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 Checklist

Title: 2017 Spring Education Symposium - Smile - Small Incision Lenticule Extraction

Provider Name: Marshall B Ketchum University c/o Dr. John Lee

☑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
Disciplinary History? ☑Yes ☐No

Letter of Public Reprimand attached

AAOS

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:

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

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2017 FEB 22 PM 1:02

CONTINUING EDUCATION COURSE APPROVAL APPLICATION

Cashiering and Board Use Only			
Receipt #	Payor ID	Beneficiary ID	Amount
1-2916	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
SMILE – Small Incision Lenticule Extraction

Course Presentation Date
8:15Am-5:00Pm
04/02/2017

Course Provider Contact Information

Provider Name
John (First) Lee (Last) Howard (Middle)

Provider Mailing Address
Street 2575 Yorba Linda Blv **City** Fullerton **State** CA **Zip** 92831

Provider Email Address jlee@ketchum.edu

Will the proposed course be open to all California licensed optometrists?	☑ YES ☐ 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?	☑ YES ☐ 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 (First) Tooma (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 2/14/2017 ***Date***

SUMMARY – SMILE

Tom Tooma, MD

According to the American Academy of Ophthalmology, small incision lenticule extraction (SMILE) is a relatively new refractive procedure designed to treat a multitude of refractive errors such as myopia, hyperopia, presbyopia, and astigmatism. The procedure involves using a femtosecond laser to create a corneal lenticule which is extracted whole through a small incision without the use of an excrimer laser. It is reported to achieve effects similar to laser-assisted in situ keratomileusis (LASIK) with excellent post-operative outcomes. It has faster recovery of post-op dry eye, reinnervation of corneal nerves and potential biomechanical advantages. The procedure began in September 2011 in Europe, China and India with clinical trials commencing in the United States in June 2012. The DFA expanded clinical trials and at least 255 patients have been treated. This lecture will cover this new procedure in terms of technical procedures, research results and its comparison to its success relative to LASIK.

NVISION
EYE CENTERS

Presenter – Tom Tooma, MD

Course Title – SMILE – small incision lenticule extraction

Course Outline –

Intrastromal surgery without a flap

TREATMENT OF MYOPIA
Sphere up to -10.00D
Cyl <0.50D
Stable refraction
22 year old and older
Optical zone of 6.0 to 6.5mm
Subject Demographics
n = 315
Age and Preoperative Refraction
n = 315
Postoperative Refraction
7 Days and 1 Month
Postoperative Refraction
3 Months and 6 Months
Postoperative Refraction
9 Months and 12 Months
Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 7 Days
Attempted vs Achieved
Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 1 Month
Attempted vs Achieved
Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 3 Months
Attempted vs Achieved
Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 6 Months
Attempted vs Achieved
Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 9 Months
Attempted vs Achieved
Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 12 Months
Attempted vs Achieved
Efficacy
Manifest Refraction Spherical Equivalent Outcome Percent Within Attempted
Efficacy
Uncorrected Visual Acuity (ETDRS)

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Efficacy
Uncorrected Visual Acuity (ETDRS)
Safety
Change in Best Spectacle Corrected
Visual Acuity (ETDRS)
Operative Events
Adverse Events
DATA SUMMARY
318 eyes treated
94% at 9 months within +/-0.50D
82% at 9 months within +/-0.25D
93% >20/20 at 9 months UCVA
SMILE – POTENTIAL ADVANTAGES
2-4mm incision
Bowman's layer mostly intact
Different set of potential complications
Journal of Refractive Surgery
2014;30(9):590-596
Ganesh and Gupta
Bangalore, India

Smile vs Lasik
100 eyes in each group
Matched for SE, schirmer 1+2, TBUT, Tear Osmolarity, Contrast sensitivity, RMS HOA total
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HOA and Contrast better with Smile
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Lasik/Smile considerations
Stroma hydration

Lasik/Smile considerations
Anterior stromal nerve plexus
correction of astigmatism/hyperopia
Recovery of vision
FDA approval
Mechanical stability
Lasik/Smile considerations
Centering the 'ablation'
Suction loss
Optical zone size

