## For Skin Types IV-VI, Sculptra Just as Effective

BY BRUCE JANCIN

Maui, Hawaii — Injectable poly-L-lactic acid is at least as safe and effective in patients with darker skin as in those with Fitzpatrick skin types I-III, according to a multicenter postmarketing study.

The ongoing study also demonstrated that there were no sex differences in response to treatment. The study was mandated by the Food and Drug Administration as a condition of Sculptra's approval for correction of HIV-related facial lipoatrophy because the original clinical trials were heavily skewed toward white males, Dr. Douglas Mest explained at the annual Hawaii dermatology seminar sponsored by Skin Disease Education Foundation

"What I found most interesting [about the postmarketing study findings] was that there were no hypertrophic scars or keloids in any of the darker skin types. One of the questions about PLLA that people have had from the beginning was, 'Can you use it on darker skin types, or are patients going to produce too much collagen and have problems?' Interestingly enough, darker skin types had less problems than lighter skin types," observed Dr. Mest of a cosmetic medicine group practice in El Segundo, Calif.

He presented 1-year data from the ongoing 5-year open-label study of 290 patients who were treated with PLLA for HIV-related facial lipoatrophy. Unlike patients in prior studies, these participants were roughly equally divided between men and women, and Fitzgerald skin types I-III and types IV-VI.

None of the patients developed hypertrophic scars or keloids. Treatment-related adverse events occurred in 31% of Fitzpatrick type I-III women, compared with 17% of Fitzpatrick IV-VI women, and in 30% of Fitzpatrick I-III men, compared with 18% of Fitzpatrick IV-VI men.

Injection-site nodules occurred in 8.6% and 16.2% of Fitzpatrick I-III women and men, respectively, compared with 2.9%

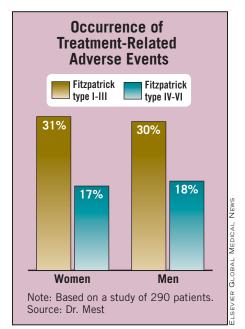
and 6.6% of Fitzpatrick IV-VI women and men, he continued.

At the 1-year visit, physicians rated their satisfaction with treatment efficacy as "very good" or "excellent" in 96% of cases, as did 90% of the patients themselves. Neither patient nor physician assessments varied significantly by patient gender or skin type.

Anecdotally, Dr. Mest said, he and other experienced Sculptra injectors have observed that darker-skinned patients form new collagen in response to PLLA much more quickly than light-skinned ones, whether the treatment was for HIV-related facial lipoatrophy or off label for cosmetic improvement. "They actually do very well with this product," he said.

Years 2-5 of the ongoing study are expected to provide important new information regarding the long-term efficacy, durability, and safety of injectable PLLA for this indication.

The postmarketing study was sponsored by Dermik Laboratories. Dr. Mest



serves as a consultant to the company.

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## Cryolipolysis on Track to Become First Cool Way to Remove Cellulite

BY BRUCE JANCIN

Maui, Hawaii — Noninvasive selective cooling of subcutaneous fat is a novel and particularly promising method of getting rid of love handles, back fat, and cellulite, according to Dr. Christopher B. Zachary.

The fat-freeze method, cryolipolysis, was developed by Dr. R. Rox Anderson and his colleagues at the Wellman Center for Photomedicine at Massachusetts General Hospital, Boston, and is being commercially developed by Zeltiq Aesthetics.

The project is being advanced with a level of scientific rigor and openness traditionally lacking in the field of excess fat removal, Dr. Zachary said at the annual Hawaii dermatology seminar sponsored by Skin Disease Education Foundation. Dr. Zachary isn't involved with the cryolipolysis project but is working on other next-generation, energy-based methods for removing subcutaneous fat.

Cryolipolysis crystallizes the lipids in fat cells when temperatures are above the freezing point of water. Dr. Anderson and his colleagues have developed a device for controlled energy extraction that's applied to the skin surface to accomplish this. The result is adipocyte death by apoptosis

without damage to surrounding nerves, vasculature, or the skin surface.

