

From retinol serums to glycolic acid peels and even **bee venom** — which antiaging ingredients have real evidence behind them? A clinical breakdown of **4 trending treatments** to help counsel patients with confidence at the point of care.

EVIDENCE BY TREATMENT

Topical Vitamin A & Retinoids GOLD STANDARD

Rx tretinoin is FDA-approved for fine wrinkles, hyperpigmentation & skin roughness. **OTC retinol (0.04%–0.5%)** improves wrinkles, pigmentation & elasticity with consistent use. Combination products (retinol + niacinamide or resveratrol) show modest improvements in tone, texture & wrinkling.

 **KEY BENEFITS**

Wrinkles, hyperpigmentation, skin roughness

 **FORMS**

Rx tretinoin or OTC retinol cream/lotion (0.04%–0.5%)

 Causes irritation, dryness & photosensitivity. Apply at night on dry skin; layer moisturizer after. Start low, build slowly. **Daily SPF is essential.**

Glycolic Acid (AHA) GOOD EVIDENCE

Alpha hydroxy acid reduces fine wrinkles & photoaging. Products include **peels (20%–70%)** used every 2–4 weeks over 3–4 months; or **creams/lotions (8%–25%)** applied 1–2x daily. Peels appear less effective than OTC retinol for texture. Most studies were small and unblinded.

 **KEY BENEFITS**

Wrinkles, texture & photodamage

 **HIGH CONC. RISK**

Bleeding, blistering, burns — start low (≤10%)

 All concentrations increase sun sensitivity. Avoid stacking with retinoids without guidance — irritation compounds and skin barrier can be compromised. **Daily SPF required.**

DHEA (Dehydroepiandrosterone) SOME PROMISE

DHEA is an adrenal hormone — precursor to estrogen & testosterone. DHEA levels naturally decline with age. Some research shows improvement in epidermal thickness, skin hydration & facial pigmentation in **elderly & postmenopausal patients** vs. baseline (no comparator group).

 **ORAL DOSE**

50 mg/day

 **TOPICAL DOSE**

1%–10% cream; safely used up to 12 months

 Avoid in hormone-sensitive cancers (breast, uterine, prostate), endometriosis & uterine fibroids. Androgenic side effects (dose-dependent): acne, oily skin, hirsutism.

Bee Venom (Topical) HYPE > EVIDENCE

Trending but only studied **in combination** with manuka honey, royal jelly & botanical extracts — independent efficacy is unknown. One small study showed improved self-reported skin appearance (elasticity, fine lines, overall appearance), but **objective measures (moisture, pigmentation, texture) were inconsistent.**

 **EVIDENCE QUALITY**

Small study; no control group; combo products only

 **SAFETY DATA**

Minimal — injections can cause anaphylaxis & immune effects

QUICK EVIDENCE SUMMARY

TREATMENT	CLINICAL EVIDENCE SNAPSHOT	RATING
Vitamin A / Retinoids	Rx tretinoin FDA-approved; OTC retinol supported by small studies — best overall evidence for aging skin among the four	★★★★★
Glycolic Acid	Well-studied for wrinkles & photodamage; efficacy & safety are concentration-dependent; studies are small/unblinded	★★★★
DHEA	Some promise in elderly/postmenopausal patients vs. baseline only; long-term oral use raises cancer risk concerns	★★★
Bee Venom	Very limited; no control group; combo-only; objective outcomes inconsistent; safety data lacking — likely hype	★

CLINICAL COUNSELING PEARLS

-  **First-line:** Recommend vitamin A (retinol/tretinoin) or glycolic acid — strongest clinical evidence for antiaging.
-  **DHEA precautions:** Avoid in hormone-sensitive conditions; screen for cancer history before recommending.
-  **Ask patients about:** Concurrent meds, skin conditions, photosensitizing products & history of cancer.

KEY TAKEAWAYS FOR PATIENTS

-  **Sunscreen is non-negotiable** — It's foundational to slow photoaging PLUS most anti-aging treatments increase sun sensitivity.
-  **Start low, go slow** — build tolerance to retinoids or glycolic acid; results require months of consistent use.
-  **More expensive ≠ more effective** — proven ingredients outperform exotic trends every time.
-  **60+ ingredients** fall into "insufficient evidence" — help patients focus on what data actually supports.