

Clinical Benefits of Adjunctive Periocular Skincare in Dry Eye Patients

A Retrospective Analysis of Periocular Erythema, MGD, Tear Film Stability, Symptom Burden & Patient-Reported Outcomes

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BACKGROUND

The Overlooked Interface: Periocular Skin & Ocular Surface

- Thin, fragile eyelid skin
Eyelid skin is <1 mm thick with a weaker barrier and fewer sebaceous glands — prone to dehydration and cosmetic-related damage.¹
- Cosmetics & MUR migrate onto the ocular surface
Eye cosmetics and make-up remover (MUR) residue migrate onto the tear film and ocular surface, where they can disrupt the lipid layer and trigger inflammation.^{2,3}
- Cosmetics exacerbate DED
71.6% DED prevalence among cosmetic users vs 32.1% in the general population; eye-makeup users have a 2.2× higher dry-eye risk.⁴
- Preservative-containing MUR are cytotoxic
BAK- and PHMB-containing MUR show significant corneal-epithelial cytotoxicity in live/dead cell models, while preservative-free MUR maintains viability comparable to saline.⁵
- Gap in standard DED care
Periocular skin health and safe make-up removal are routinely overlooked in DED regimens despite being daily contact points with the ocular surface.⁶

PURPOSE

Primary: To evaluate periocular erythema, MGD grading, TBUT, and SPEED scores in DED patients treated with a comprehensive regimen including Optase Life as adjunctive periocular skincare.

Secondary: To describe tolerability and patient-reported periocular comfort, hydration, and satisfaction outcomes.

METHODS

27

Female DED patients

53

Mean age (years)

28

Days follow-up

Study Design

- Retrospective chart review, single optometric practice
- All patients: diagnosed DED + MGD, eye-cosmetic users
- Assessments at baseline and Day 28

Adjunctive Periocular Skincare (Optase Life)

- Sensitive Eye Make-Up Remover (preservative-free, ionised-water-based)
- Sensitive Eye Daily Renewal Cream (preservative-free, barrier-supportive)

Concomitant DED Therapies (as indicated)

IPL, cyclosporine, perfluorohexyloctane, artificial tears, warm compresses, hypochlorous-acid spray, omega-3 supplements.

Endpoints

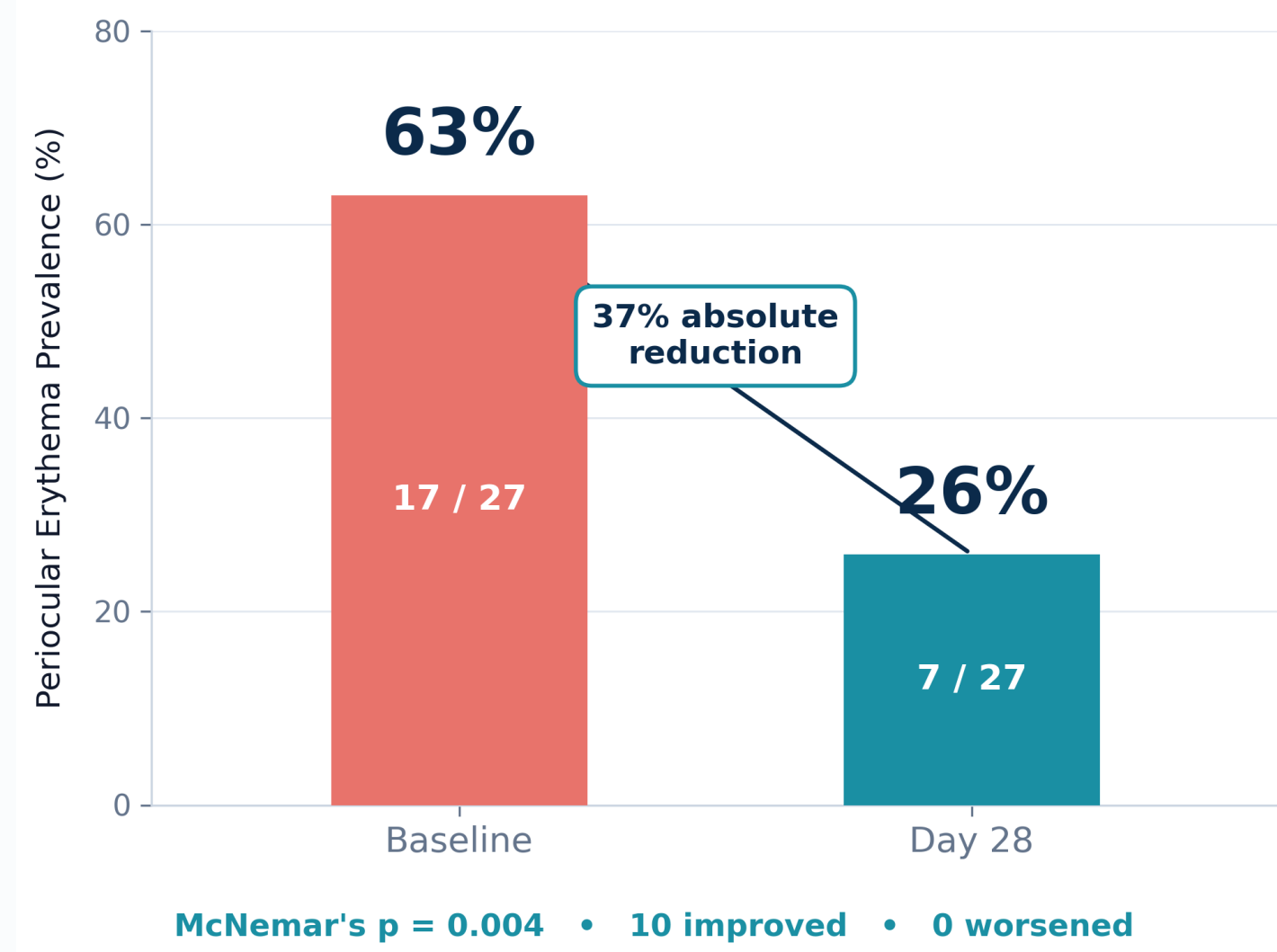
Skincare-related: Periocular erythema (clinical grade), tolerability, patient-reported outcomes.

