

# INTEREST OF A NOVEL DERMOCOSMETIC SHAMPOO IN THE MANAGEMENT OF SCALP PSORIASIS

Floriane Gayraud<sup>1</sup>, Elise Abric<sup>1</sup>, Elsa Tisserand<sup>1</sup>, Christelle Graizeau<sup>1,2</sup>, Nathalie Ardiet<sup>1</sup> and Michèle Sayag<sup>1</sup>

<sup>1</sup>NAOS Group, Research and Development Department, Aix-en-Provence, France

<sup>2</sup>NAOS Institute of Life Science, Aix-en-Provence, France

## INTRODUCTION & OBJECTIVES

Scalp psoriasis (SP) is a chronic disease presenting thick scales on clearly-defined, erythematous skin. It can also cause severe itching. Even though, the hair frequently covers lesions, flaking may impact the subject's quality of life. Currently, SP treatment includes topical therapy, intralesional therapy, systemic therapy, and photochemotherapy. The present studies assessed the non-delipidating and protective effect as well as the clinical benefit and safety of a novel dermocosmetic shampoo containing salicylic acid, juniper and zanthoxylum extracts, and forskoline for mild to moderate SP indication.

## MATERIALS & METHODS

Two open-labelled, intra-individual clinical studies were conducted. The first study assessed, 1 and 4 hours after a single application, the non-delipidating and protective effect of the shampoo by assessing transepidermal water loss (TEWL) on the cheekbones and sebum quantity on the forehead of 10 healthy adult female subjects with oily skin (cutaneous sebum rate  $\geq 140\mu\text{g}/\text{cm}^2$ ). The second study assessed in 18 subjects aged  $>18$  years with mild to moderate untreated SP, the clinical benefit, local tolerability and cosmetic acceptability of the shampoo during 56 days. Subjects applied the shampoo every 2 days during 21 days and then twice a week during 35 days. The investigator assessed the Investigator's Global Assessment (IGA, from 0=none to 4=severe), the Scalp Surface Area (SSA in percentage), the Psoriasis Scalp Severity Index (PSSI, from 0=none to 72=very severe) and the overall benefits (0=very poor to 4=very good) on baseline, Day 28 (D28) and 56 (D56). Subjects assessed the intensity of pruritus on D28 and D56 and the cosmetic acceptability on Day 56.

## RESULTS

No variation compared to the non-treated area was observed of the TEWL 1h and 4h after a single application, and of the cutaneous sebum rate after 4h. In the clinical study, subjects had a mean age of  $36.0\pm 10$  years, 72% were males, 50% had phototype V, 33% a phototype IV and 6% each had a phototype II, III or VI. 66% had a SP which started more than 6 years prior to the study and 61% had a psoriasis family history. As soon as 28 days, the SSA, the PSSI and the pruritus intensity were significantly reduced, and after 56 days, the four assessments significantly decreased, including IGA (Fig. 1-4). Overall, investigators rated the dermocosmetic shampoo being beneficial for 67% of subjects. Subjects highly appreciated the cosmetic properties of the shampoo which was very well tolerated.

