

## **Safety/Efficacy of New Topical Silicone Formulation with Selective Growth Factors for Treating Striae Distensae**

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### **Synopsis**

Striae distensae (SD) are linear dermal scars that arise from progressive stretching or tearing of the dermal layer. This study tests the safety and efficacy of a topical formulation of silicone-based scar cream containing selective synthetic recombinant human growth factors, hyaluronic acid, and vitamin C to improve overall appearance and texture of SD. Twenty-two subjects with SD alba were recruited and randomized to apply the topical formula to half of their SD laterally twice a day for 1 month. Patient surveys were obtained at 1 month for overall appearance, texture, and tolerability. Three-dimensional imaging was obtained at baseline and at 1 month and submitted to independent evaluators for grading on overall appearance. Subjects reported improved texture and appearance in 86.4% of SD. Subjects reported 100% of untreated SD to have no change in overall appearance or texture. 90.9% of subjects reported no tolerability issues. 9.1% of the treated group reported mild issues such as slight itching or redness the first day of application, which subsided in 2 days for all patients. Independent evaluators indicated improvement in 72.7% of SD in comparison to improvement in 36.3% of untreated SD. This study demonstrates that the investigated topical formulation is safe and effective to use for SD.

### **INTRODUCTION**

Striae distensae (SD), or stretch marks, are linear dermal scars that arise from progressive stretching or tearing of the dermal layer. They are a cosmetic concern to a significant part of the general population, occurring in 50–90% of the general population following rapid weight changes during adolescence, pregnancy, or with corticosteroid use (1–3). The commonly affected areas include the abdomen, outer thighs, buttocks, axilla, and breasts. SD progress through three stages. They first appear as red inflammatory, pruritic,