



AESTHETIC AND COSMETIC DERMATOLOGY (LASERS SEPARATE CATEGORY)

## **A PROSPECTIVE, RANDOMIZED, DOUBLE-BLIND, SPLIT-FACE, PLACEBO-CONTROLLED CLINICAL TRIAL EVALUATING THE EFFICACY AND SAFETY OF RED DEER UMBILICAL CORD EXTRACT CREAM IN REJUVENATING THE FACE**

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**Background:** Aging is a multifactorial process that involves all components of the skin. Both intrinsic and extrinsic forces play a role in this aging process. A new patented protein mix derived from red deer umbilical cord lining stem cell conditioned media (CALECIM® Multi Action Cream, CellResearch Corporation, Singapore) has been developed to improve the signs of aging. The extract is the conditioned media from Umbilical Cord Lining Mesenchymal Stem Cell culture in basal media and consists of a mixture, in specific proportions, of cytokines, growth factors, extracellular matrix proteins, amino acids, peptides, and other proteins. It has been developed to increase epidermal cell turnover and stimulate fibroblast function, reducing the appearance of pigmentation, fine lines, redness, and to restore skin elasticity.

**Objective:** The objective of this this prospective, randomized, double-blind, split-face, placebo-controlled clinical trial was to compare the efficacy of red deer mesenchymal stem cell extract (RCE) in a transepidermal vehicle versus vehicle alone for facial rejuvenation.

**Methods:** This was an IRB-approved, randomized, double blind, split-face, placebo-controlled clinical trial involving 40 healthy subjects with moderate to severe facial wrinkling secondary to photodamage. One half of the face was randomized to receive topical RCE cream and vehicle cream to the other half of the face. Treatment was continued for 3 months, and evaluations were performed in a double-blind fashion.

**Results:** Both sides of the face achieved significant improvement. Blinded investigator assessments did not detect any statistically significant differences between the two halves of the face in terms of efficacy, safety, or tolerability. Subject evaluations demonstrated superiority of the active treatment side.

**Conclusion:** Red deer cord lining mesenchymal stem cell extract is effective in rejuvenating the aging face as demonstrated by investigator and subject measures.