Full regimen: TBUT (sec), MGD grade, SPEED score, corneal/conjunctival staining, visual acuity.

RESULTS — CLINICAL OUTCOMES

✓ PRIMARY ENDPOINT • p = 0.004

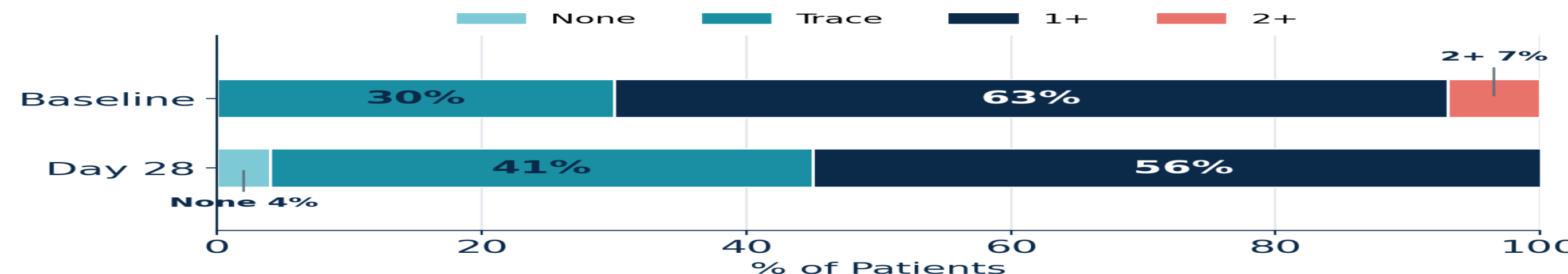
Periocular Erythema: Significant Reduction



