

# The safety and efficacy of Laser Vision Correction in a Large Corporate Practice



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**Optical Express**

Vision for a better life

# Optical Express Clinical Structure

- 34 laser centers
  - UK, Ireland, Netherlands, Germany, France, USA
- 27 surgeons and 138 optometrists
- International Medical Advisor Board
- Complete refractive solutions
- Electronic medical records
- Biostatistics department



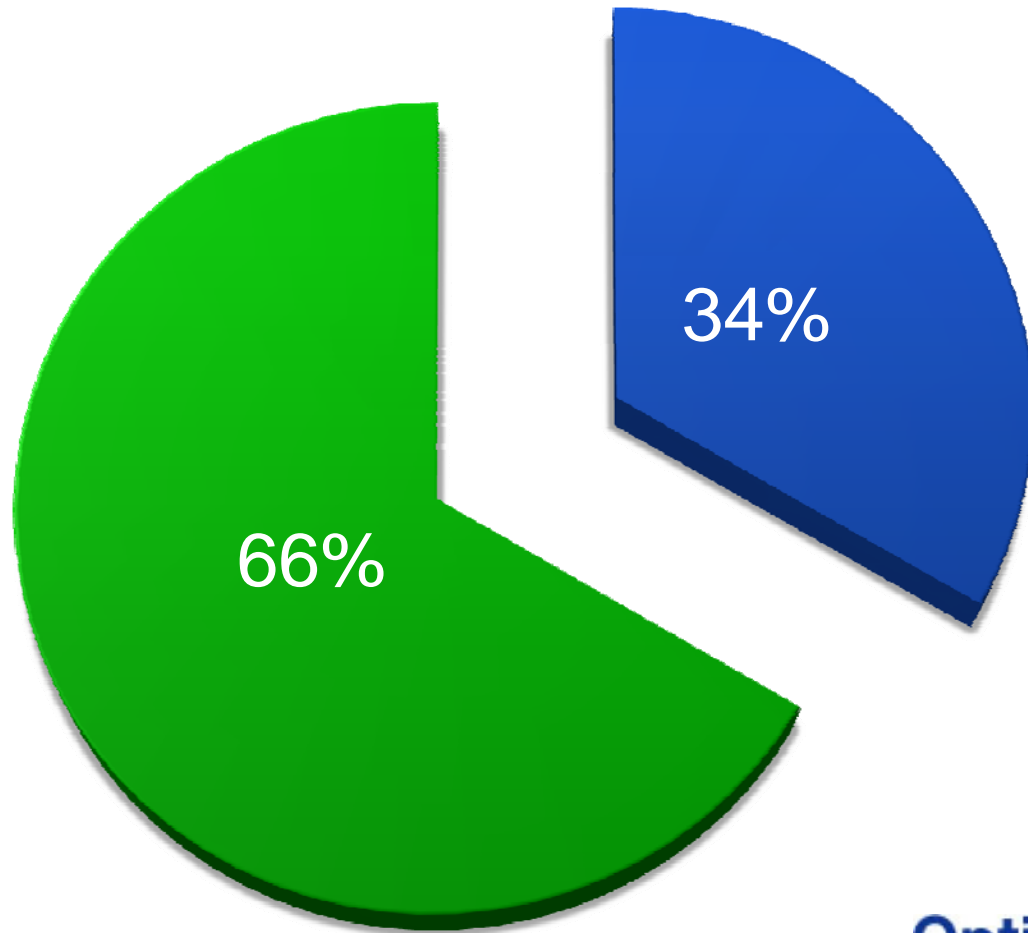
# Laser Vision Correction

- Consecutive treatments in 2008
  - **25,732 pts; 50,027 eyes**
- Procedures: LASIK & LASEK
- Equipment
  - Excimer laser VISX S-4
  - Keratome
    - Intralase FS-60
    - Disposable Moria
- Followup 1 day, 1 wk, 1 and 3 months
- Postoperative patient experience survey

