Procedures and Technology at CCRS

We are not just limited to LASIK here at CCRS. Please see below for all that we have to offer!

	LASIK	PRK/LASEK/Epi-Lasik	ICL
Type of Surgery	Laser vision correction	Laser vision correction	Implantable Collamer Lens
Method of Correction	* Ablation/Subtraction *Creation of corneal flap then reshaping of cornea through tissue removal	* Ablation/Subtraction * Removal of epithelial cells then reshaping of cornea through tissue removal	*Non-subtraction *Biocompatible lens is placed between the iris and the natural lens.
Correction Range	* Nearsightedness and farsightedness with or without astigmatism +4.0 to -10.0	*Similar to LASIK but most effective for lower range of correction	* Nearsightedness of -3.0 or higher. * Recommended for those who are not candidates for LASIK (thin corneas, dryness).
Vision Outcome/Quality	* Excellent for low/ med/ mod high degree of correction. *Good to excellent for high degree of correction.	*Very good for low degree of correction (+2.0 to -3.0) *Less predictable for higher correction	*Excellent at all ranges *More surgeon dependent than laser vision correction.
Incision/Cut	* Creates flap with either a femtosecond laser (bladeless) or mechanical microkeratome.	* No flap (cut) is created. *Remove the surface cells either by hand or with microkeratome.	* 2.5 mm incision for lens insertion
Surgery Time	Approx. 5 min/eye	Approx. 5 min/eye	Approx. 15 min/eye
Recovery Period	1 day	Functional vision in 1 to 2 weeks	1 day
Dryness	*Observed especially in the first 2-4 weeks following surgery, more so for those prone to dry eyes.	Same as LASIK	Not induced
Glare and Halos	*Possible at all ranges but risk increases with higher correction	Same as LASIK	None or mild at all ranges
Regression	*Probability increases with higher correction	Same as LASIK	Not observed

	LASIK	PRK/LASEK/Epi-Lasik	ICL
Rare but Potential Risks	*Very rare but flap related issues (i.e. wrinkles and displacement)	* Intended outcome may not be obtained for several months.	*Extremely rare but catarat and/or glaucoma, ICL can be removed.
Satisfaction Rate	High to very high		Very high
History	First laser vision correction surgery performed in US in 1985.		* US FDA approval in 2005 but much longer follow up internationally.
Other Factors	Greater familiarity with technology and surgery.		*Intraocular procedure * Public is less familiar with the technology but is gaining increasing acceptance and is preformed in the military.
Cost	Depends on Laser system: See below	$1600 per eye	$3000 per eye
Follow Up	See below	1 year	3 years

10% off LASIK when surgery is scheduled at the time of consultation

Laser Systems and Costs at CCRS			
	Standard LASIK	***Wavefront LASIK***	***Bladeless Wavefront LASIK***
Laser System	**Nidek**	**Mel 80/Wavelight Allegretto**	**VisuMax**
	* Non-Wavefront * No eye-tracker * Scanning slit-laser beam	*Highest precision in Wavefront technology *Eye-tracker to compensate for eye movement. *Small-flying spot laser beam	* Gold Standard in bladeless LASIK surgery *Highest precision and safety profile * Curved applanation for minimal pressure during flap creation.
Follow Up	1 year follow up		
Dry Eye Treatment	$100 for LASIK patients		
Enhancement	$250 if performed with Mel 80/ Wavelight Allegretto $100 if performed with Nidek		
Costs	Non-Wavefront LASIK with Microkeratome $1000 per eye	Wavefront LASIK with Microkeratome: $1500 per eye	VisuMax Bladeless Wavefront LASIK: $2000 per eye

★ No additional costs with any of the procedures.

Comparison of Corneal Flap Creation in LASIK

	Microkeratome (Blade)	**Femtosecond Laser (Visumax)**
Flap Creation Technology	Mechanical blade	All-laser (bladeless)
Corneal Contact	Pressure applied to eye Cornea unnaturally flattened	Unique curved contact interface Cornea minimally flattened
Flap Thickness	Meniscus" flap – thinner center and thicker periphery Standard flap thickness	"Planar" flap – uniform thickness throughout middle and outer edges Customizable flap thickness (previously not good candidates due to thin corneas may benefit)
Flap Edge Contour	Standard edge angle and hinge location	Customizable edge angles for secure flap placement Customizable hinge location
Intraocular Pressure (IOP)	Significant rise in IOP (risk in glaucoma patients)	Curved interface enables flap creation with minimal pressure
Comfort	Pressure sensation on the eye Possible conjunctival hemorrhage (fully resolves on its own)	Maximum comfort without a pressure sensation on the eye Minimum stress and trauma to eye
Sight	Vision "blacks out" for several seconds	Visual sight maintained during entire procedure
Potential Flap Complications (*ie. unattached/partial flap, buttonhole*)	Greater variability due to corneal flattening and non-uniform flap thickness, especially with steeper corneal curvature	Less variability due to uniform flap thickness regardless of corneal curvature
Potential Higher-Order Aberrations (*ie. vision distortion*)	Greater variability due to non-uniform flap contour	Less variability due to uniform flap contour