63% → 26% prevalence • 37% absolute reduction • 10 improved, 0 worsened

✓ SIGNIFICANT • p = 0.020

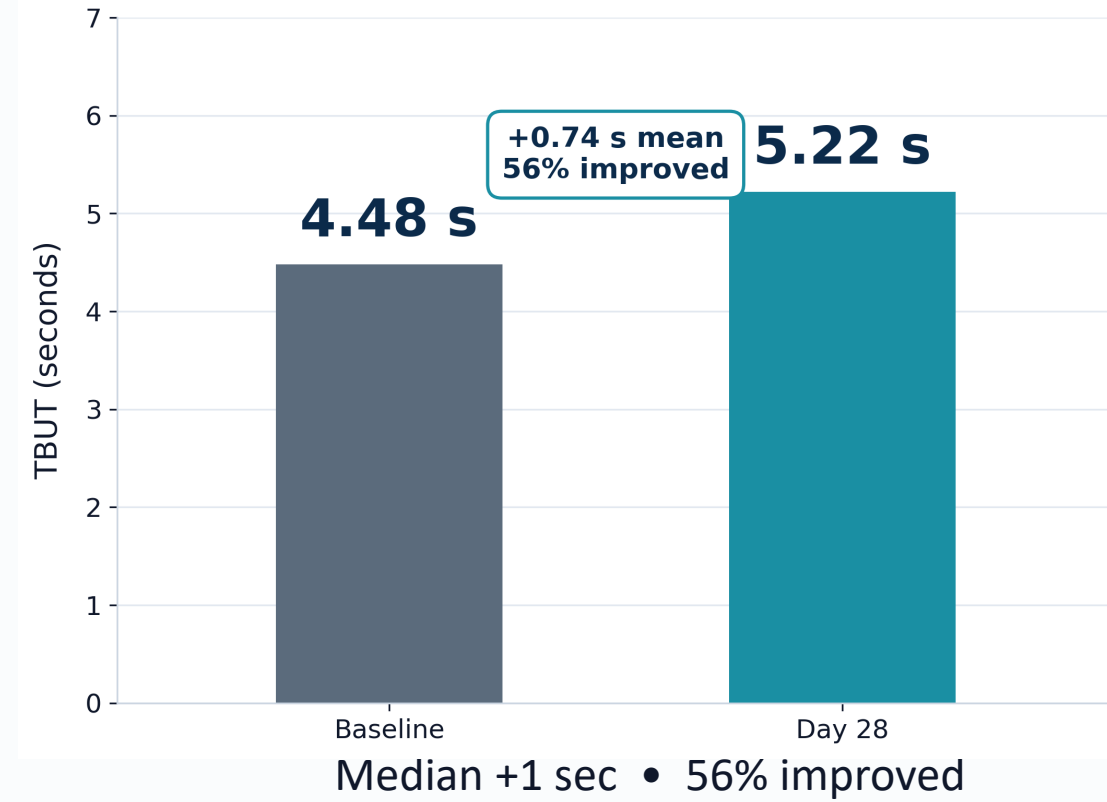
Meibomian Gland Dysfunction Grading



30% Improved (4/27)

Tear Break-Up Time (TBUT)

p = 0.180 (not significant)