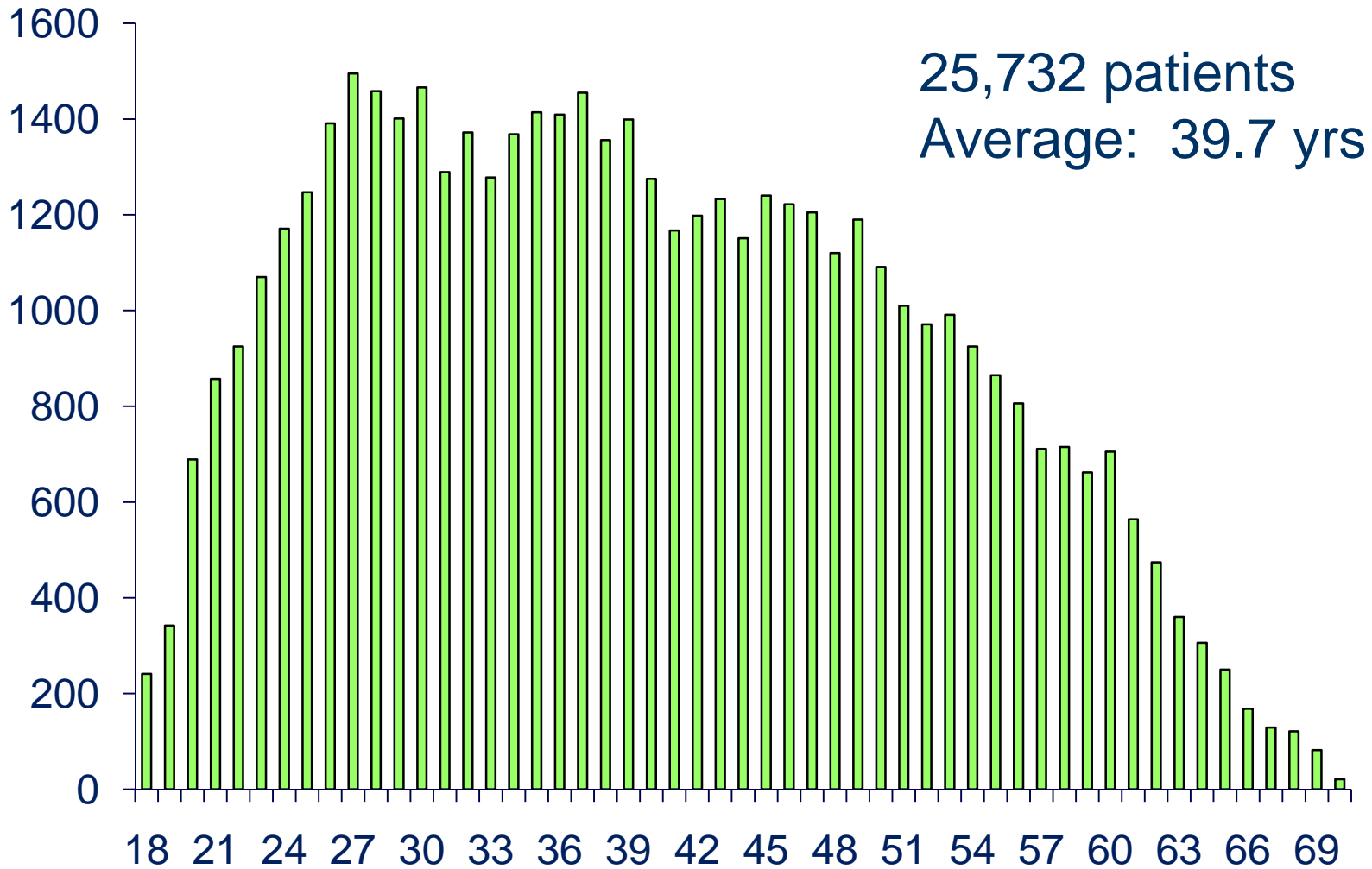


# Gender Distribution of Treated Patients

- Male
- Female



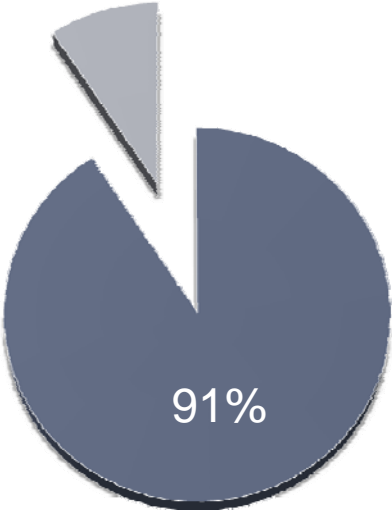
