

Myrtus Communis Extract Enhances The Tolerability And Efficacy of High-Retinol Facial Moisturizer

P819

Sidney B. Hornby, M.S.^a • James J. Leyden, M.D.^c • Samantha Samaras-Tucker, Ph.D.^b • Yohini Appa, Ph.D.^a

^aNeutrogena Corporation, Los Angeles, CA USA • ^bJohnson & Johnson Consumer Companies, Inc. Skillman, NJ, USA • ^cKGL Skin Study Center, Philadelphia, PA

INTRODUCTION

Facial moisturizers, featuring retinol, have been the gold standard for improving the signs of photodamage on skin. However, high-retinol facial moisturizers, may induce transient intolerance reactions, therefore, delivering superior or rapid clinical efficacy through increasing the level in the product is difficult. Elsewhere, we have presented studies showing that water-soluble extract of *Myrtus communis* leaf was able to significantly enhance the expression level of genes specific for retinoid activity in an *ex-vivo* model and show significant benefit on the signs of photoaging.¹ We have developed a retinol facial moisturizer incorporating the extract of *Myrtus communis* leaf and evaluated its efficacy compared to a department store benchmark in this 8-week, double-blind, clinical study.

We have also performed a retrospective comparison of the clinical improvement observed in this study with that observed by the same investigator on a currently marketed comparable retinol formulation.

Reference

1. Thierry Oddos, Christiane Bertin, Valeris Bruere; Linda Fournier, Sebastien Saclier, Anti-wrinkle activity of retinol is enhanced by a *Myrtus communis* extract, Poster Presentation, 69th Annual meeting of the Academy of Dermatology, February 2011.

STUDY DESIGN

- Double-blind clinical study, with treatments once daily
- Approximately 80 females between the ages 40–69 years old with moderate-to-severe (4–9 on a 0–9 scale, where 0 = none, and 9 = severe) for overall facial photoaging and the following parameters:
 - a. Facial fine lines/wrinkles
 - b. Skin laxity
 - c. Facial coarse wrinkling
- Investigator assessment at baseline, and weeks 1, 4, and 8
- Subject assessment of tolerability at weeks 1, 4 and 8
- Clinical imaging
- Retrospective comparison to previous clinical data

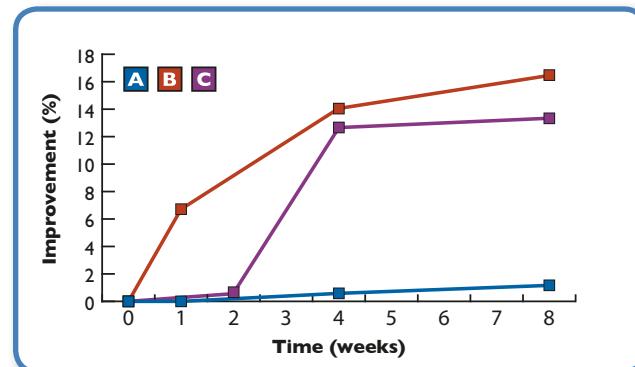
Test Products

- A** Benchmark department store anti-wrinkle serum
- B** Retinol/*Myrtus communis* leaf extract anti-wrinkle treatment
- C** Retinol anti-wrinkle treatment

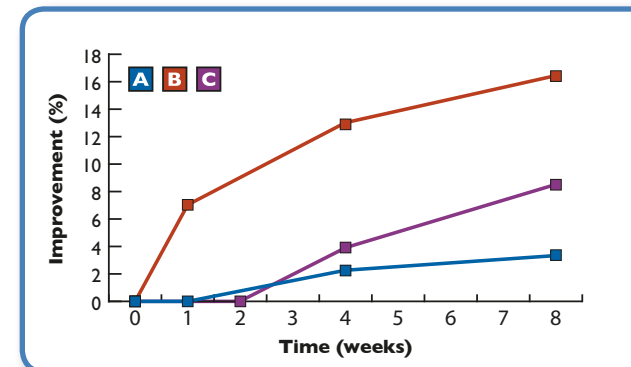
RESULTS

The high-retinol facial moisturizer with *Myrtus communis* leaf extract delivered rapid and significant improvements in fine lines and coarse wrinkling.

