

# Clinical Evaluation of the Safety and Efficacy of an Eyelash Enhancing Serum Containing a Proprietary Lipid Core Technology in Improving Upper Eyelash Prominence Across All Fitzpatrick Skin Types

Yamalia Cates<sup>1</sup> • Sidney Hornby<sup>2</sup> • Neftali Donis<sup>1</sup> • Laurence Dryer, PhD<sup>1</sup> • Deborah Sherman, MD<sup>3</sup>

1. Obagi Cosmeceuticals LLC • 2. Sidney Hornby Consulting LLC • 3. Sherman Aesthetic Center, Ophthalmic Plastic Surgery/Oculofacial Plastic Surgery

## Introduction

Aging is accompanied by a reduction in the overall quantity and quality of hair. Additional factors such as harsh environmental conditions, dietary issues, or aggressive hair treatments contribute to a decrease in hair water content, leading to luster and volume loss. The lash aging process is no different: with time a slower lash follicle produces fewer hair of lesser quality, color depth and volume. Aggravating factors such as hormones or stress contribute to further degradation. The lash life cycle is divided into three phases: the anagen phase lasts an average of 1–2 months and is the only phase during which the lash undergoes melanogenesis and keratinocyte proliferation. Anagen duration is proportional to lash length. This is followed by a short (averaging 15 days) catagen phase, during which lash cells undergo programmed cell death and regression takes place. The final phase, Telogen, or resting phase, lasts 4–9 months and is characterized by lack of activity. This study examined the clinical efficacy of a lash serum containing a proprietary lipid technology on 27 female participants aged 35–65 with minimal to moderate eyelash prominence and Fitzpatrick skin type I–VI. This 16-week study was double-blinded and benchmark-controlled with a leading competitor. Clinical grading and image analysis showed that the lash serum improved lash volume, prominence, and definition. Efficacy was subject-perceivable and positively impacted psycho-social measures of confidence as measured by Quality-of-life (QoL) probing. Magnitude and Incidence of efficacy were superior to those of the benchmark at all timepoints after week 4. The data is consistent with a mechanism of action involving extension of the anagen phase resulting in a progressive improvement in lash appearance over 16 weeks.

## Clinical Study Design

**Subjects:** 57 female participants ages of 35 to 65 years (inclusive), Fitzpatrick Skin Type I–VI, who were dissatisfied with their eyelashes

**Study Type:** Double blinded, 16-week clinical study with nightly use of eyelash serum on the upper lashes only in place of current lash serum and/or false lashes.

**Evaluations:** Product benefit was measured by the following method at week 0 (baseline), weeks 8, 12 and 16:

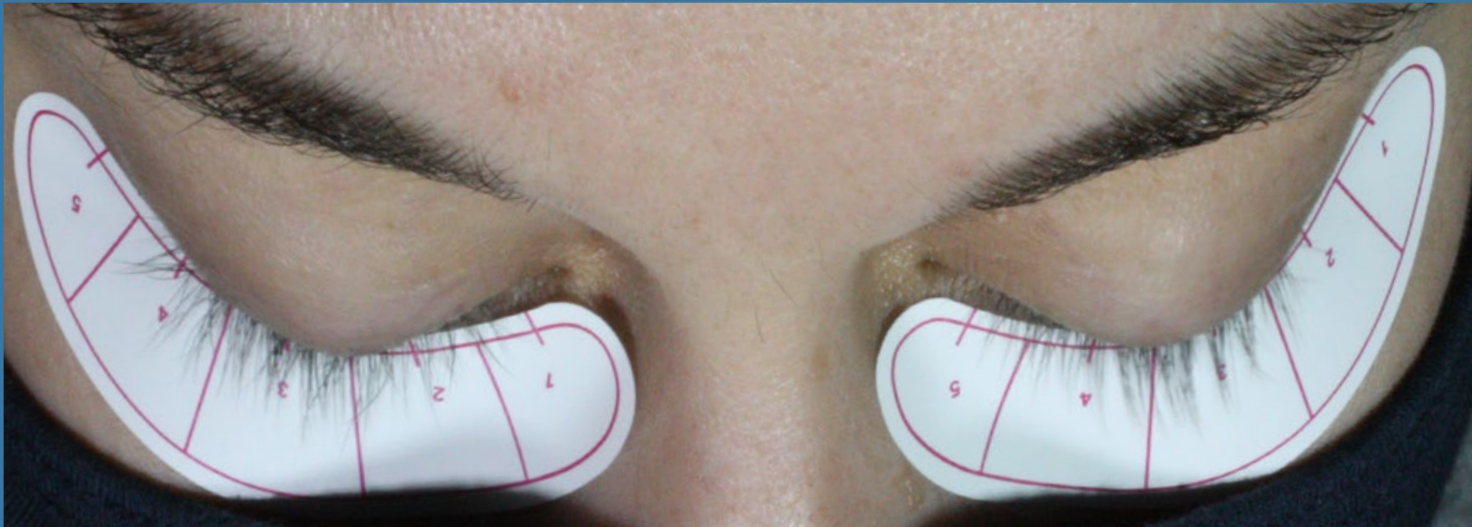
- Clinical grading of eyelash condition on 4-point scale

