

SynergEyes CLs Offer Benefits of Both GP and Soft Lenses

This new hybrid lens provides the comfort of a soft contact lens and the quality vision correction of a gas permeable lens.

By Gerry Navarrete, COMT

HOW do you offer the clear vision of a gas permeable (GP) material with the comfort of a soft contact lens? It's simple—combine them to create a hybrid lens to get the best of both worlds. The central GP portion addresses the need for higher definition optics, while the soft material provides the comfort and stability of a soft contact lens.

SynergEyes, Inc. recently developed two hybrid contact lenses—SynergEyes™ A and SynergEyes M—with additional hybrid products in the works. SynergEyes A is currently available and SynergEyes M will be marketed in early 2006.

HyperBond

The design of a soft lens skirt and GP center is not novel. Earlier designs failed due to easy separation at the junction between the soft and rigid materials. SynergEyes contact lenses have a high Dk GP rigid center with a soft/

rigid junction that is significantly stronger than its predecessors. This is due to the new proprietary HyperBond™ technology, which SynergEyes describes as a breakthrough in material science because of the strong link between the hydrophilic skirt and the rigid center.

Skirting Around

The rigid center of the SynergEyes lens is comprised of the highly permeable Paragon HDS 100® (145 Revised Fatt., ISO/ANSI 100). The bonded soft skirt is a Group 1 low-water nonionic material chosen for its low soiling characteristics and minimal environmentally induced dimensional instability.

SynergEyes lenses are manufactured with state-of-the-art “no-polish” lathing. Spherical, toric, multifocal, and rotationally non-symmetrical designs are generated for this hybrid platform. A number of skirt radii are avail-

able for a given base curve radius to accommodate the geometric diversity of a full range of corneal diameters.

Multiple skirt curves for a given base curve radius facilitate an optimum lens-eye relationship that surpasses previous hybrid lenses and GP lenses in general. Factors that affect skirt radii are the relationship between corneal curvature, corneal diameter, and the required base curve.

Full Distribution Platform

To ensure that most patients can wear SynergEyes, it will be offered in four designs. SynergEyes A and M recently earned FDA market clearance. The SynergEyes A lens is indicated for hyperopic, myopic, and astigmatic refractive errors. SynergEyes M is indicated for presbyopia with add requirements from +1.00D to +4.00D. SynergEyes KC and SynergEyes PS, awaiting FDA market clearance, are engineered for keratoconus and post surgical applications.

All four SynergEyes designs were developed for daily wear. The SynergEyes A and M lenses are indicated for corrections between +20.00D and -20.00D in eyes with astigmatism up to 6.00D and are available with two core skirt radii.

The high Dk rigid material makes up 8.4mm of the 14.5mm



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overall diameter, and the optic zone is 7.8mm. The multiple skirt radii choices are available for a given base curve to accommodate a full range of corneal diameters.

Lens Care

Care and handling of the lens is uncomplicated. Alcon, Inc.'s OPTI-FREE® EXPRESS® has been found to be particularly compatible with both the rigid and soft materials of SynergEyes lenses. Minimal rubbing will help to ensure the six-month replacement cycle.

The new hybrid lenses from SynergEyes should be a welcome addition to any contact lens practice to deliver the comfort of a soft lens with the crisp, clear vision of a gas permeable lens. ■

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where to find it

SynergEyes, Inc.
877-SEE-2012
synergeyes.com

The SynergEyes Platform

- SynergEyes™ KC (keratoconus)—for keratoconus with aspheric base curve radii from 5.70mm to 7.10mm, each with three skirt curve options.
- SynergEyes PS—for post radial keratotomies, photorefractive keratectomy, LASIK, over Intacs for keratoconus, penetrating keratoplasty, and mechanical trauma.
- SynergEyes W—for correction of residual higher order aberrations.
- SynergEyes MPC—patent-pending Therapeutic Aberration Structure™ for myopia progression control.