

Tolerance and Efficacy of an Anti-Blemish 360° Soothing Spray in Individuals with Truncal Acne: Results from a Controlled Study

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INTRODUCTION

Truncal acne is a frequent but under-recognized form of acne vulgaris affecting the back, chest, and shoulders, and can cause discomfort and psychosocial impact. Lesions include inflammatory papules and pustules, as well as non-inflammatory comedones, and treatment is often challenging due to thicker skin and difficulty of topical application. Given these specificities, suitable and well-tolerated formulations, easy to apply, especially in inaccessible areas, are essential to ensure adherence and long-term control of the condition.⁴

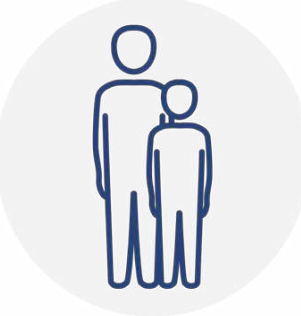
The objective of this study was to evaluate the tolerance and efficacy of an anti-blemish soothing 360° spray in subjects with mild to moderate truncal acne on the back, shoulders and neckline.

⁴Woo, Y.R.; Kim, H.S. Truncal Acne: An Overview. J. Clin. Med. 2022, 11, 3660. <https://doi.org/10.3390/jcm11133660>

MATERIALS & METHODS



This intra-individual controlled study was conducted in Brazil between September and November 2024 corresponding to the Brazilian spring.



The panel consisted of 34 valid cases of teenagers and adults (14 to 33 years old) of both genders with mild to moderate truncal acne severity.



The study included five visits (D0, D7, D14, D28, and D56). After a 20-minute acclimatization period, a dermatologist assessed tolerance, lesion counts, acne severity (Comprehensive Acne Severity Scale-CASS and Truncal Acne Severity Scale-TRASS), and post-inflammatory marks (Post Inflammatory Hyperpigmentation-PIH and Post Inflammatory Erythema-PIE).

Quality of life (Cardiff Acne Disability Index-CADI), self-assessments of efficacy, cosmetic acceptability, compliance, and adverse events were recorded throughout the study. Standardized back photographs were collected at each visit.

RESULTS

Clinical assessment

All acne lesions (retentional and inflammatory lesions) decreased significantly from D7 to D56; at D56, reductions ranged from about -55% to -100%, with the largest decreases in open comedones (-100%; p<0.001, Wilcoxon test) and total lesions (-70%; p<0.001, Wilcoxon test).

After 56 days of twice-daily use, the anti-blemish soothing spray significantly and progressively reduced PIH and PIE, with decreases of -23.6% and -37.1%, respectively, at D56 versus D0 (p<0.001, Wilcoxon test). A significant improvement in overall acne severity was also observed, with CASS and TRASS scores reduced by up to -38.5% and -21.8%, respectively, at D56 compared with baseline (p<0.001, Wilcoxon test).