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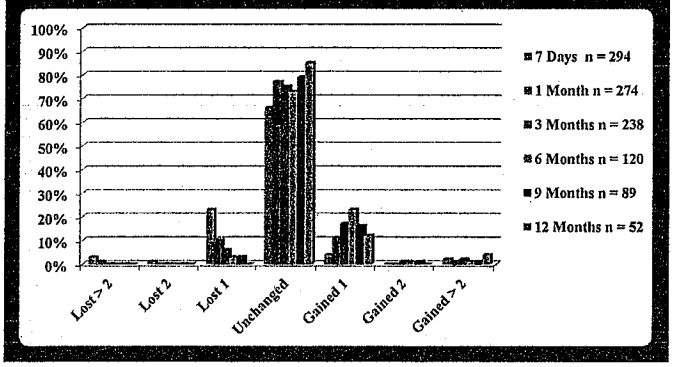
Custom ablations
Visual recovery
Presbyopia
Retreatment options
SMILE
PROMISING TECHNIQUE
125,000 PROCEDURES PERFORMED

75 Enterprise, Suite 200, Aliso Viejo, CA 92656
p: 949.274.4652 • *f:* 949.509.4898 • *e:* info@nvisioncenters.com • *w:* www.nvisioncenters.com

Safety

Change in Best Spectacle Corrected Visual Acuity (ETDRS)



Operative Events

Event		N
Loss of suction	Discontinued treatment	2
	Completed treatment	4
Difficult lenticule removal without tissue damage		8

Adverse Events

Event	N
Difficult lenticule removal with tissue damage	2
Perforated cap	1
Retained tissue	2
Viral conjunctivitis	1
Pain at 6 months or later	1

DATA SUMMARY

318 eyes treated

94% at 9 months within +/-0.50D

82% at 9 months within +/-0.25D

93% >20/20 at 9 months UCVA

SMILE – POTENTIAL ADVANTAGES

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Bowman's layer mostly intact

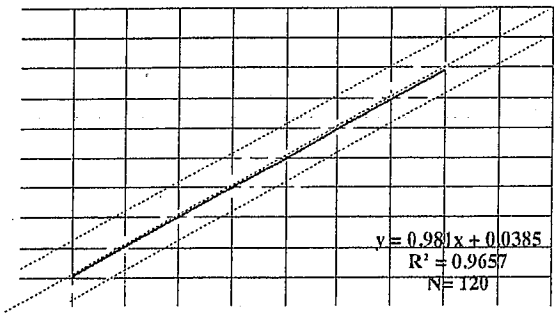
Different set of potential complications

Journal of Refractive Surgery 2014;30(9):590-596

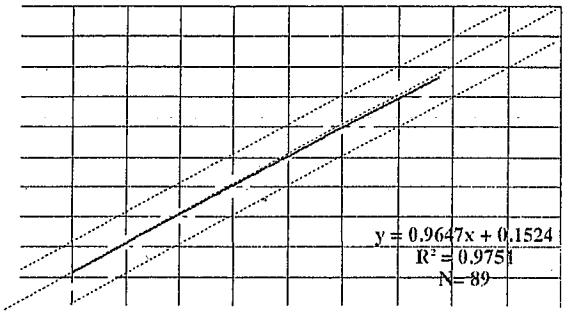
Ganesh and Gupta

Bangalore, India

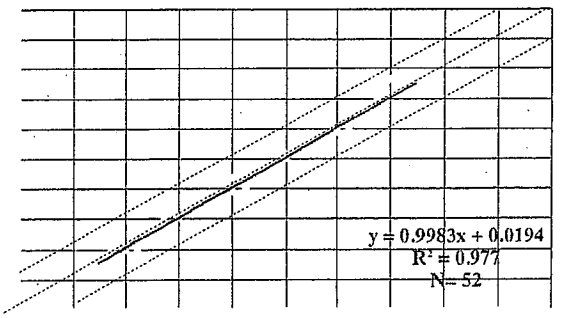
Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 6 Months Attempted vs Achieved



Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 9 Months Attempted vs Achieved

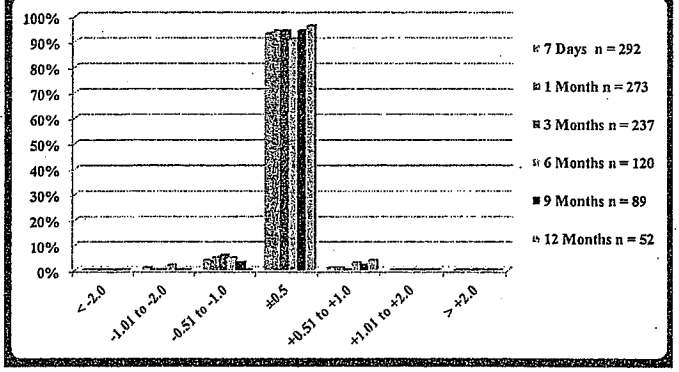


Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 12 Months Attempted vs Achieved