# Age Distribution



# Surgery

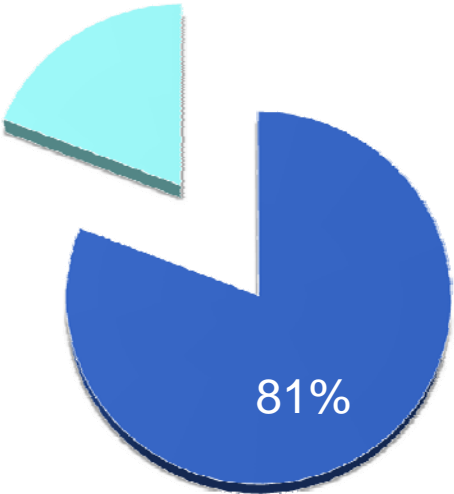
## Type

- LASIK
- LASEK



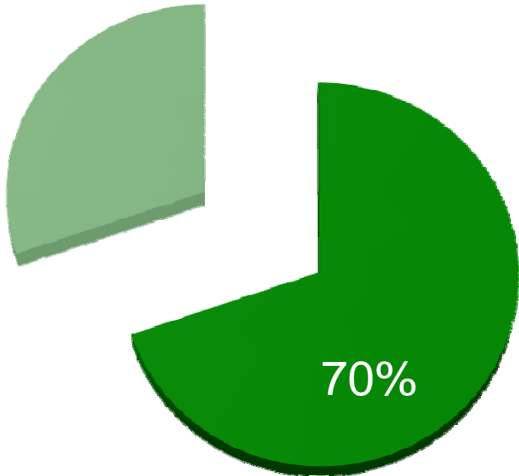
## Ablation

- WFG
- Standard

