## Transdermal Delivery Device Shows Promising Results

## By Bob Kronemyer, Associate Editor

Ultrapeel<sup>®</sup> Transderm<sup>®</sup> Ionto System is the newest ionic drug solution transdermal delivery system to be used for medical purposes. Introduced earlier this year at the *American Academy of Dermatology* annual meeting in New Orleans, the Ultrapeel Transderm Ionto System uses a new proprietary technology called Dermoelectroporation<sup>®</sup> from Mattioli Engineering of Florence, Italy. Mattioli has been known as a leader in microdermabrasion for more than ten years.

**From a regulatory** standpoint, the Transderm Ionto is FDA cleared as "a powered drug delivery system that is indicated for the local administration of ionic drug solutions into the body for medical purposes and can be used as an alternative to injections."

Effectively infusing a local anesthesia product into the dermis prior to aesthetic procedures has never been easy, especially on some parts of the face and body. Traditional transdermal delivery techniques may take some time to deliver even low weighted molecules or unable to deliver high macro molecules.

**"With Transderm Ionto** we are able to achieve new ways of delivering topicals through the skin as never before," said Michael Gold, M.D., owner of Gold Skin Care Center in Nashville, Tenn. "For instance 2% lidocaine with 1:100.000 epinephrine is transdermally

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delivered in a few minutes and without any need for needles. This is an amazing achievement, especially for those patients afraid of needles. Further work with 20% 5-aminolevulinic acid (ALA) will hopefully show that the absorption of the 5-ALA can be enhanced, making photodynamic therapy for our patients even more effective. Transdermal delivery is already very common in Europe, and as the Europeans have proved, it has the ability to deliver unique molecules such as hyaluronic acid and other collagen derivates into the skin."

Mark Nestor, M.D., Ph.D., a clinical associated professor of dermatology at the University of Miami



Transderm Ionto System

School of Medicine in Florida recently completed a lidocaine study comparing transdermal delivery with Transderm Ionto versus topical ELA-Max cream for pain management when treating the abdomen with the ThermaCool TC System from Thermage, Inc. (Hayward, Calif.). "Overall patients experienced a statistically significant decrease in pain with Transderm Ionto compared to topical ELA-Max," reported Dr. Nestor, noting that ELA-Max was left on for at least one hour under occlusion. "I feel Transderm Ionto has a lot of promise. We're considering transdermal delivery of Levulan (DUSA Pharmaceuticals, Inc.) and other solutions."

**Dr. Nestor is** also impressed by the Ultrapeel<sup>®</sup> microdermabrader from Mattioli Engineering. "It seems to do a very nice job. We use it pre-Levulan PDT treatment, among other things."

"Ultrapeel® microdermabrasion is the quietest and gives the most control over skin depth. Also, my aestheticians like the Ultrapeel the best," said Mitchel Goldman, M.D., medical director at Dermatology/ Cosmetic Laser Associates of La Jolla, Calif. "In addition to this, it has worked flawlessly on a daily basis for almost two years now." We combine Ultrapeel microdermabrasion with Transderm Ionto to allow cosmeceutical products to penetrate into the skin without needles. These products are difficult to deliver in alternative ways versus needles. For patients that are afraid of needles, Transderm Ionto is the most effective alternative."