Histologic studies in both pigs and people have documented that a cryolipolysis session lasting 60 minutes or less results in a low-grade inflammatory process that continues for 3 months, during which fat cells are engulfed and digested by inflammatory cells and a dermal fibrotic response occurs.

Pig studies have document-ed—both by ultrasound and histology—a 40% reduction in subcutaneous fat layer thickness over 90 days in treated areas, which is a dramatic effect, not-ed Dr. Zachary, professor and chair of dermatology at the University of California, Irvine. He added that he found the procedure "totally convincing."

An ongoing, initial, multicenter cryolipolysis clinical trial has enlisted over 120 of a planned 240 dermatology and plastic surgery patients.

An initial subset of 32 patients with discrete love handles was treated with one-time conservative energy extraction (intensity ranging from -33 mW/cm² for 60 minutes to -72 mW/cm² for 45 minutes). At 4-month follow-up, 27 of the 32 patients (84%) demonstrated reproducible, visually-evident improvement of the treated area, compared with the untreated contralateral love handle. The study design eliminat-

ed diet or exercise as potential explanations for the change.

Ultrasound assessment documented a mean 22% reduction in the treated fat layer thickness, compared with baseline, with the shrinkage coming primarily from the suprafascial fat component.

A total of 30 of 32 patients (94%) indicated they felt no or minimal discomfort during and after the procedure. "It's not like you need anesthesia for this. People can be working on their computers or whatever," Dr. Zachary noted. The lipids in the destroyed fat cells are gradually resorbed. Importantly, serial blood lipid measures have shown no increase in lipid levels post treatment.

The investigators are cautiously introducing higher energy extraction parameters while expanding the trial to include participants with excess body fat at other locations, including the abdomen, back, thighs, and upper arms.

The duration of benefit from cryolipolysis, or any of the other emerging fat-removing technologies, remains to be seen. It may turn out that the treatments need to be repeated periodically, akin to a haircut, said Dr. Zachary. That would be fine as long as physicians and patients are informed, he added.

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## Second Botulinum Held Safe For Treating Glabellar Lines

BY MARY ANN MOON

A second botulinum toxin that is expected to reach the U.S. market soon was found to be safe and well tolerated in a large, open-label clinical trial.

Multiple cycles of botulinum toxin A (Reloxin, Ipsen) injections to minimize glabellar lines were well tolerated and did not cause concerns about cumulative safety in the study. Reloxin is used for this indication in 73 countries outside the United States, and has been under investigation within the U.S. since 2002.

Researchers conducted a phase III trial to evaluate the long-term safety of the treatment at 21 centers across the country. The study was funded by Medicis Pharma.

The trial involved 1,200 patients who had moderate to severe glabellar lines and who received up to five treatment cycles at intervals of 85 days or more. The median age was 48 years, and nearly all of the patients in the study were white women, said Dr. Ronald Moy of the Moy-Fincher Medical Group, Los Angeles, and his associates.

Adverse events that were considered to be treatment related developed in 36% of patients. In eight patients, these were deemed to be severe: one case of eyelid ptosis; one case of strep throat; three patients with

headaches; one patient with a sinus headache; one episode of dizziness; and one case of injection-site irritation.

A total of 45 patients had 55 cases of ptosis, out of 4,214 total treatments (1.3%). All but one case was considered mild or moderate.

One patient dropped out of the study because of an adverse reaction—dermatochalasia of the upper eyelid and an injection-site reaction.

The study patients frequently reported headaches and attributed them to the injections. Fifteen percent of patients reported headache, but only 11% of the headache events were deemed to be related to the treatment.

There was no evidence of tachyphylaxis, and no anti-Reloxin antibodies were detected in serum samples, the investigators noted (Arch. Facial Plast. Surg. 2009;11:77-83).

The incidence of treatment-related adverse events "decreased over time, showing no evidence of cumulative safety issues after more than 4,000 treatments," Dr. Moy and his colleagues noted.

"By every measure—investigators' and patients' assessments of glabellar lines at maximum frown, the onset of effect, and the duration of effect—Reloxin demonstrated an efficacy that did not diminish with repeated treatments," they wrote.