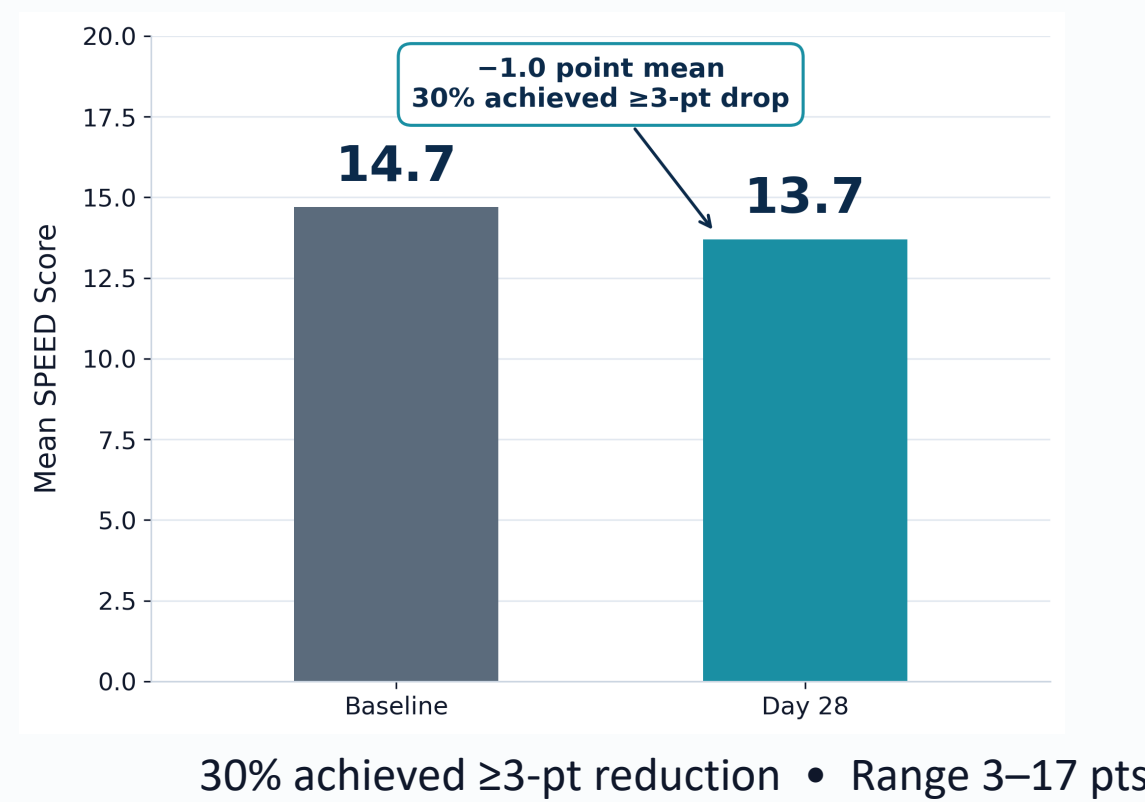
Additional Clinical Findings

40% Corneal / Conjunctival staining improved among patients with evaluable baseline staining (6/15)

0 Serious Adverse Events

SPEED Symptom Score

p = 0.313 (not significant)