Global eyelash score with Clinical Grading	Description of eyelash prominence
1	Minimal, sparse, or even no lashes
2	Moderate
3	Marked
4	Very marked

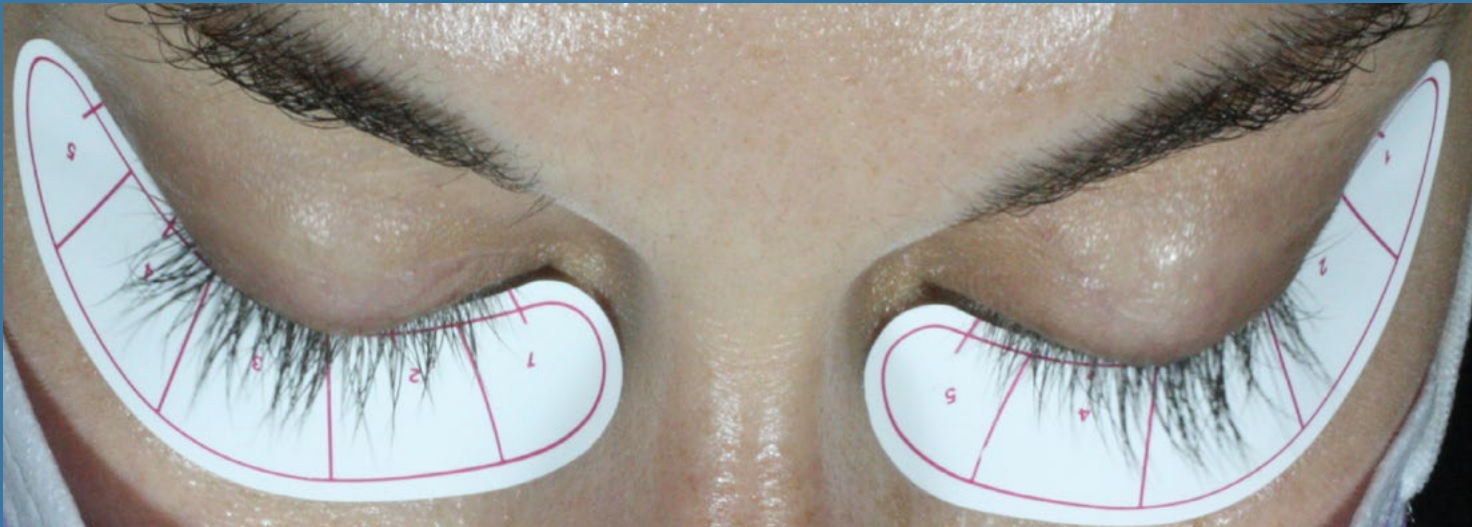
- Computerized Image Analysis
  - Fullness
  - Darkness
- Overall Improvement in Eyelash appearance
- Self-Assessment Questionnaires (SAQ)
- Quality of Life Assessment

## Results

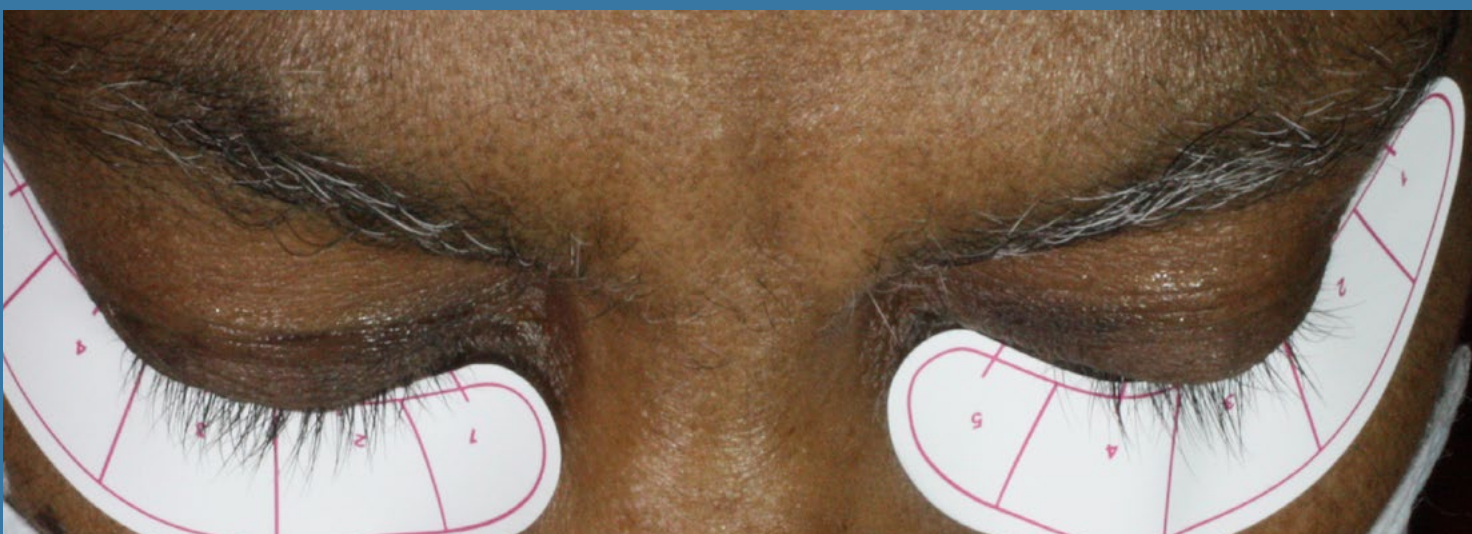
The clinical grader and subject participants observed an overall improvement in overall improvement in eyelash prominence as early as 8 weeks, with continued improvements at weeks 12 and 16.



