EyePrintPRO™ Description

EyePrintPRO is a transparent prosthetic scleral device designed to match the exact contours of the individual eye providing the best vision and comfort possible.

There is no guessing with the EyePrintPRO.
What Makes EyePrintPRO So Different?

EyePrint Impression Process

- Takes only 2 minutes
  - 1 minute set up
  - About 1 minute on the eye
- Captures the precise curvatures of the entire ocular surface.
  - Impression material has 1-2 micron accuracy
- Comfortable and gentle
  - No anesthetic necessary
Unique Like a Finger Print

Gives more information than high tech computerized topographical scanners
Conventional Lens VS. EyePrintPRO
EyePrintPRO Indications

Optical Correction
- Keratoconus
- Pellucid marginal degeneration
- Post LASIK ectasia
- Post Radial Keratometry
- Corneal Transplants
- High Myopia / Hyperopia
- Aphakia

Ocular Protection
- Neurotrophic Keratitis
- Ocular Surface Disease (Dry Eye)
- Graft vs Host disease
- Steven Johnson Syndrome
- Ocular Cicatricial Pemphigoid
- Chemical Burns
- Stem Cell Failure

Ocular Comfort
- Pinguecula
- Pterygium
- Scarring
- Scleral Patch Grafts
- High Wind/Dust Environments
Good VS. Bad
EyePrintPRO Candidates

Good

- Any corneal or scleral irregularity
  - Patch Grafts
  - Pinguecula and Pterygium
  - Blebs
- Any eye desiring more stable optics

Bad

- Low endothelial cell counts
  - Less than 800
- Active infection or Inflammation
- Refusal to D/C lens wear for 48 hours
- Overhanging blebs
Device Design

Material

Contamac Optimum Extra

- Dk 100
- High Dk, wettable, stable

Optics

Exceptional Stability

- Spheres
- Torics
- Decentered Optics
- Multifocals
- Optical Prism (Any Direction)

To Come:

Higher Order Optics

Drill dots: 1 dot OD, 2 dots OS
Spheres and Torics

- Included in base cost of lens
- Over refract GP lens
- Order sphere lens if initial cylindrical over refraction is less than 0.75D
- Incorporate all toricity in final lens power order
  - Typically can get a more precise over refraction over the EyePrintPRO lens
  - Front surface toric
Decentered Optics

- Superimpose the line of sight with the optical center
- Improves visual acuity/performance
- Angle Kappa
Optics

Multifocal
- Back surface
- Multi-zone
- Aspheric
- Can do front surface toric and back surface multifocal
- Complete control of optic zone width and design

Info needed
- Add power
- Primary focal distance
  - Distance
  - Computer
  - Reading
- Angle Kappa
Optics

Prism

- Stabilized by the global toricity and irregularity of the eye
- Prism in ANY direction
- Limited to 4 PD per eye due to O2 transmission.
- Order total amount of vertical and horizontal.
- We will split between the eyes unless otherwise directed
Higher Order Aberrations

- Front surface correction
- Will correct total HOA of the ocular system
- Ideal for Keratoconus with clear cornea and back surface cornea bowing
- Caution with:
  - Cataracts
  - Corneal scarring
- On the horizon
Pinguecula

Peripheral Notching

Elevation Based
Pinguecula (continued)

Same patient from previous slide 2 years out
Post Limbal Melanoma Resection
Keratoconus/ Pellucid
Corneal Transplants
Patch Graft
Blebs - The Good
Blebs - The Good
Blebs - The Good

Note: No compression of bleb
Blebs - The Bad
Custom Peripheral Design

EyePrint Software Designed

OCT Evaluated
Predictable Central & Limbal Clearance

EyePrint Software Designed

OCT Verified
How the Device is Designed
Virtual Eye vs. “Real” Eye

EyePrint Software

OCT