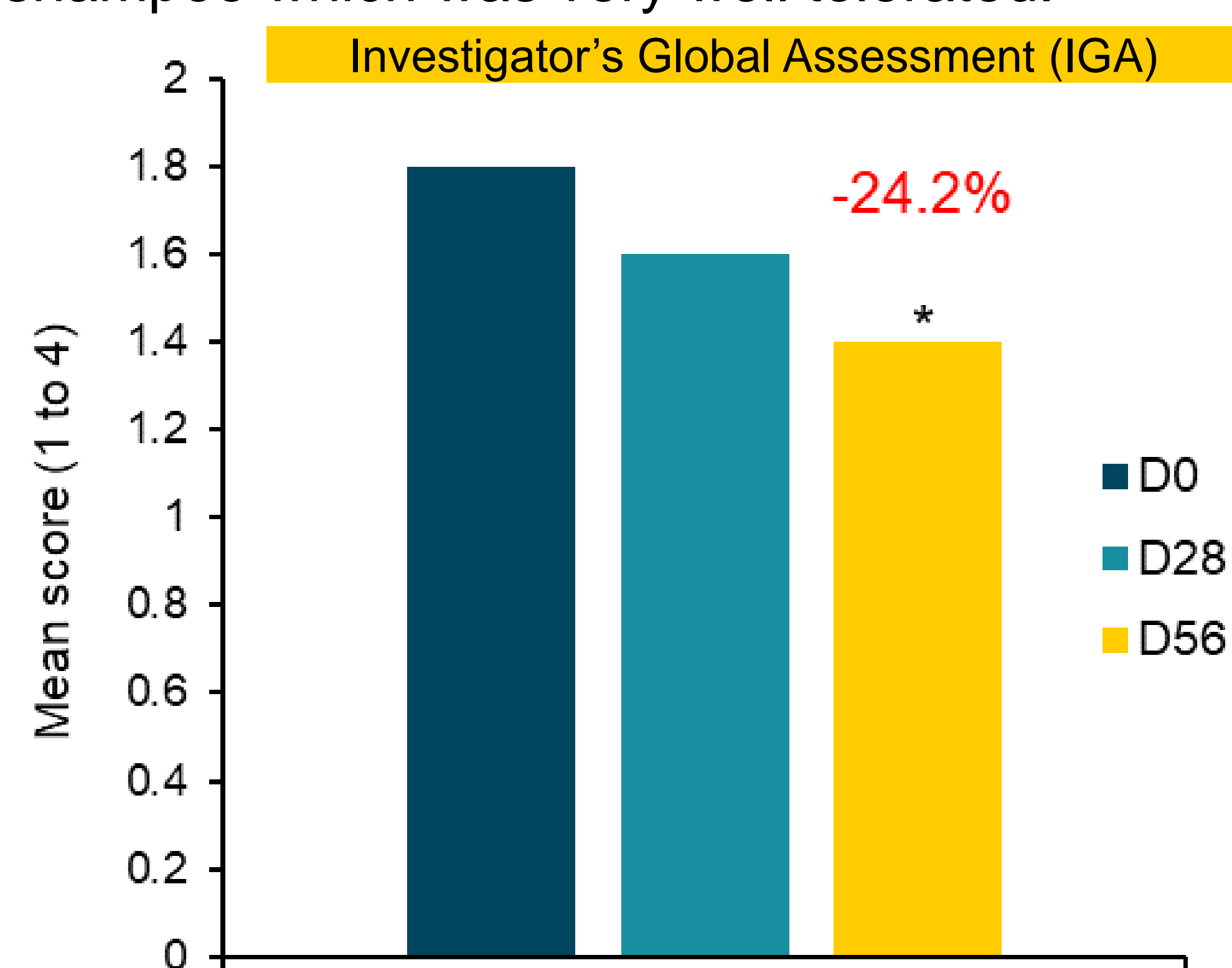


Figure 1: Evolution of the Investigator's Global Assessment (IGA) (\* $p < 0.05$ , Wilcoxon signed rank test)