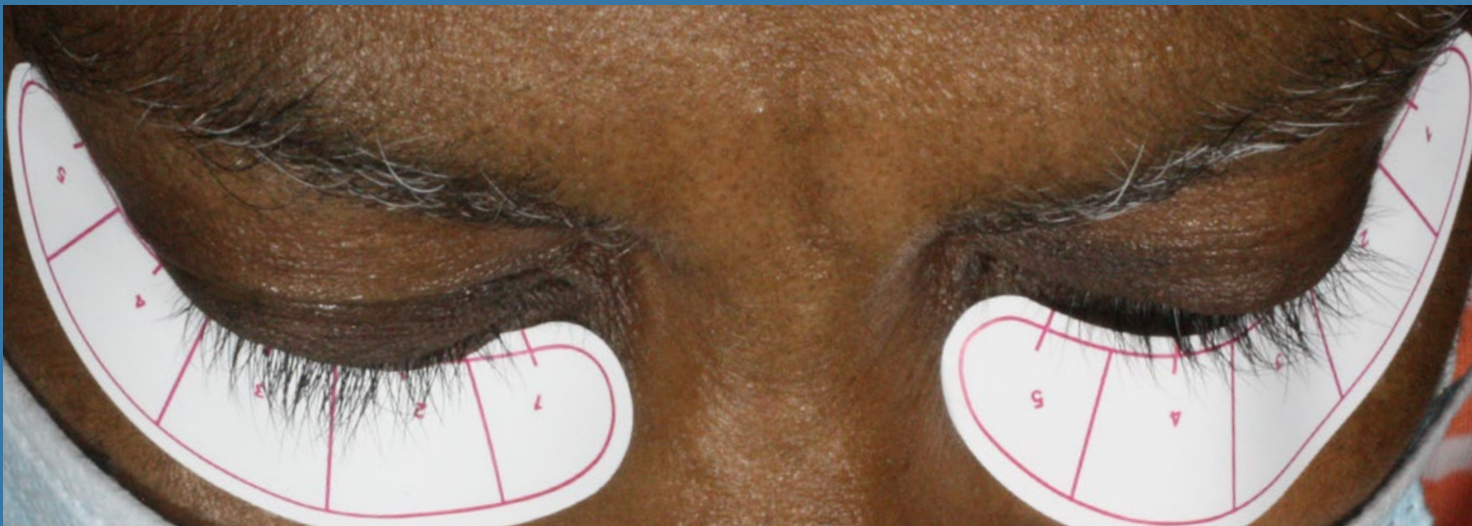
Baseline Clinical Grade-2



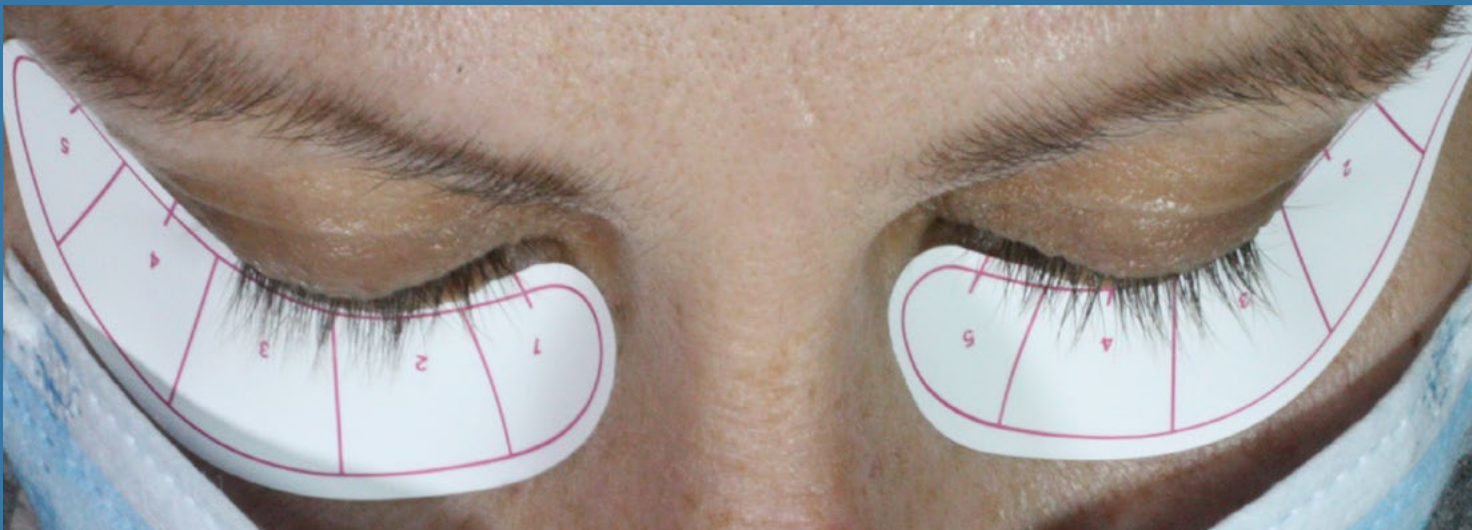
Week 8 Clinical Grade-2



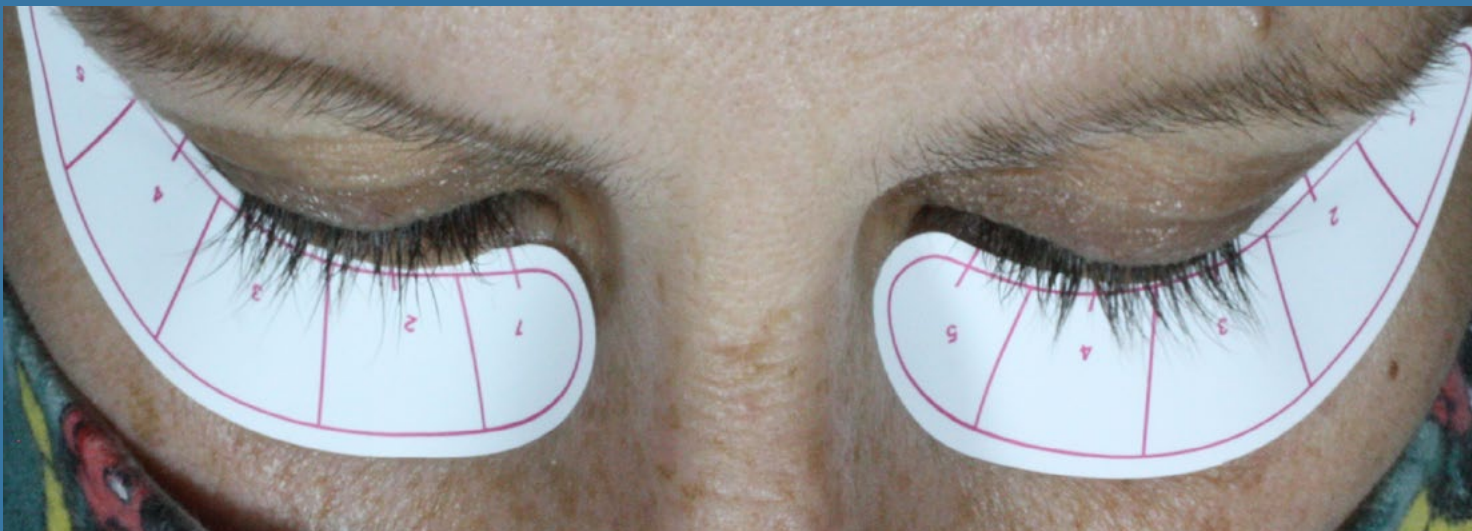
Baseline Clinical Grade-2



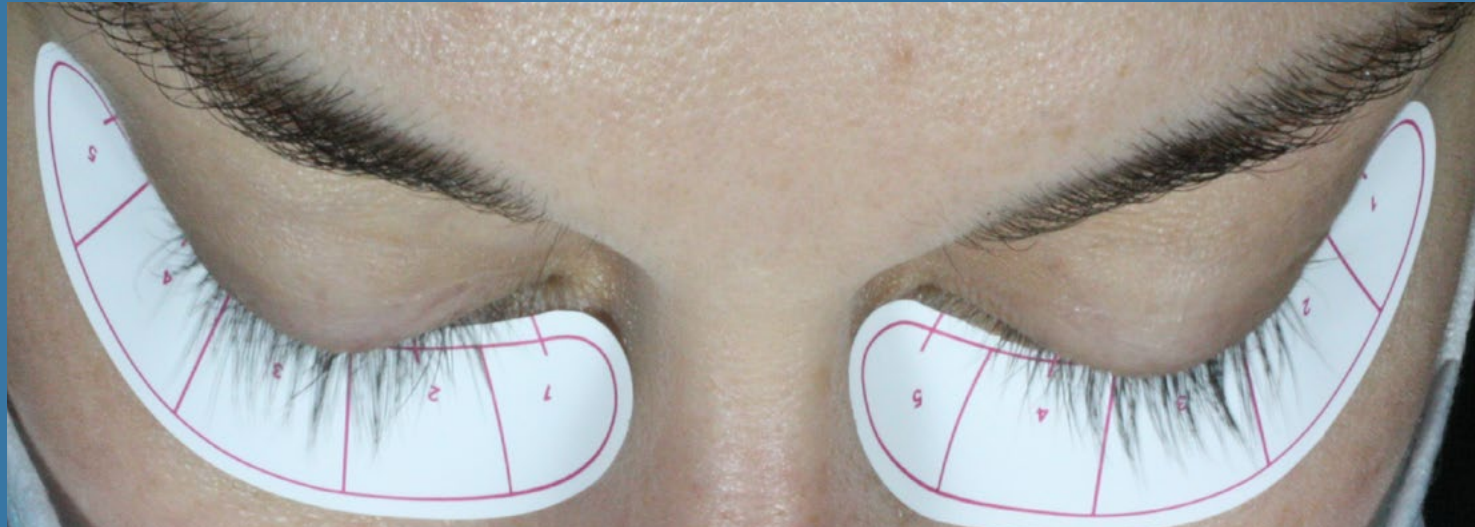