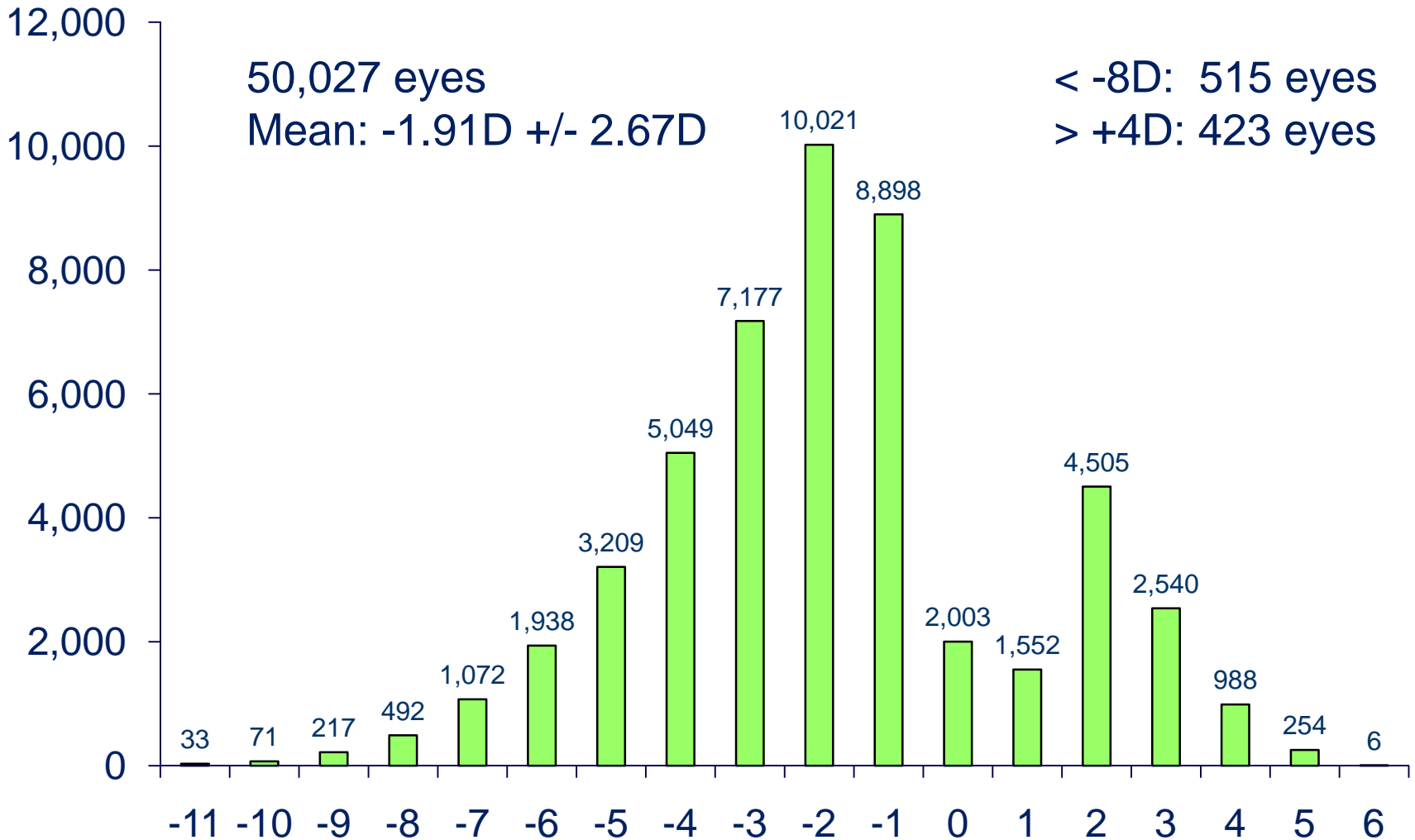


## Flap

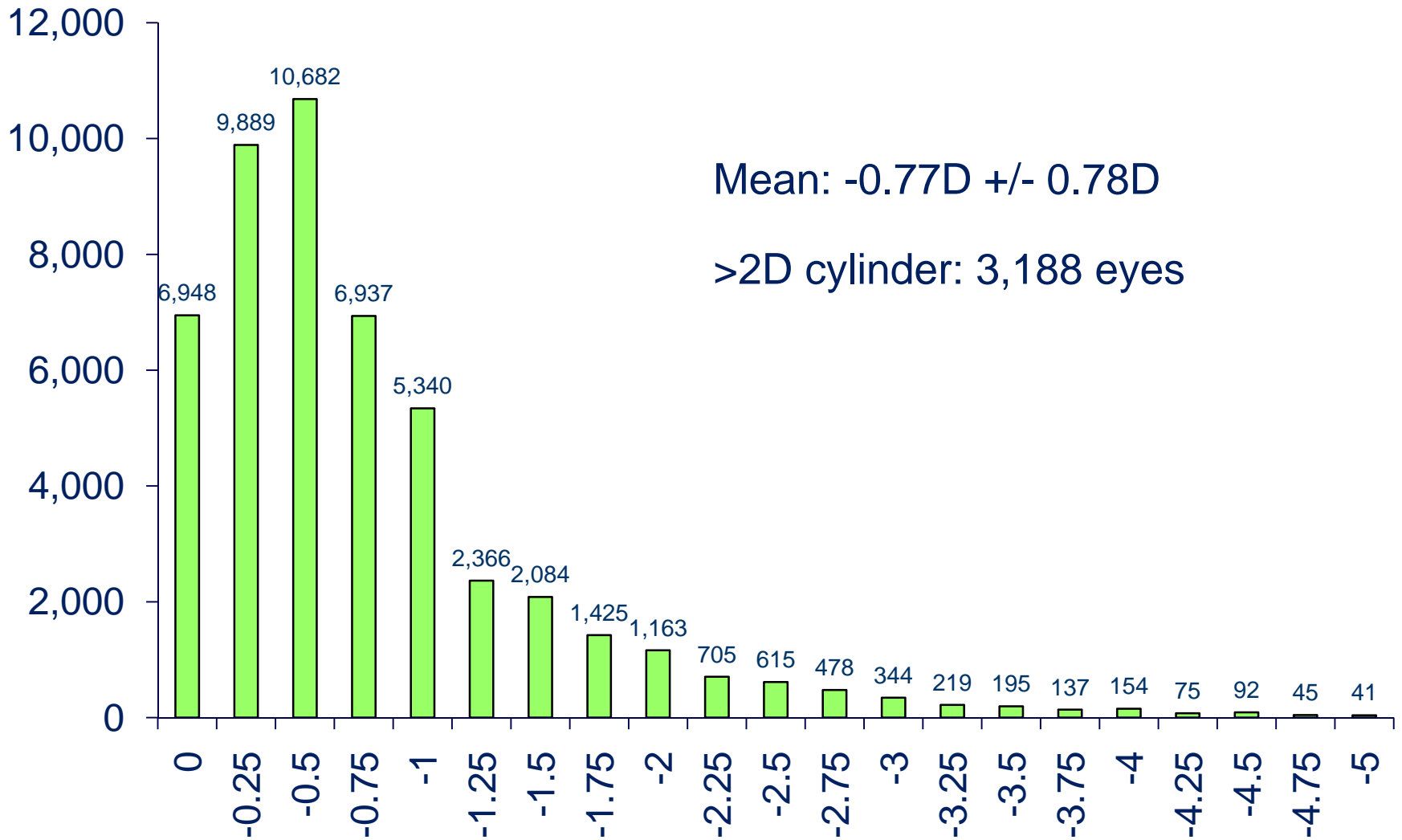
- Intralase
- Mechanical



# Preoperative Sphere



# Preoperative Cylinder

