15998

Effects of a topical cosmetic growth factor serum in postmenopausal subjects with moderate to severe facial photodamage

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Menopause, defined by the cessation of menses, is associated with hormonal alterations including decreased estrogen production. Because the skin contains numerous estrogen receptors, these hormonal changes can significantly affect the skin, including diminished collagen levels, turnover and synthesis. Visible manifestations of menopause-related skin changes may include dryness, lines/wrinkles and sagging. Limited studies have been conducted using topical cosmetic products on the postmenopausal patient population. Recently, a novel topical growth factor serum (test product) derived from neonatal human fibroblasts cultured under hypoxic conditions was clinically-proven to improve the appearance of moderate to severe facial photodamage. To explore the effects of the test product in postmenopausal subjects, a 12-week clinical study was conducted. 15 postmenopausal female subjects aged 46-65 years with Fitzpatrick skin types I-III and presenting with moderate to severe facial photodamage, completed the study. Subjects applied the test product twice daily, morning and evening for 12 weeks. Visits occurred at baseline, week 6 and week 12 and included investigator assessments, questionnaires and standardized photography. Significant improvements in investigator assessments for overall photodamage, skin tone evenness, perioral fine lines/wrinkles, periocular and cheeks coarse lines/wrinkles and tactile roughness were observed at all follow-up visits (all $P \leq .02$; paired t test). At week 12, significant improvements were also observed for periocular, forehead and cheeks fine lines/wrinkles and perioral coarse lines/wrinkles (all $P \leq .04$; paired t test). Study results suggest that the test product may help improve the appearance of facial skin quality in postmenopausal subjects. However additional studies in this unique population are needed.

Commercial disclosure: 100% paid by Allergan.

16002

Clinical efficacy of a novel topical treatment for periocular dark circles

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Periocular dark circles are a challenging esthetic concern for patients owing to its complex multifactorial etiology. Dark circles can be caused by excess melanin deposition, shadow effects, increased vascularization and age-related structural changes. Treatment options are limited. A randomized, double-blind, split-face, vehicle-controlled study was conducted to assess efficacy and tolerability of a novel eye brightening cream (EBC) over 12 weeks. 41 female subjects aged 30-64, with Fitzpatrick skin types I-V and mild to moderate dark undereye circles completed the study. Subjects were randomized to apply EBC to their left or right eye area and the vehicle control (Control) to their other eye area twice daily. Investigator grading, photography, image analysis and questionnaires occurred at all study visits: baseline, baseline post-application (product left on the skin) and weeks 4, 8, and 12 (no product on the skin). EBC demonstrated significant improvements over Control in the appearance of dark circles in both the undereye and upper eyelid areas at all follow-up visits (all $P \leq .01$; Wilcoxon signed-rank test); in puffiness at post-application, week 4, and week 8 (all $P \leq .05$; Wilcoxon signed-rank test); and reached near significance over vehicle control at week 12 ($P = .056$; Wilcoxon signed-rank test). EBC provided significant improvements in dark circles, fine/-coarse wrinkles, crepiness, droopiness, and puffiness vs baseline (all $P \leq .02$; Wilcoxon signed-rank test). Study results support how EBC can help improve the appearance of periocular dark circles and other eye area esthetic concerns. The study is among the first to demonstrate efficacy over vehicle control in addressing periocular dark circles.

Commercial disclosure: 100% paid by Allergan.

16004

Meta-analysis of platelet-rich plasma for androgenetic alopecia

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Background: Platelet-rich plasma (PRP) therapy is a non-surgical treatment option with a desirable safety profile which has been suggested for androgenetic alopecia (AGA). It is currently used off-label as monotherapy or adjunct therapy.

Objective: To investigate the efficacy of PRP treatment for AGA.

Methods: A literature search and meta-analysis was conducted using RevMan 5.3 (Copenhagen, Denmark) to compare the published results of PRP treatment (injections) with baseline or control treatment. Internal controls were used, consisting of an untreated or placebo-treated patch or portion of the scalp on the same patients who received PRP in a different area of the scalp. Efficacy was measured by improvements in hair density and hair thickness.

Results: Using hair density as a measure of efficacy, the standardized mean difference (SMD) was 0.61 (95% CI 0.41, 0.81) in favor of PRP treatment over baseline (12 studies, pooled n = 212, $P < .00001$). Likewise comparing PRP treatment with control treatment (placebo or untreated) also favored PRR treatment with an SMD of 0.48 (95% CI 0.15, 0.80, $P = .004$) including 5 trials (pooled n = 76). In addition, when investigating hair thickness, the SMD was 1.47 (95% CI 0.67, 2.26) in favor of PRP treatment (6 studies, pooled n = 96, $P = .0003$, $I^2 = 80\%$).

Conclusions: Meta-analysis of the literature suggests that PRP can be used to increase both hair density and hair thickness in AGA patients although randomized controlled trials are still required.

Commercial disclosure: None identified.

16006

Protection and rejuvenation against skin damage in a highly air polluted area from a novel antioxidant dual serum system: A randomized, regimen-controlled study in Beijing, China

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Background: Environmental effects such as air pollution have been increasingly linked to the aged appearance of the skin. Exposure to air pollution has been shown to increase pro-inflammatory mediators and induce gene expression related to dark spot and wrinkle formation. A novel antioxidant dual serum system (LVS), consisting of a DAY serum (LVD) and a NIGHT serum (LVN), was developed based on circadian rhythm of the skin to provide protective and reparative effects against environmental damage by combining a unique blend of antioxidants and peptides. A 12-week, randomized, regimen-controlled clinical study was conducted to assess the effects of LVS on subjects who were occupationally exposed to an excessively high concentration of air pollution. 105 female Chinese subjects aged 33-60 years completed the 12-week study (Active = 52, Control = 53). Active subjects received LVS and basic moisturizer, and Control only received the basic moisturizer. At all visits (baseline, days 28, 56 and 84), objective instrumentation measuring skin color, wrinkles, moisture loss, elasticity, sebum, pH, and hydration were taken from the facial skin. Despite high levels of air pollution during the study, significant improvements over control were observed for both skin brightness (L*) and redness (a*) at all follow-up visits (all $P < .03$; Independent-sample t test). Active group also showed significant improvements at all follow-up visits in skin hydration, elasticity, moisture loss and skin wrinkles compared with baseline (all $P < .05$; paired t test).

Results: from this study suggest that LVS may provide protection and rejuvenation effects to skin exposed to air pollution.

Commercial disclosure: 100% paid by Allergan.