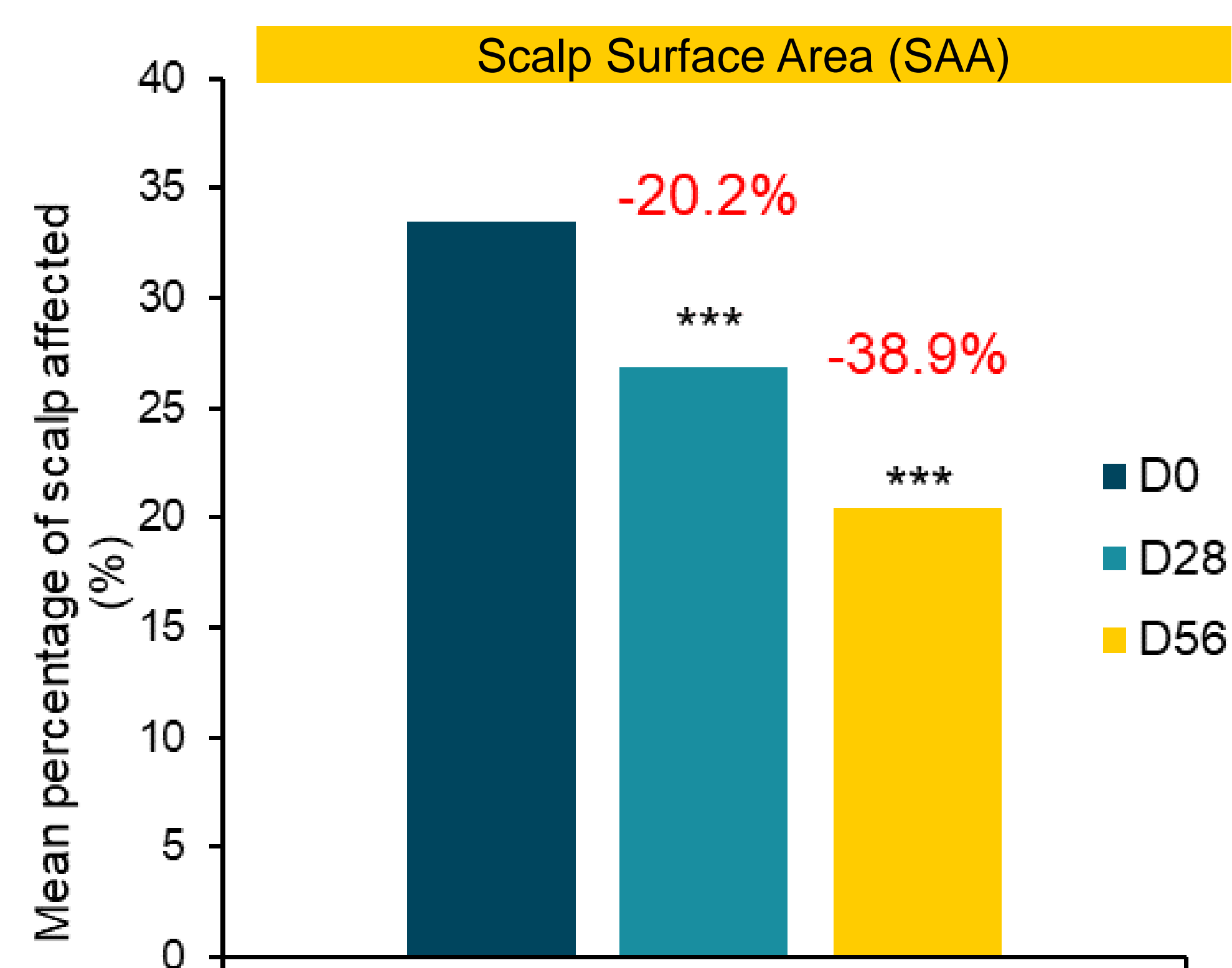


Figure 2: Evolution of the Scalp Surface Area (SAA) (\*\* $p < 0.01$ , Wilcoxon signed rank test and paired sample T-test)