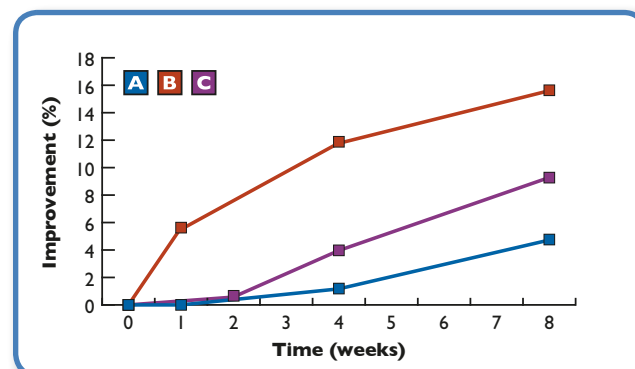
The high-retinol/*Myrtus Communis* leaf extract moisturizer provided effective minimization of wrinkles and fine lines as compared to department store benchmark. The rate of wrinkle reduction appears to be more rapid than that observed for the comparable retinol formulation.



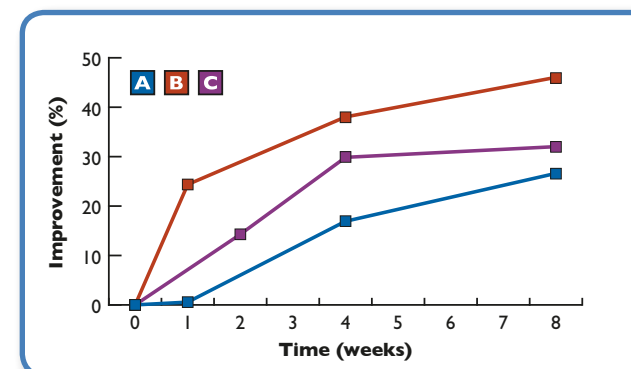
Rate of improvement in coarse cheek wrinkles.



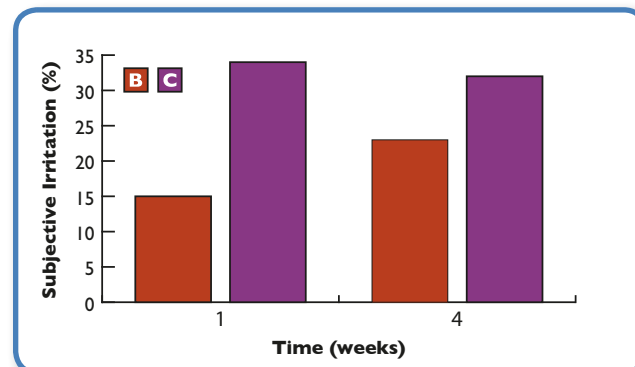
Rate of improvement in coarse forehead wrinkles.



Rate of improvement in coarse under-eye wrinkling.



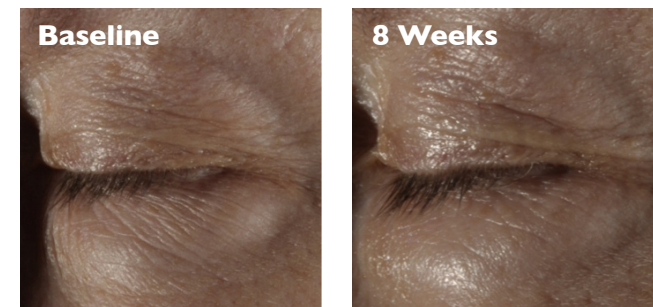
Rate of improvement in fine wrinkling.



There was little to no clinical irritation observed during the study (data not shown). Transient sensory irritation (subjects responding positively to the question, “did you experience irritation”) was about half that observed for the comparable commercial formulation after 1 week of treatment. At 4 weeks the levels continue to be substantially lower.



Unaltered digital imaging shows marked visible improvement in wrinkling and skin texture on Subject 56



Unaltered digital imaging shows visible improvement in wrinkling and skin texture on Subject 56.

CONCLUSIONS

- The high-retinol facial moisturizer with *Myrtus communis* leaf extract provided significant and rapid improvements in skin photodamage and wrinkling as demonstrated by objective clinical assessments.
- The high-retinol facial moisturizer with *Myrtus Communis* leaf extract was better tolerated relative to the comparable retinol formulation