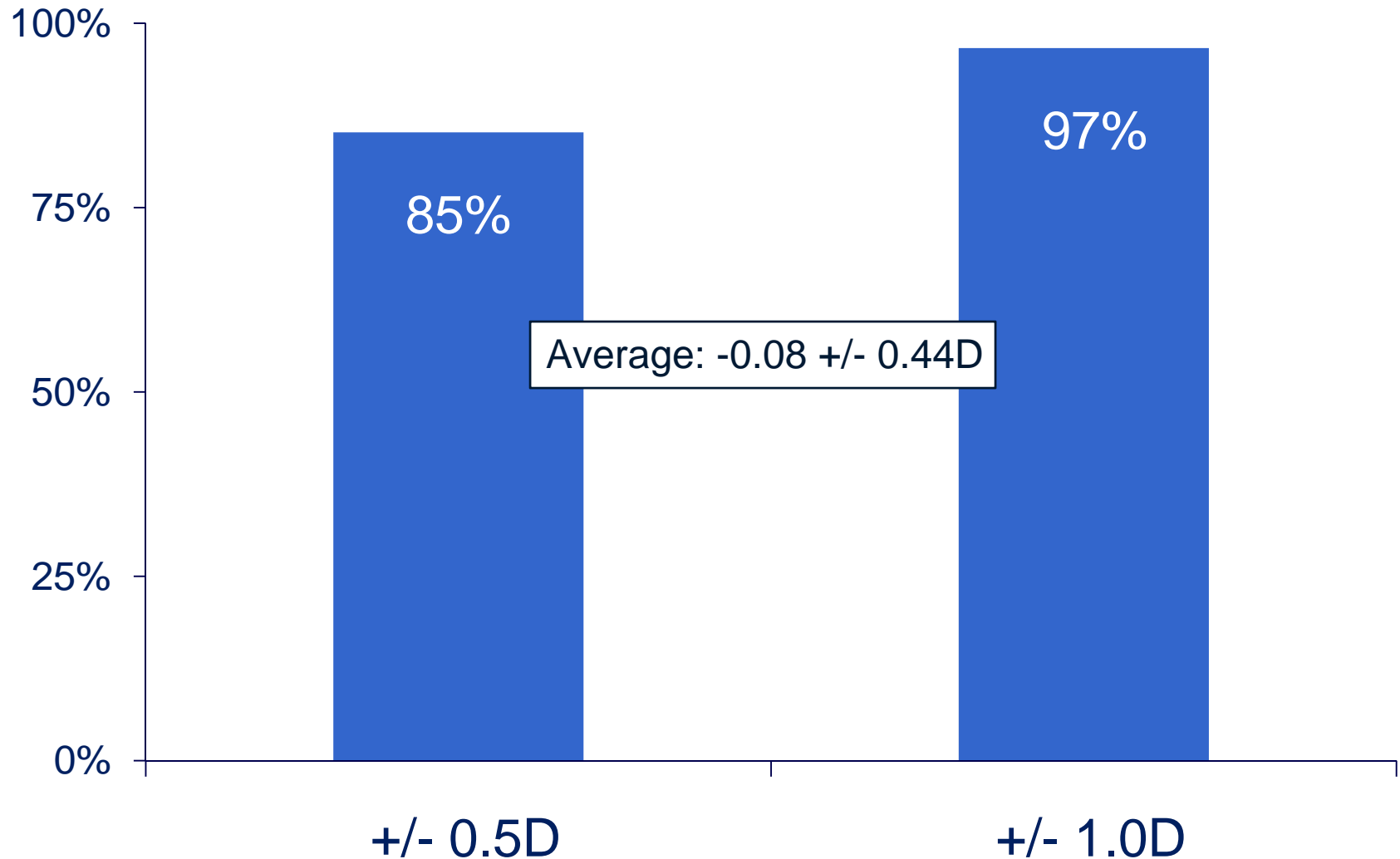




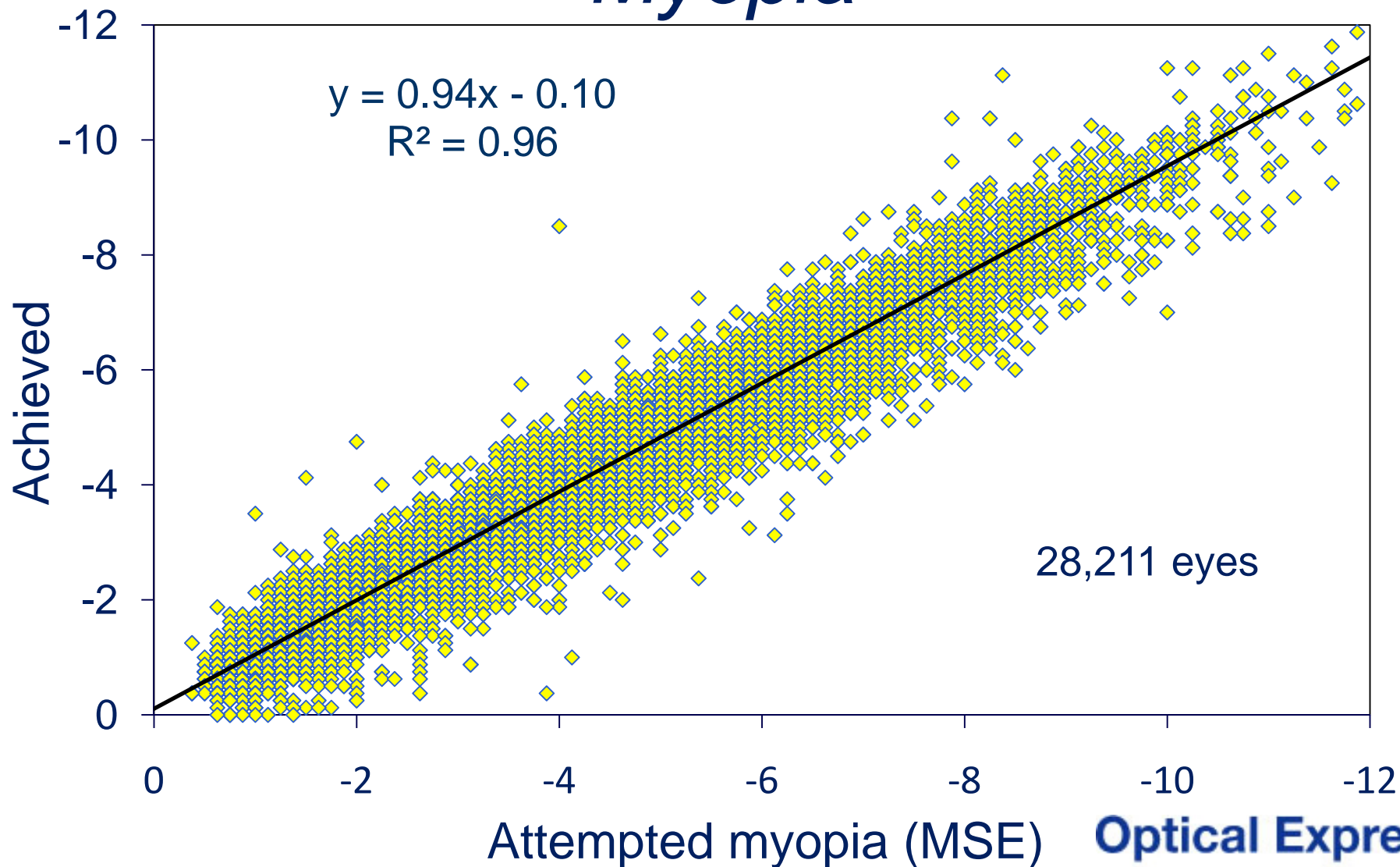
# 1 mo. Results

- Myopia and Hyperopia
- LASIK and LASEK
- Eyes targeted for emmetropia
- Primary treatments
- Completed one month examination:
  - 45,961 eyes (23,159 pts) (92%)
  - No difference in any preop parameter in those who did not complete 1 mo visit