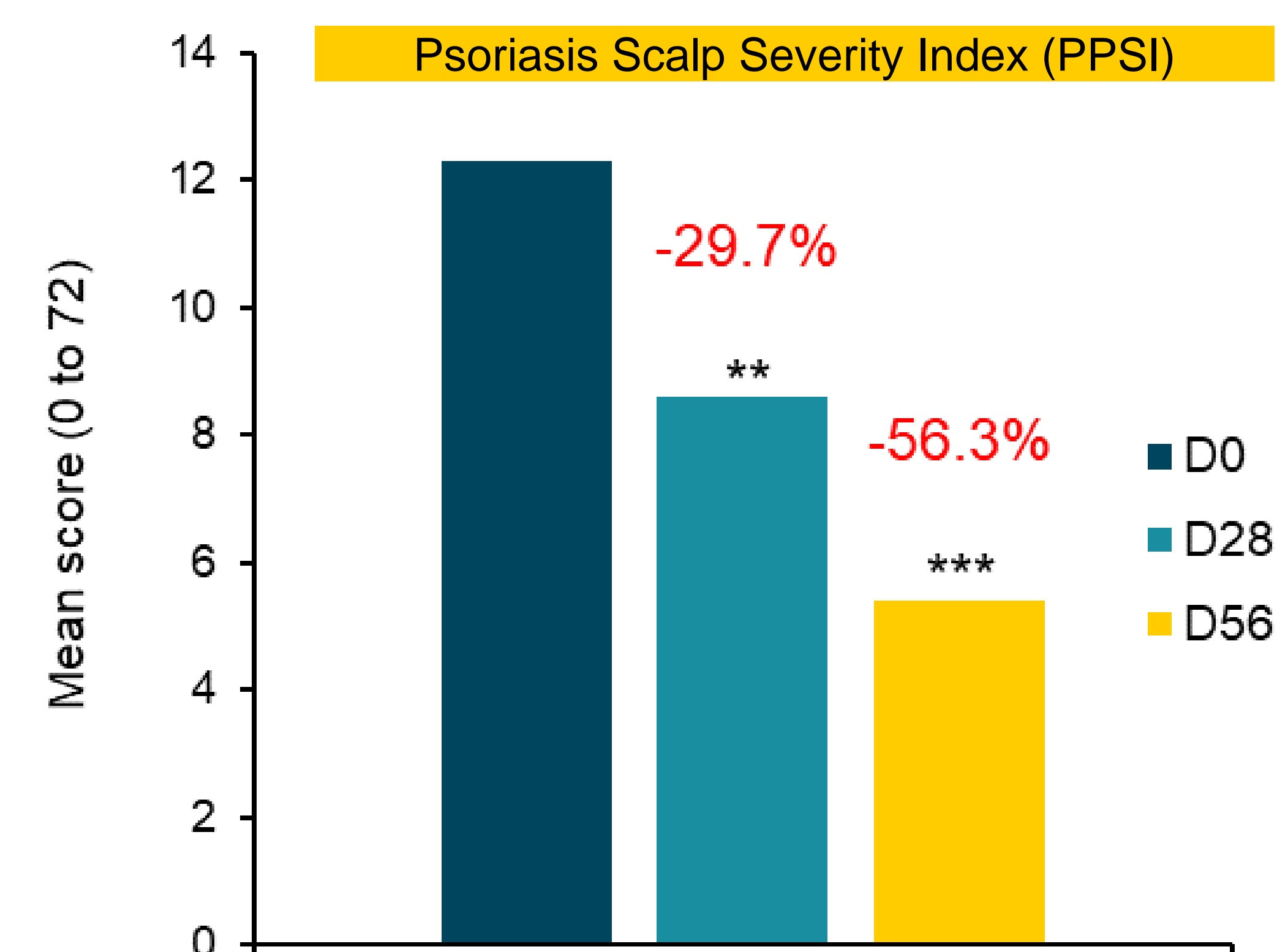


Figure 3: Evolution of the mean of Psoriasis Scalp Severity Index (PSSI) (\*\* $p < 0.01$ , \*\*\* $p < 0.001$ , paired sample T-test)