Week 8 Clinical Grade-2



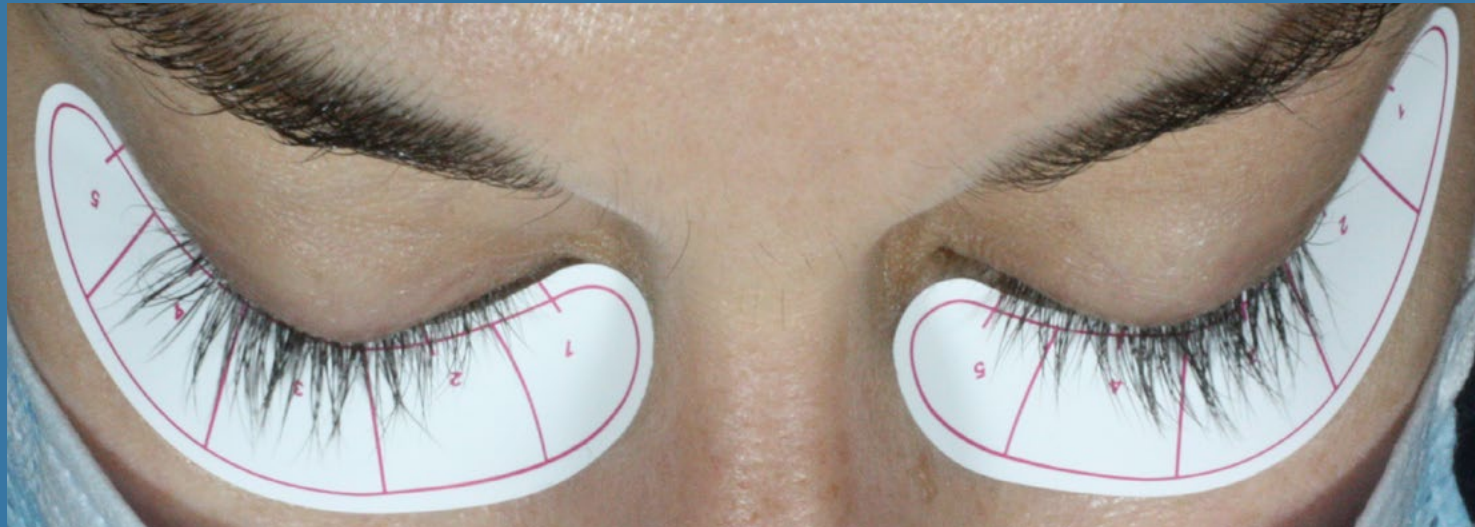
Baseline Clinical Grade-2



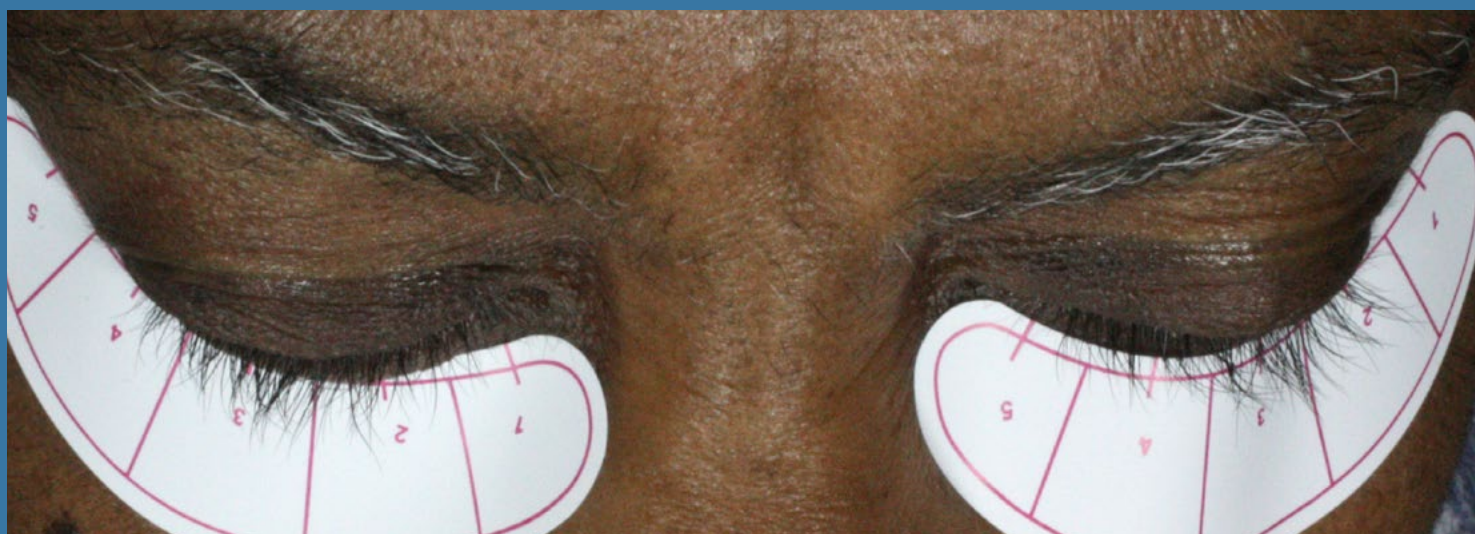
Week 8 Clinical Grade-2



Week 12 Clinical Grade-4



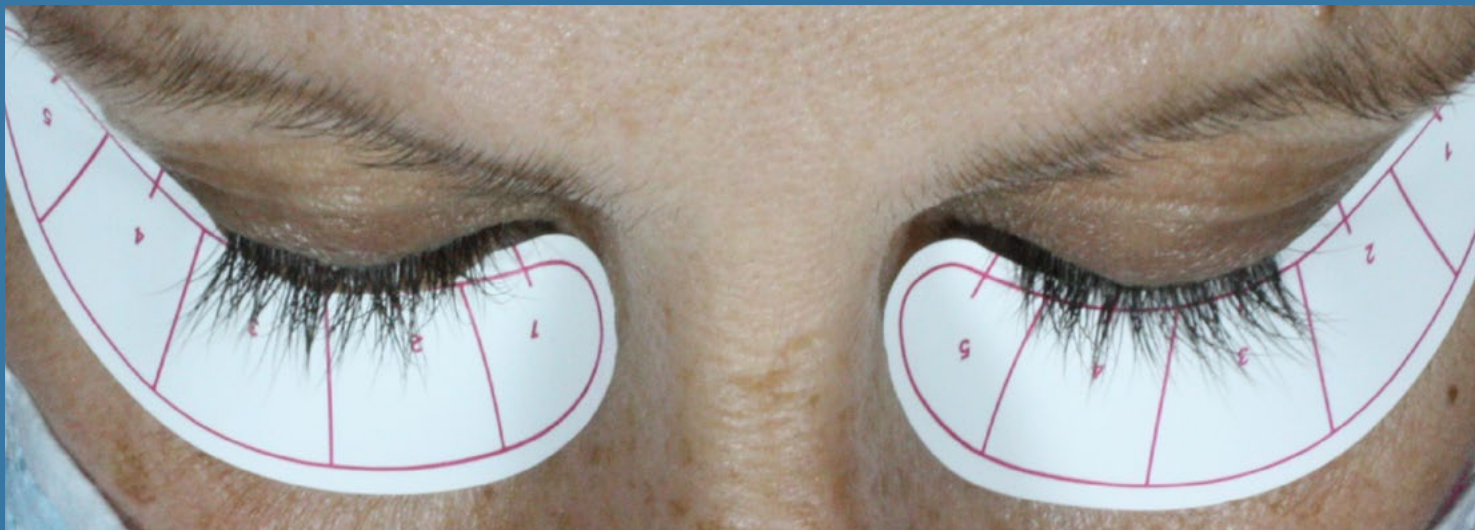
Week 16 Clinical Grade-4