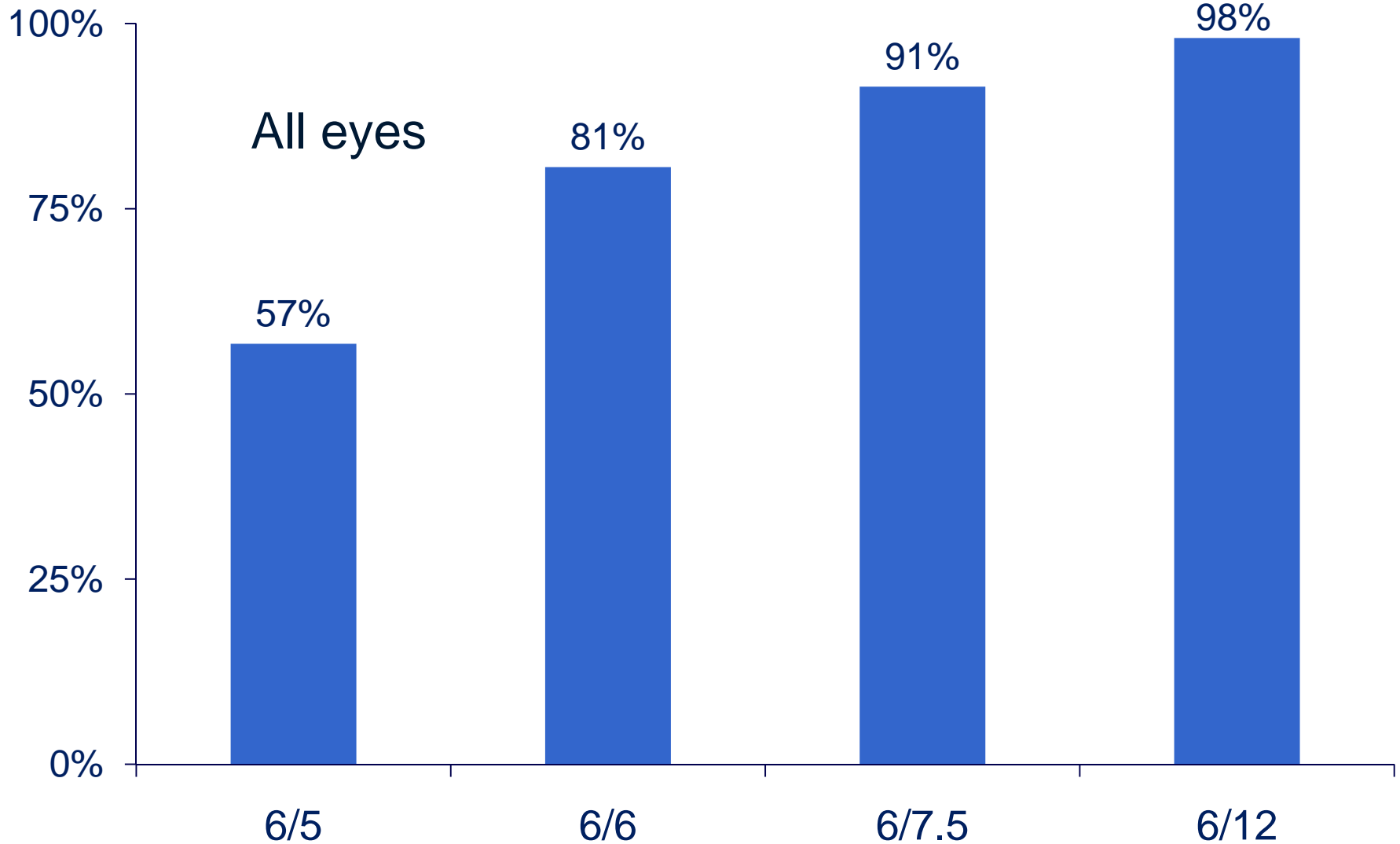
# 1 mo. Refractive Predictability (MSE)