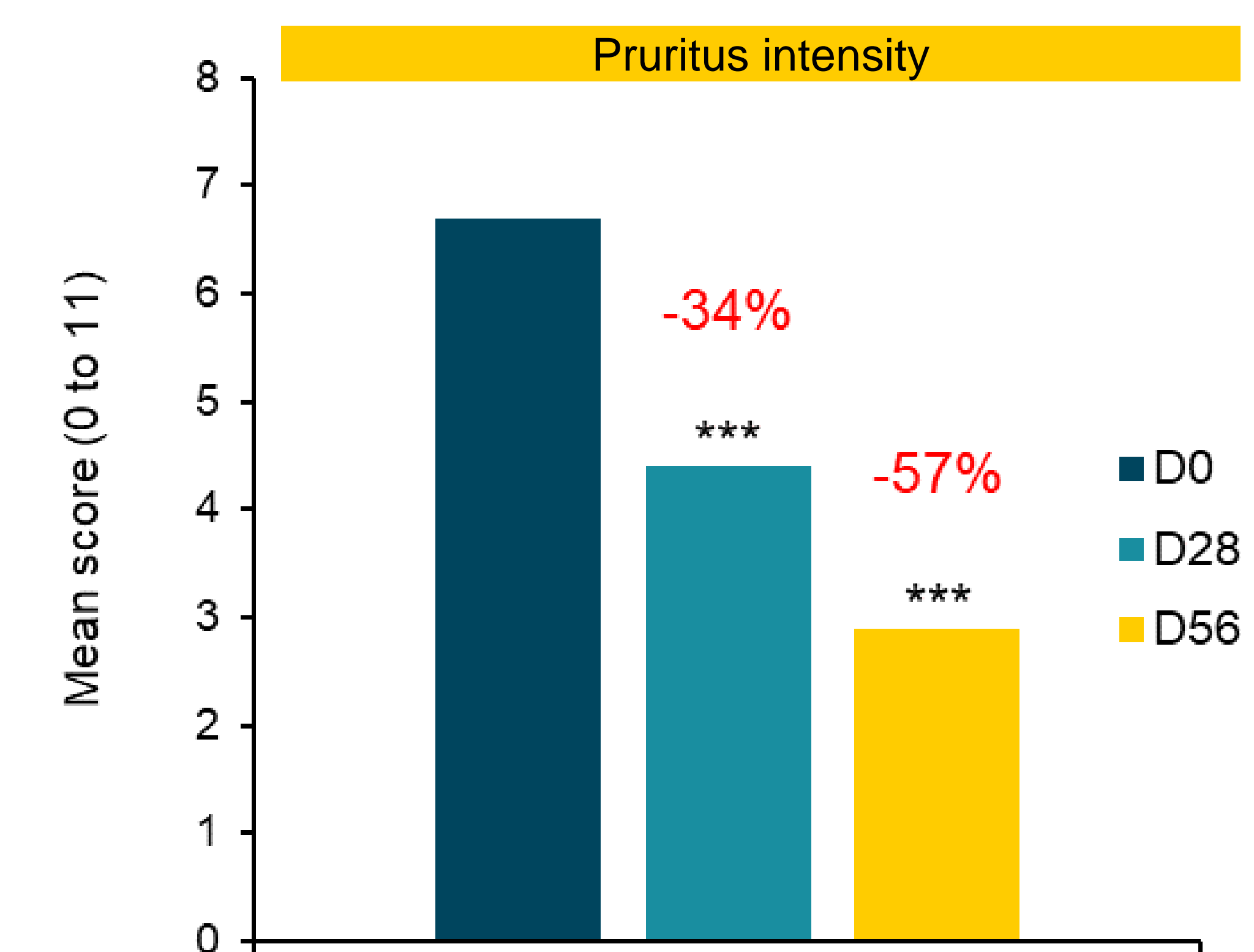


Figure 4: Evolution of the mean of pruritus intensity score (\*\* $p < 0.01$ , paired sample T-test)

## CONCLUSION

The dermocosmetic shampoo is non-delipidating, does not affect the skin barrier and is highly beneficial and well tolerated by subjects with mild to moderate scalp psoriasis as early as after 28 days.