

# EVOLENCE Filler Combines Advantages of Collagen and Hyaluronic Acid

By Bob Kronemyer, Associate Editor

Physicians looking for a facial filler that offers the persistence of a hyaluronic acid based product, but with the placement flexibility and superior side effects profile of a collagen based product, need look no further than EVOLENCE® and EVOLENCE® Breeze™ from ColBar LifeScience Ltd. (Herzliya, Israel).

This third generation collagen filler is part of ColBar/OrthoNeutrogena's product line and has already been approved by the European Union region, Canada and South Korea. The first product, EVOLENCE, is designed to correct moderate-to-deep facial wrinkles and folds, while the softer version, EVOLENCE Breeze, is for fine-to-moderate wrinkles and lip enhancement.

Thanks to Glymatrix (glycation plus collagen matrix) technology, duration of effect is extended. The cross-linking of collagen bundles is accomplished with sugar molecules. In contrast, hyaluronic acid in the body has a brief biological life because it is not cross-linked.

Another advantage of EVOLENCE is that potential side effects in sensitive patients with allergies are avoided because of the absence of chemical additives and other allergy inducing components. By using only natural ingredients, EVOLENCE is biocompatible with the human body. The unique production process mimics the extracellular matrix of the skin: chemically, structurally and functionally.

"We believe FDA approval of EVOLENCE is just around the corner," said Z. Paul Lorenc, M.D., F.A.C.S., an aesthetic plastic surgeon in private practice in Manhattan, N.Y., who treated 21 patients as an investigator for a multi-site, clinical trial. "The filler shows wonderful persistence at 12 months. In addition, skin tests are not required. EVOLENCE basically replaces the collagen that we tend to lose as our face or skin ages."

A U.S. clinical trial compared EVOLENCE to the hyaluronic acid filler Restylane (Medicis, Scottsdale, Ariz.). One nasolabial fold of the patient was injected with EVOLENCE and the other nasolabial fold with Restylane. Patients scheduled one injection session, followed by one touch-up session if needed, two weeks later. "Results are immediate," Dr. Lorenc reported. "There is also less swelling than with some other fillers. Patients resume full activity right away." Adverse events like redness and bruising were all within the normal range of an injection of a dermal filler.



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Dr. Lorenc considers EVOLENCE a third generation collagen filler, preceded by a basic bovine collagen (Zyplast and Zyderm; Allergan, Irvine, Calif.) and a purified human based collagen usually derived from the foreskin of a penis (CosmoDerm and CosmoPlast, Allergan). "There is slight antibody elevation when injecting EVOLENCE without any relationship to clinical symptoms," Dr. Lorenc said. "The likelihood of an allergic reaction is close to zero."

Glymatrix technology "is a very clever way of binding these fibrils of collagen for longer duration," Dr. Lorenc explained. "The standard way of cross-linking molecules for hyaluronic acid or collagen has always been with chemicals, such as glutaraldehyde and butanediol diacrylate (BDDE). However, EVOLENCE represents the first time a sugar has been used to cross-link collagen, which mimics the cross-linking of collagen in our human body."

Dr. Lorenc believes it is critical that physicians learn how to inject EVOLENCE

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precisely, as technique varies among fillers. Compared to other collagen products, “I think you need to inject deeper – in the mid-dermis to achieve the optimal result,” he said. “I am also a big believer that after injection, you massage the injected area for an absolutely smooth result.”

Although the pending approval is for the nasolabial folds, EVOLENCE can be used off-label “for any depression or wrinkles,” Dr. Lorenc stated. Some physicians have had success using EVOLENCE Breeze for lip enhancement and contouring. Swelling and bruising are minimal when using EVOLENCE Breeze to redefine a lip contour. In nearly all cases, swelling disappears by the next day, compared to up to eight days with many other products. “EVOLENCE blows all of the other collagen based products out of the water, and the duration is certainly competitive to hyaluronic acid.”

Histology sections of injected EVOLENCE resemble the dermis, as opposed to hyaluronic acid implants that show large fragmented particles dispersed in the dermis. As a result, EVOLENCE allows penetration of fibroblasts, formation of vascular vessels and increased fibroblast production.

Some European doctors have observed corrections lasting up to 18 months with EVOLENCE. Such longevity also helps the patient financially due to less frequent treatment. Likewise, EVOLENCE does not require an allergy test before therapy, so it is more convenient for the patient to schedule.

Stacy Smith, M.D., a dermatologist in private practice in San Diego, Calif., also participated in the U.S. clinical trial of EVOLENCE. “This filler performed exactly as well as Restylane,” he said. Moreover, “Restylane performed better than first generation collagens in previous studies.”

After completing the American study of EVOLENCE, 145 patients were asked whether they preferred being injected with EVOLENCE or Restylane. “Approximately half of patients chose EVOLENCE,” Dr. Smith said. “EVOLENCE has a very natural feeling. It also has a natural color, unlike hyaluronic acid based products. Therefore, there is little chance of the Tyndall effect – concern of a bluish tinge.”



**Stacy Smith, M.D.**  
Dermatologist  
San Diego, CA

EVOLENCE requires a 27 gauge fine needle and “the needle is placed very similarly to the collagen products we are used to,” Dr. Smith noted. He also pointed out that EVOLENCE causes less frequent bruising than hyaluronic acid. “Collagen based products are hemostatic. They induce platelet aggregation.”

According to Dr. Smith, EVOLENCE offers the best features of both collagen and hyaluronic acid. “For instance, EVOLENCE has the placement capabilities and side effects profile of a collagen based product, but it does not require skin testing. Refrigeration is also not needed,” he said. “EVOLENCE also has the persistence of a hyaluronic acid based product. It seems to offer the best of both worlds.”

For the EVOLENCE trial, Dr. Smith’s center treated about 40 patients. “However, there is no reason to think that EVOLENCE cannot be used in conjunction with other therapies,” said Dr. Smith, who specializes in clinical research.