RESULTS — PATIENT EXPERIENCE

96%

Non-irritating

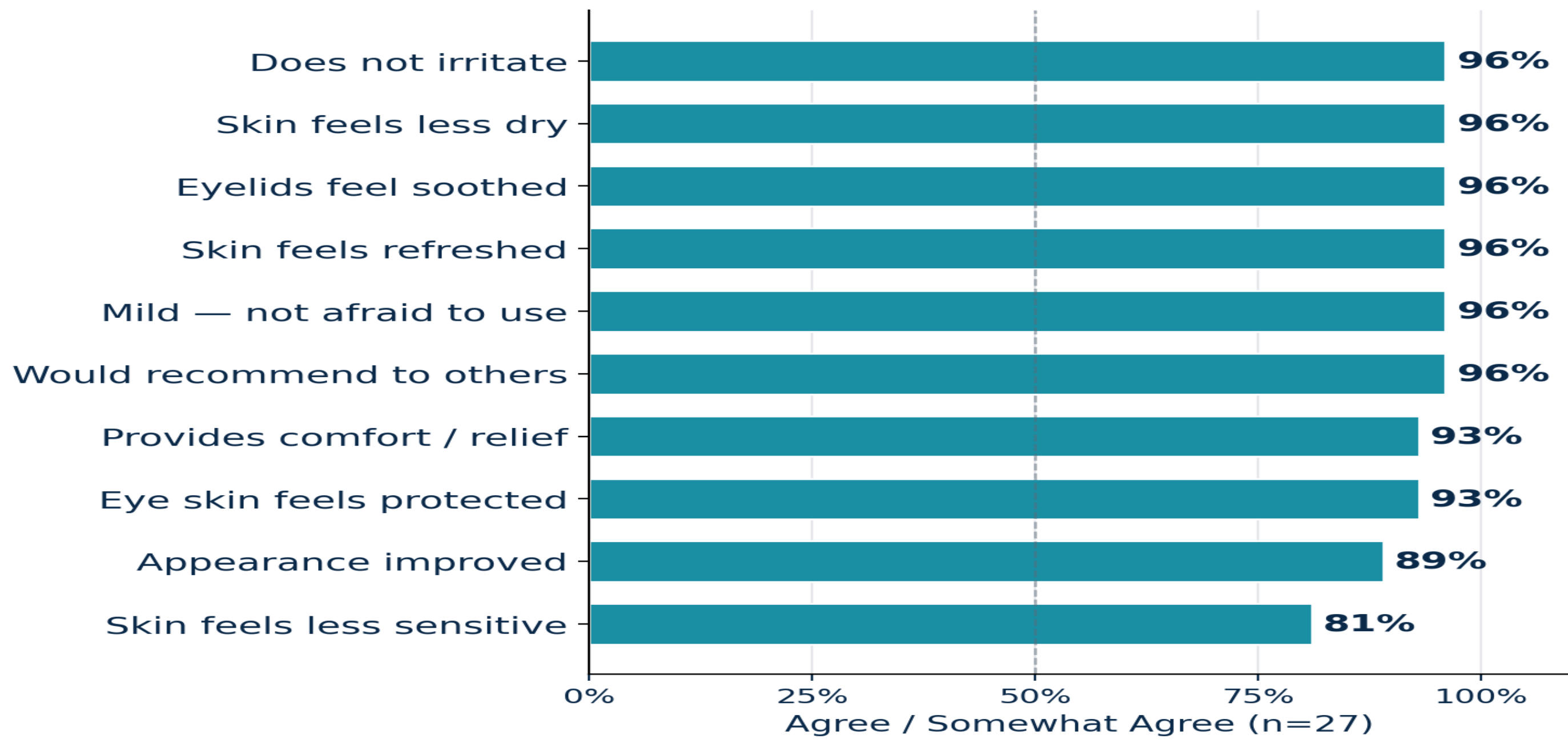
93%

Continue use

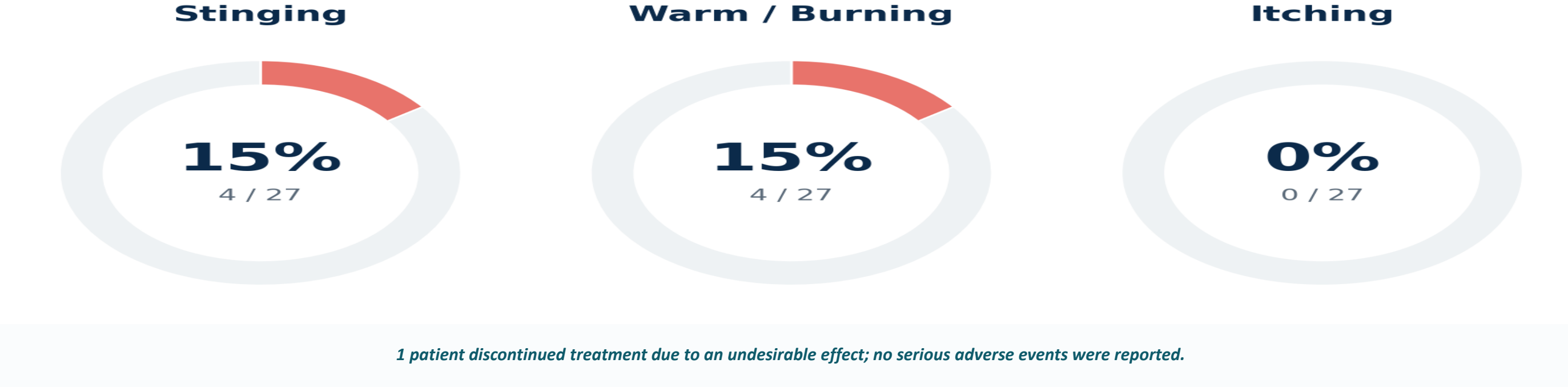
70%

Preferred vs prior

Patient-Reported Satisfaction (n = 27)



Local Tolerability



1 patient discontinued treatment due to an undesirable effect; no serious adverse events were reported.

In Patients' Own Words

- "No irritation and they work well"
- "I liked that the products felt smooth and they were non-irritating."
- "Eye make-up remover is a game-changer — cleans so thoroughly without stinging."
- "Eye cream made my eyes feel better, more hydrated"
- "Eye makeup remover removed makeup quickly eye cream had a nice, soothing feel"
- "Great eye makeup remover, did not have to scrub eyes to remove makeup"

CONCLUSIONS • CLINICAL IMPLICATIONS • STUDY LIMITATIONS

KEY TAKEAWAYS

- Statistically significant reduction in **periocular erythema** (63% → 26%, p=0.004) over ~28 days.
- Statistically significant improvement in **MGD grading** (p=0.020); 30% improved.
- Positive numerical trends in **TBUT and SPEED** scores; 40% of patients with baseline corneal staining improved.
- Excellent tolerability and high patient satisfaction (**81–96% across 10 items**); 93% wish to continue use.

CLINICAL IMPLICATIONS

- Ask cosmetic-using DED patients about make-up removal practices and periocular skin symptoms during routine assessment.
- Consider gentle, preservative-free periocular skincare as an adjunct to standard DED therapy for patients with lid erythema and MGD.
- Adjunctive periocular skincare may address commonly overlooked eyelid and periocular complaints without compromising existing DED treatments.

STUDY LIMITATIONS & FUTURE DIRECTIONS

- Retrospective, single-centre design with a small cohort (n=27, all female) limits generalisability.
- No control arm and multimodal concomitant therapies limit attribution of effects to any single product.
- Prospective, randomised, controlled studies with longer follow-up and standardised patient-reported outcome measures are warranted to confirm the contribution of adjunctive periocular skincare to overall DED management.