

CASE STUDY

Evaluating a Novel Retinol Serum Using the DermaLab Ultrasound Probe

Objective ultrasound evaluation of collagen density following topical retinol-serum treatment of photoaged facial skin



CASE STUDY

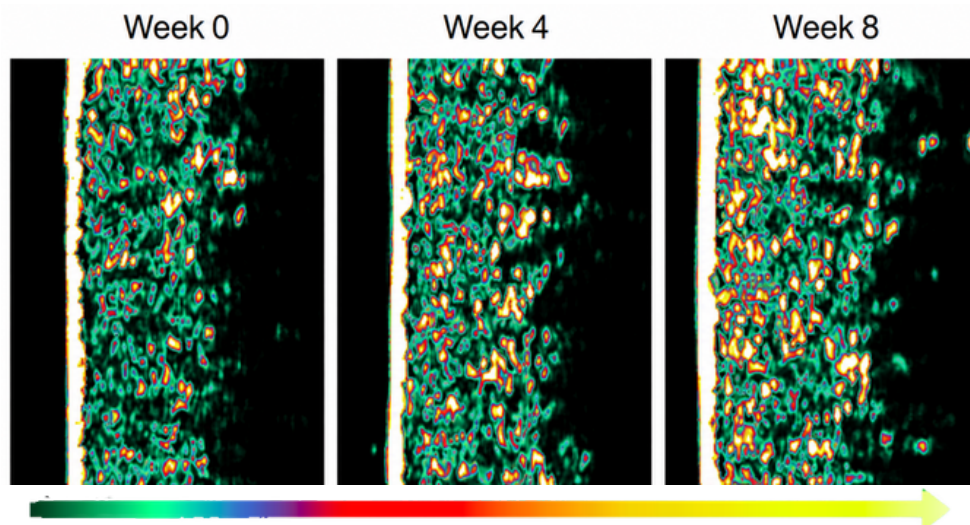


SOLUTION & METHOD

31 women with mild photoaging were enrolled in the study and instructed to apply the retinol serum to the face twice daily for 8 weeks.

DermaLab Ultrasound measurements were performed before first application (Week 0), at Week 4, and at Week 8.

ULTRASOUND RESULTS



Ultrasound images before serum study start (Week 0) and during study period (Week 4 and 8). The increasing white/yellow coloration reflects a progressive increase in collagen deposition within the dermis.

Reference: Figure lent from Shen et al.: "An Innovative Serum With Retinol, Hydroxypinacolone Retinoate, Peptides, and Silybin Improves Mild Photoaged Facial Skin in Middle-Aged Chinese Women", Journal of Cosmetic Dermatology, Vol. 25(1) e70627 (2025), Figure 6.



RESULTS AND CONCLUSIONS

Collagen density **improved with 33.1%** after 8 weeks of treatment, indicating enhanced structural integrity of the dermis.

The results suggest that the retinol serum provides a rejuvenating effect on photoaged skin.

MEASUREMENT AREA



Cheeks



Case information

Study title: An Innovative Serum With Retinol, Hydroxypinacolone Retinoate, Peptides, and Silybin Improves Mild Photoaged Facial Skin in Middle-Aged Chinese Women

Published in: Journal of Cosmetic Dermatology, Vol. 25(1) e70627, (2025)

Authors: Shen et al.

Aim: To evaluate the efficacy of a novel serum containing retinol, hydroxypinacolone retinoate, peptides, and silybin.

Please note: Measurements were performed using the DermaLab Combo; alternatively, collagen density measurements may be obtained and visualized using the DermaLab Aesthetic.