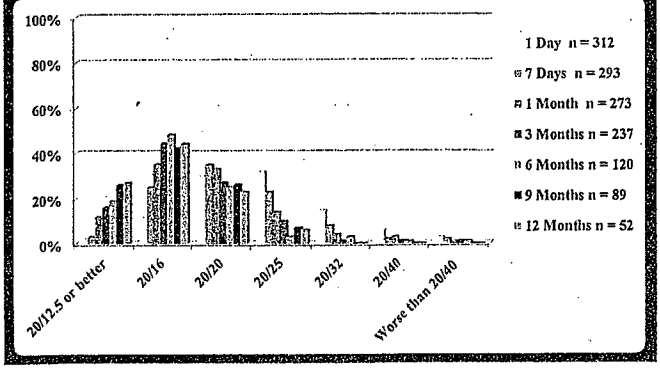
Efficacy

Manifest Refraction Spherical Equivalent Outcome Percent Within Attempted



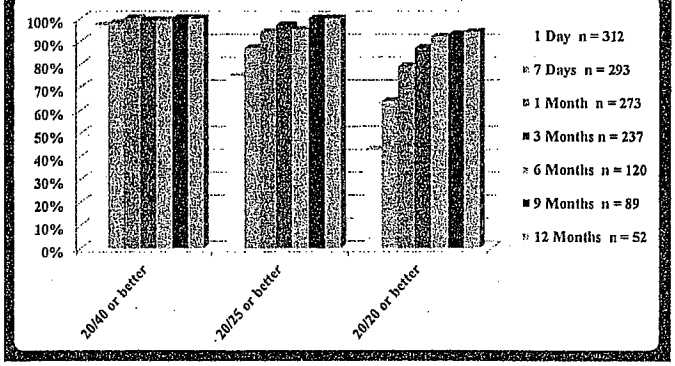
Efficacy

Uncorrected Visual Acuity (ETDRS)



Efficacy

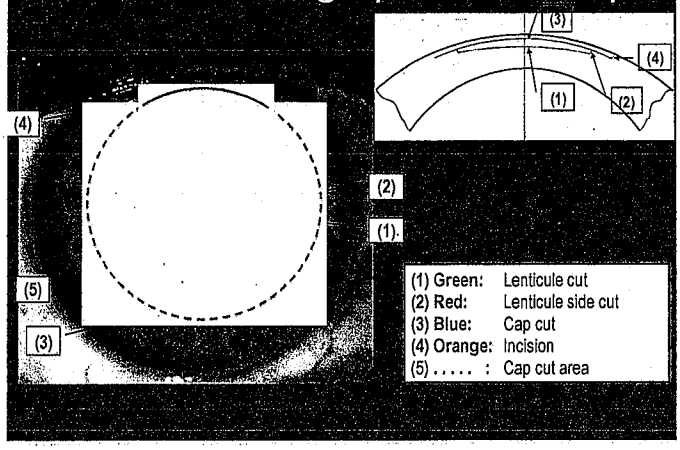
Uncorrected Visual Acuity (ETDRS)

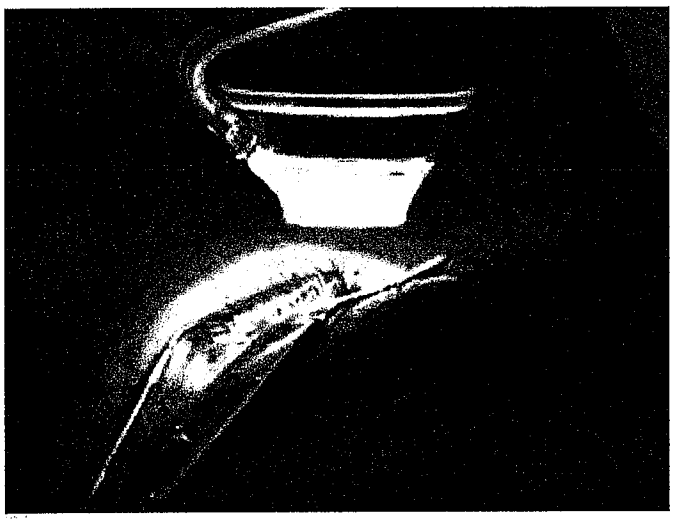


SMILE – small incision lenticule extraction

TOM TOOMA
MEDICAL DIRECTOR
NVISION EYE CENTERS

Intrastromal surgery without a flap





TREATMENT OF MYOPIA

Sphere up to -10.00D
Cyl <0.50D
Stable refraction
22 year old and older
Optical zone of 6.0 to 6.5mm