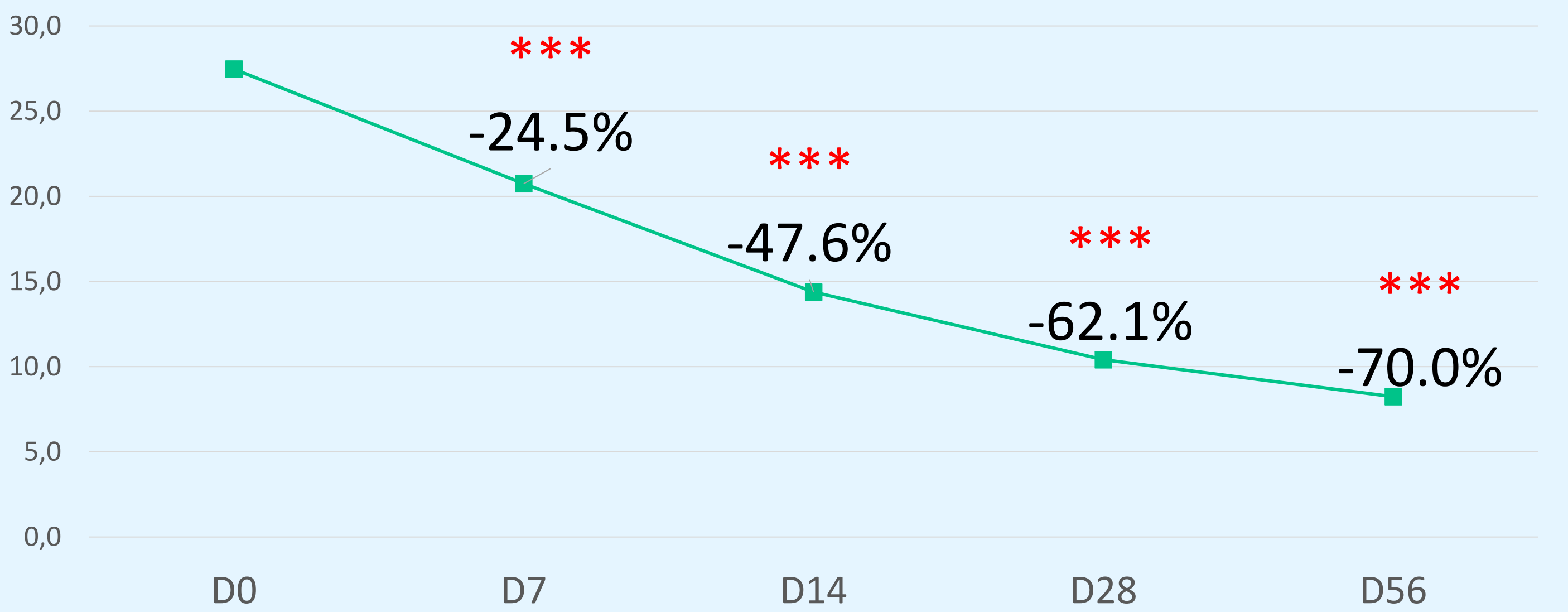


Figure 1 – Evolution of the mean value of total lesions versus D0 (***, p<0,001; Wilcoxon signed rank-test)

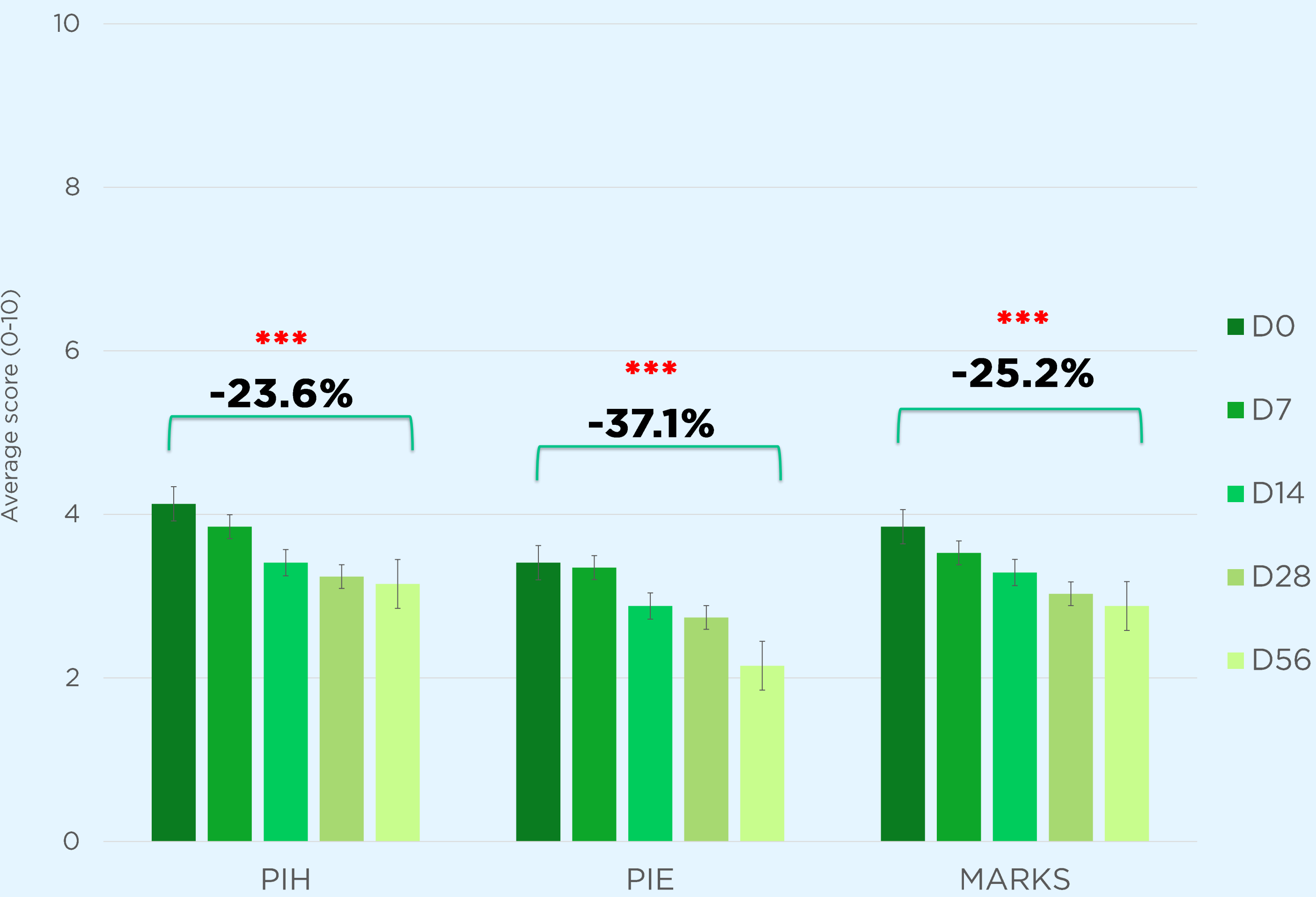


Figure 2 – Evolution of the average efficacy scores (PIH, PIE and marks) at D56 versus D0. (***: p<0.001, **: p<0.01, NS: p>0.05 (Not Significant), Wilcoxon test)

Subject's assessment

Visual Analogue Scale (VAS) scores showed a progressive reduction in perceived severity, marks and discomfort, with the sum of scores decreasing by -33.1% (p<0.001, Wilcoxon test) at D56.

