U.S. Trends in Refractive Surgery: 2012 ISRS Survey
- Partner of AAO -

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The authors have no financial interests in this survey study.
Fourth year of ONLINE*** survey opened by 376 ISRS members of the 1150 total emailed...sixteenth year of refractive data collection overall

127 responses analyzed by October 5, 2012 for 34% of the U.S. ISRS membership who opened the emailed survey and 11% of the membership e-mailed.

Alphabet soup of refractive surgery including corneal and lens-based surgeries and premium refractive IOLs.
> 75 Cases / Month

* Peaked in 2001

DUFFEY 2012
Preferred Surgery For 30 yo -10.00 Diopter Myope

* 45% LVC

DUFFEY 2012
Preferred Surgery For 45 yo +3.00 D Hyperope

*70% LVC

DUFFEY 2012
Preferred Surgery For 45 yo +5.00 D Hyperope

DUFFEY 2012
Willing To Do Bilateral Surgery At Same O.R. Visit

DUFFEY 2012
Family LVC Index: (LASIK or PRK Performed on Ourselves and Family Members)

* 3X the general population

DUFFEY 2012
Excimer Laser Most Commonly Used

DUFFEY 2012
“Microkeratome” Most Commonly Used

*D 66% femtolaser*

DUFFEY 2012
Topography Unit Most Commonly Used

DUFFEY 2012
Preferred Surgery for “Pre-Cataract” Presbyopia

DUFFEY 2012
Preferred Flap Thickness (when no other constraints)
Minimum Residual Stromal Bed Thickness Requirement for LASIK

*60% at 275 microns or greater*

DUFFEY 2012
Total Cases of Post LASIK Ectasia as the Primary Surgeon in Career

* Not growing

DUFFEY 2012
Minimum Cent. Corneal Pachymetry for LASIK (all other parameters normal)

* 66% OK with 480 or less
Will You Perform Refractive Surgery on One-Eyed Patients

DUFFEY 2012
56% will offer to correct astigmatism when it reaches 0.75 D…
80% if it reaches 1.0 D

DUFFEY 2012
Procedure for Low Astigmatism Intervention (0.5 to 1.0 D)

- LRI: 63
- AK: 16
- Toric: 20

* 80% LRI/AK

DUFFEY 2012
Procedure for Medium Astigmatism Intervention (1.12 to 2.0 D)

DUFFEY 2012
Procedure for High Astigmatism Intervention (2.0 D plus)

DUFFEY 2012
Do You Currently Perform CXL?

- Yes: 16
- No: 84

DUFFEY 2012
Total LVC Volume w/i ISRS (1000s)

* 8% decrease in Total LVC from 2010.
Ratio of PRK / Total LVC increased from 24% to 29% over past 2 years.
Fourth ONLINE ISRS/AAO SURVEY was a success with 34% / 11% response rate.

VisX 2:1 (63%) over Wavelight (26%) and other excimers combined…stable.

About 35% penetration of modern refractive surgery amongst refractive surgeons…. 3-4 X the general population. Family Index rates also continue to be high despite mixed press re: LVC in the public media a few years ago.
25% of respondents are OK with bilateral P-IOL and 5% with bilateral RLE at the same surgical setting (down from last year).

Multifocal IOL (15%) over accommodative IOL (4%) as a preferred lens-based presbyopia option when used for RLE (stable).

Femtosecond laser use still on the rise (66%)
Thinner flaps still on the rise: 100 micron or less flaps are favored by 57% of surgeons (up from 12% in ‘04).

Preferred RSB thickness stable: 40% think 250 microns is adequate, but 60% recommend 275 microns or more.

New post-LASIK ectasia cases continue to be on the decline with 50% stating no cases of their own patients in their career.
Pentacam (41%) and Z-H (43%) about equal and Orbscan II down (26%) from last year.

LVC Volume down 8% within ISRS/AAO membership in 2012 relative to 2010 and down even greater from last year.

Ratio of Surface Ablation / Total LVC stable at 29% over past two years.
During cataract surgery 80% of surgeons will offer to correct astigmatism if it measures 1.0 D or more

LRI/AK preferred (80%) if K astigmatism <1.0D
Toric IOL preferred (76%) if K astigmatism > 1.12D

CXL offered by 16% of ISRS/AAO members surveyed in the U.S.
Thanks to the ISRS/AAO leadership for their support and for your participation in the 2012 Survey.

We look forward to your response to our fifth ONLINE survey and the seventeenth survey overall next fall.

***Complete 16 years of survey results found at www.duffeylaser.com