Subject Demographics n = 315

	n	Percent
Gender		
Male	135	42.9
Female	180	57.1
Eyes Treated		
Right	144	45.7
Left	171	54.3

Age and Preoperative Refraction n = 315

	MEAN (SD)	RANGE
Age	33 yrs (8)	22 to 58 yrs
MRSE	-4.66 D (2.09)	-1.00 to -10.25
Sphere	-4.56 D (2.09)	-1.00 to -10.00
Cylinder (untreated)	-0.19 D (0.20)	0.00 to -0.50

Postoperative Refraction 7 Days and 1 Month

	MEAN (SD)	RANGE

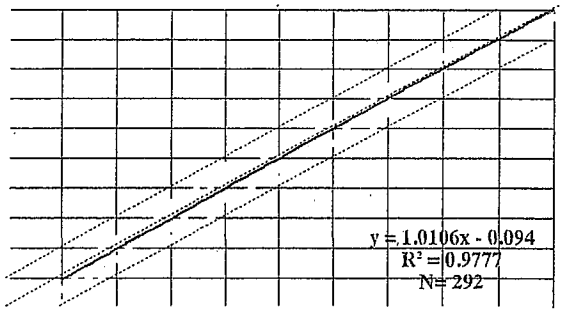
Postoperative Refraction 3 Months and 6 Months

	MEAN (SD)	RANGE

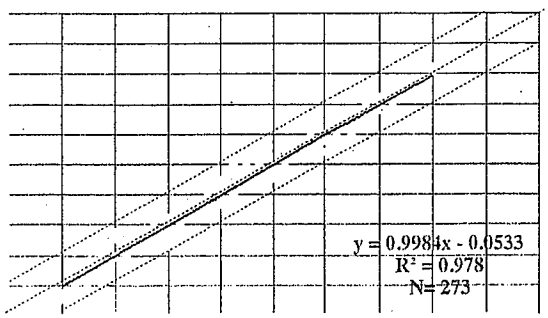
Postoperative Refraction 9 Months and 12 Months

	MEAN (SD)	RANGE
MRSE	-0.09 D (0.28)	-1.13 to +0.75
Sphere	+0.01 D (0.27)	-0.75 to +0.75
Cylinder (untreated)	-0.19 D (0.28)	-1.25 to 0.00
MRSE	-0.06 D (0.23)	-0.50 to +0.75
Sphere	+0.03 D (0.27)	-0.50 to +0.75
Cylinder (untreated)	-0.17 D (0.25)	-1.00 to 0.00

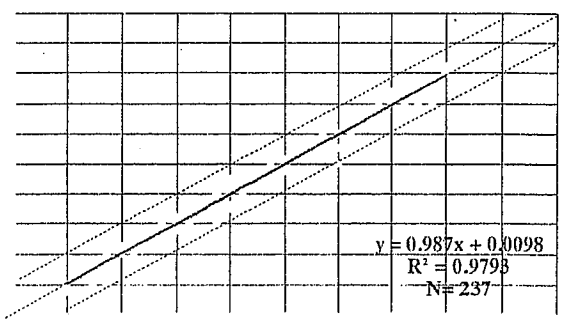
Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 7 Days Attempted vs Achieved



Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 1 Month Attempted vs Achieved



Manifest Refraction Spherical Equivalent Predictability (in Diopters) at 3 Months Attempted vs Achieved



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Lasik/Smile considerations

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Suction loss
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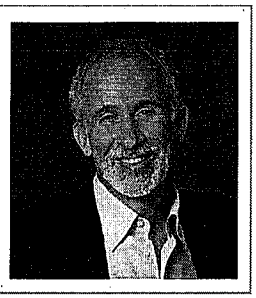
Retreatment options

SMILE

PROMISING TECHNIQUE

125,000 PROCEDURES PERFORMED

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 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.

1-877-91-NVISION | 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

NVISION
EYE CENTERS

Medical Doctor Curriculum Vitae

As of July 17, 2015

Thomas Tooma, MD

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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

2005 Evergreen Street, Suite 1200, Sacramento, CA 95815-3831 • (916) 263-2520 • FAX: (916) 263-2473 • www.mbc.ca.gov