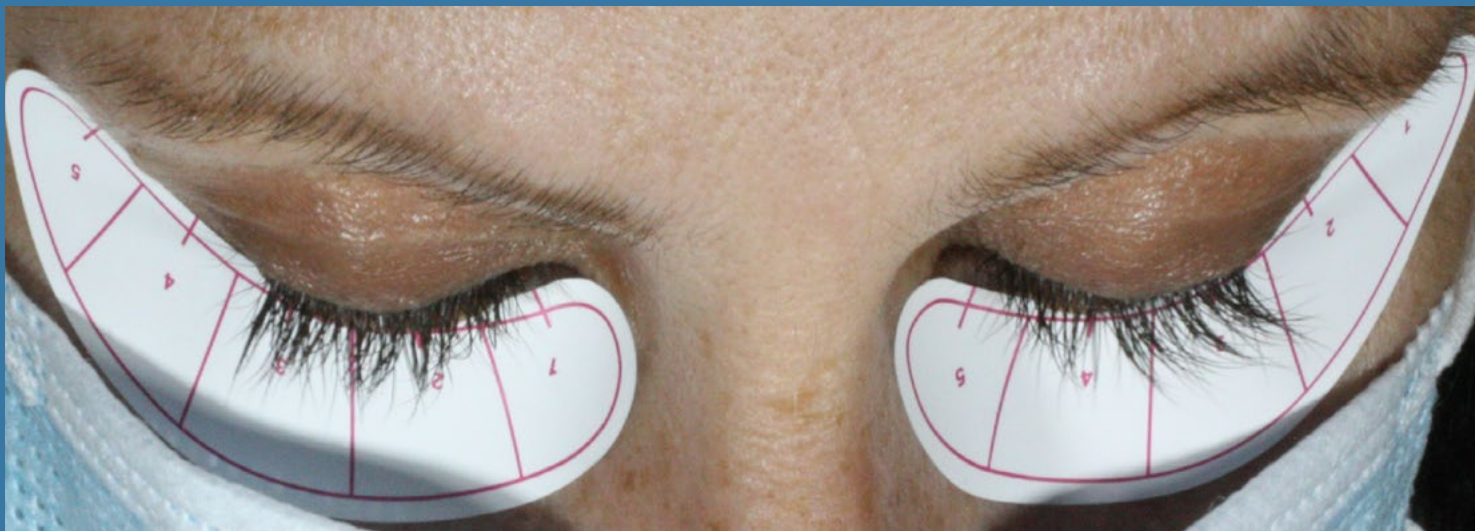
Week 12 Clinical Grade-3



Week 16 Clinical Grade-3

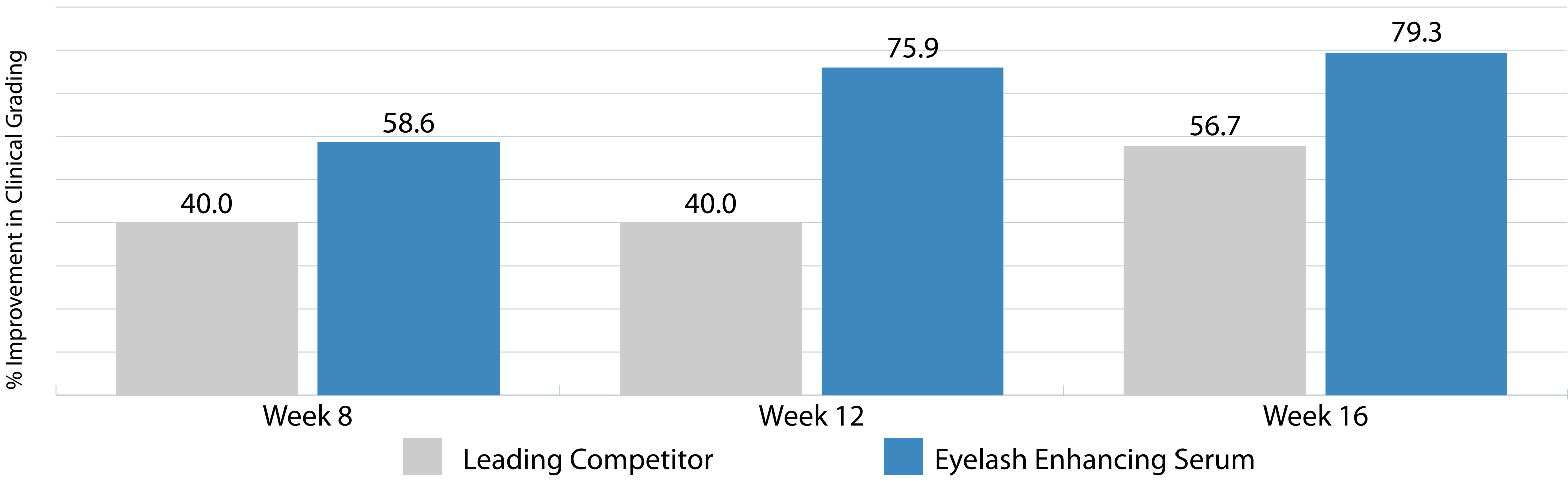


Week 12 Clinical Grade-3

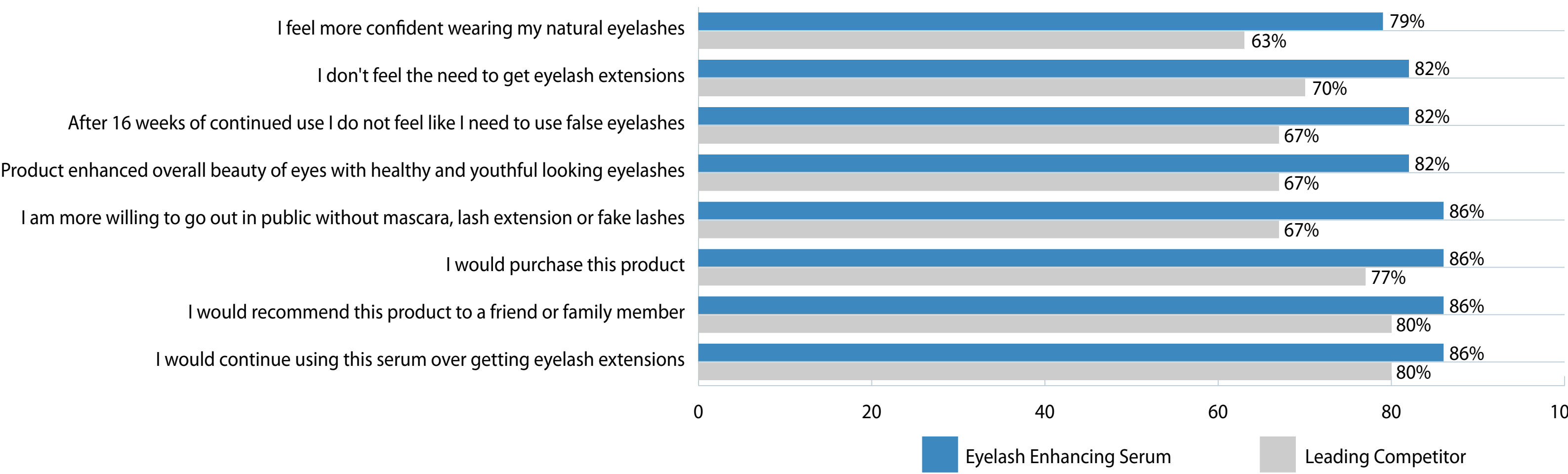


Week 16 Clinical Grade-3

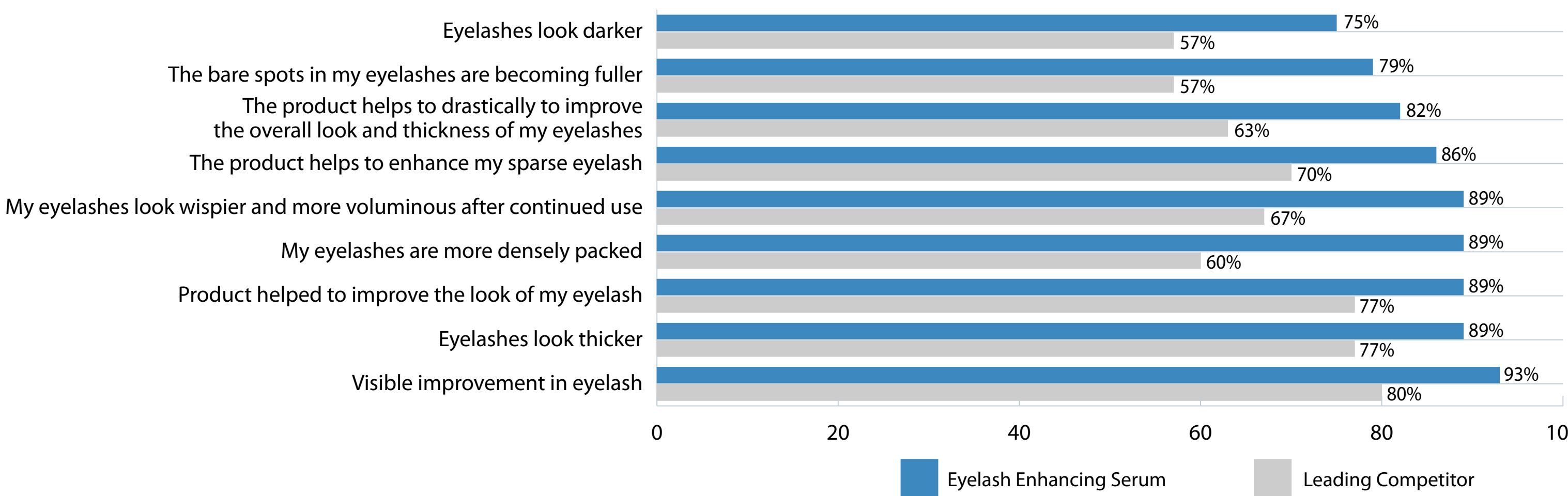
Improvement incidence with daily use of eyelash enhancement serum



Quality of life improvements after 16 weeks of eyelash serum daily use



Perceived benefits after 16 weeks of eye lash serum daily use



## Conclusions

- Eyelash enhancing serum containing a Proprietary Lipid Core Technology supports the improvement in overall prominence of the lash over 16 weeks
- The improvement in the overall eyelash prominence, fullness/thickness, and darkness of the subject's eyelashes over 16 weeks of use were evident to both the subject and the expert grader and confirmed via image analysis
- Eyelash enhancing serum was well tolerated and easy to use
- Study participants who used eyelash enhancing serum felt more confident wearing their natural eyelashes in public