS30 — bladeless all laser LASIK), which is safer and more precise than a traditional blade.

In 2010, Dr. Tooma purchased TLC's interest in the 8 Southern California locations and formed NVISION Laser Eye Centers. At NVISION, Dr. Tooma provides his patients with a lifetime commitment, giving them the assurance that if they need any enhancement surgeries in the future, they can be performed at any NVISION center, for life and at no cost.

Dr. Tooma received his M.D. from Loma Linda University School of Medicine, where he also completed his internship in internal medicine and residency in ophthalmology. He completed his fellowship in Corneal and Refractive Surgery at the Emory University Department of Ophthalmology in Atlanta, Georgia. He has been board certified in ophthalmology for more than 25 years.

For Dr. Tooma, helping patients achieve their vision goals is his passion. "I feel privileged and blessed to participate in what is a life-changing experience for my patients," he said.

In his spare time, Dr. Tooma has served on medical teaching missions to Romania, Bulgaria, China and Fiji, helping teach local ophthalmology doctors new surgical techniques. In 2008, he and his wife, Marta Tooma, D.D.S., founded the Mission at Natuvu Creek in Fiji. The Mission serves the 250,000 people living on the island, with medical, dental and eye care provided by visiting physicians, including the Toomas.





## MEDICAL BOARD OF CALIFORNIA

Executive Office



January 31, 2011

Tom S. Tooma, M.D.  
3501 S. Jamboree Road, Suite 1100  
Newport Beach, CA 92660

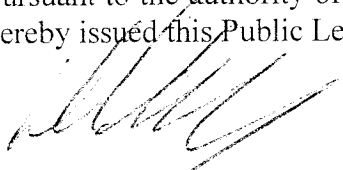
RE: Physician's and Surgeon's Certificate No. G 42262  
Case No. 04-2008-195312

### **Public Letter of Reprimand**

An investigation by the Medical Board of California revealed you failed to document a pre-operative examination and develop a surgical plan before meeting with a patient.

These actions constitute a violation of Business and Professions Code 2266.

Pursuant to the authority of the California Business and Professions Code section 2233, you are hereby issued this Public Letter of Reprimand by the Medical Board of California.



Linda K. Whitney  
Executive Director