Quality of life significantly improved throughout the study, as reflected by a 48.1% reduction in CADI score at D56 (p<0.001, Wilcoxon test). These results indicate that the anti-blemish soothing spray substantially reduced the impact of acne on participants' daily lives.

After 56 days of product use, most subjects (>60%) agreed or somewhat agreed with all benefit-related statements, with particularly high agreement (>73.5% to 97.1%; mean value calculation) for reduction of imperfections, soothing effects, improved quality of life, and cosmetic properties of the product. Cutaneous tolerance was rated good, with no significant worsening of any objective or subjective sign over time. The product was easy to apply and distributed evenly over all areas of the body, even the hard-to-reach ones for respectively 97% and 79% of the subjects.

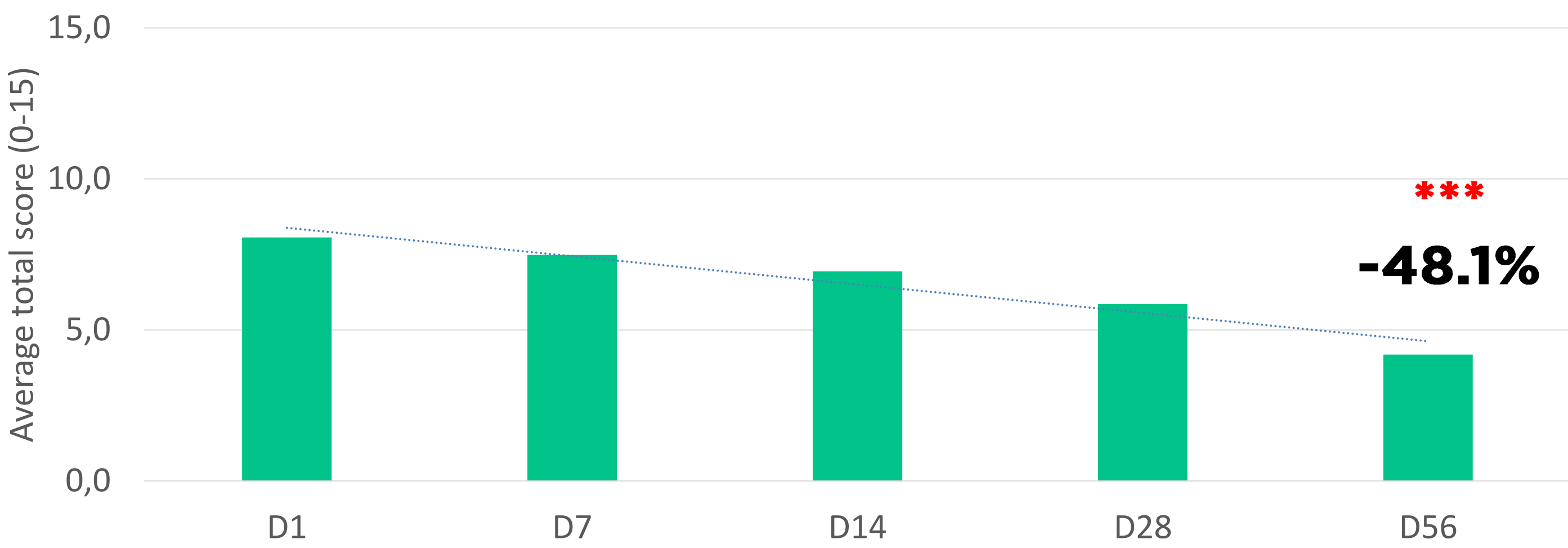


Figure 3 –Total score of Quality-of-Life Questionnaire (CADI) at D0, D7, D14, D28 and D56 (N=33). (***: p<0,001, Wilcoxon test)

-38.5%*
Of truncal
acne severity

*Evaluation of truncal acne severity through CASS scale at D56.



Figure 3 – Illustrative Studio Photos back area average-case R-015 D0 compared to D56

CONCLUSION/DISCUSSION

After 56 days of twice-daily use, the anti-blemish soothing spray demonstrated clear efficacy on mild to moderate truncal acne, with progressive improvement in post inflammatory marks, global severity and most lesion types, except nodules. The product showed good tolerance and strong subject reported satisfaction and improvement in quality of life, supporting its use as a well tolerated and effective option for managing mild to moderate truncal acne.