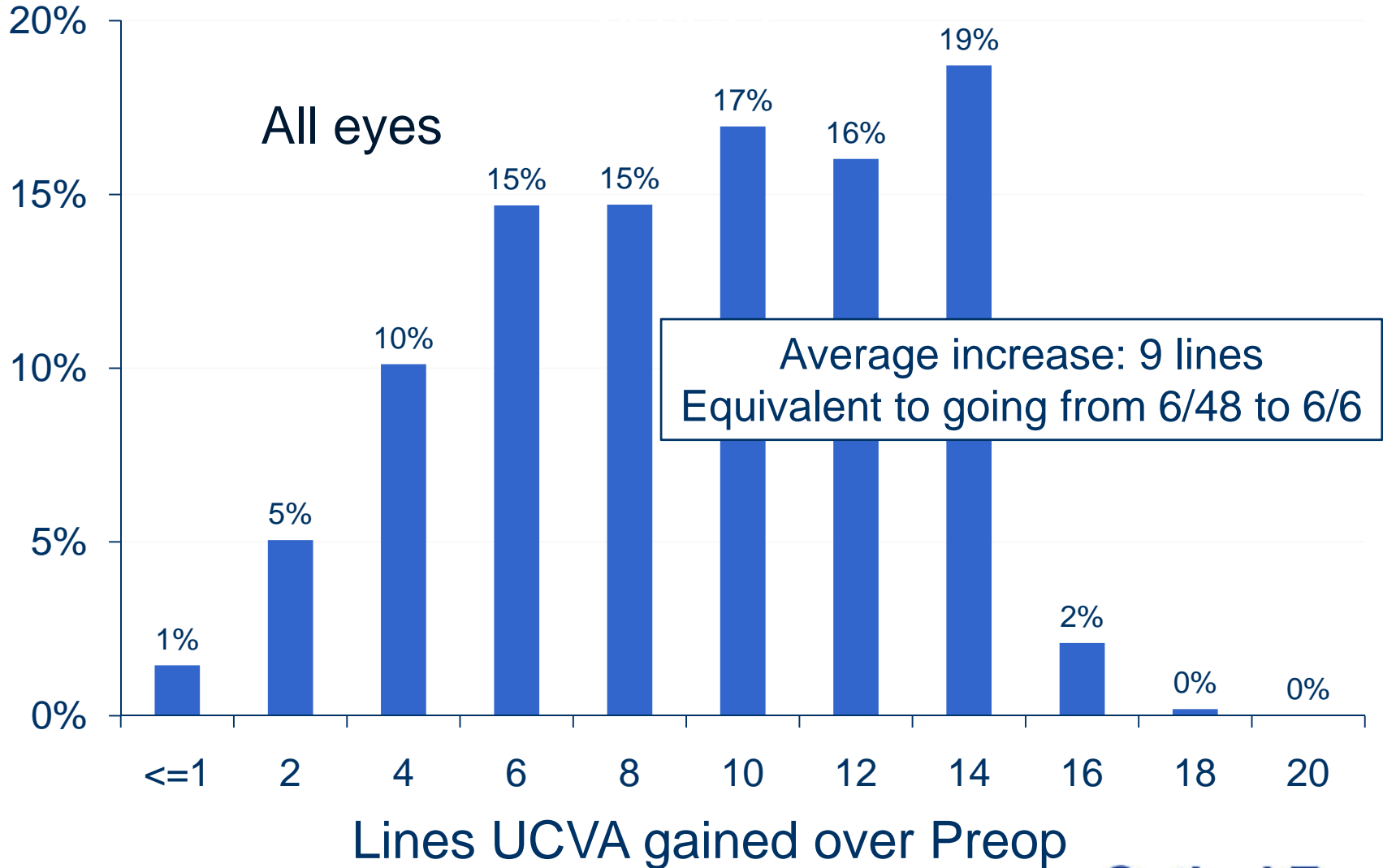
# 1 mo. Attempted Vs Achieved *Myopia*



# 1 mo. Uncorrected Acuity



# 1 mo. Improvement in UCVA



# 1 mo. Change in Best Corrected Vision

- Mean change BCVA: 0.00 LogMAR
- Loss >2 lines BCVA: 0.5% (1:500)
- BCVA within one line of preop: 94.9%

# Complication Rate

*50,027 consecutive eyes with at least one month followup*

	Number	Incidence	1:___
BCVA loss > 2 lines (1 mo.)	170	0.370%	270
Dry eye	50	0.100%	1,001
Glare/halos	21	0.042%	2,382
Other	18	0.036%	2,779
Mild DLK	14	0.028%	3,573
Flap striae	11	0.022%	4,548
Transient light sensitivity	10	0.020%	5,003
Microbial keratitis	8	0.016%	6,253
Grade 3/4 DLK	8	0.016%	6,253
Significant haze	8	0.016%	6,253
Postop cyl > 2D	7	0.014%	7,147
Flap creation complication	7	0.014%	7,147
Sterile infiltrates	5	0.010%	10,005
Epithelial ingrowth	5	0.010%	10,005
Crystalline lens changes	4	0.008%	12,507
Ectasia	3	0.006%	16,676
Delayed healing	2	0.004%	25,014
Recurrent erosions	2	0.004%	25,014
Elevated IOP	2	0.004%	25,014
Incorrect treatment	2	0.004%	25,014
Retinal detachment	2	0.004%	25,014
Decentered ablation	1	0.002%	50,027
<b>Total</b>	<b>360</b>	<b>0.72%</b>	<b>139</b>

# Conclusions

LASIK is safe and effective as delivered by a corporate provider

- Sound clinical governance
- Exceptionally robust database
- Outstanding clinical outcomes
- Very low complication rate

