

A Selenium Disulfide-based shampoo is beneficial in the management of various hair and scalp conditions: results from a real-world study conducted in China in 759 subjects

Di Zong¹, Dingquan Yang², Stephanie Leclerc-Mercier³

¹L'Oréal Dermatological Beauty, L'Oréal China, Shanghai, China, ²Department of Dermatology, China-Japan Friendship Hospital, Beijing, China, ³Vichy Laboratoires, Levallois Perret, France

1 INTRODUCTION AND OBJECTIVES

Different scalp and hair conditions such as seborrheic dermatitis (SD)/dandruff, hair loss including androgenetic alopecia (AGA), scalp folliculitis, as well as inflammatory skin conditions, such as scalp psoriasis, impact, due to clinical signs and symptoms, the individuals' quality of life (QoL).^{1, 2}

1% Selenium disulfide (SeS₂)-based shampoo, also containing, 0.9% Salicylic Acid, Vitamin E and Ceramide-R, is effective in the treatment of dandruff, a milder form of seborrheic dermatitis.³ SeS₂ has antifungal properties against *Malassezia spp.* and also inhibits *Staphylococcus epidermidis* growth *in vitro* and restores the microbial scalp equilibrium after 28 days of use. Moreover, it modifies the global bacterial distribution in decreasing Staphylococci and increasing Cutibacterium loads.^{4, 5} Past reports on the treatment of scalp SD/Dandruff have focused on *Malassezia spp.* and counts, while bacterial microbiota changes have only been poorly described.^{6, 7}

2 OBJECTIVES

The aim of this study was to assess in real-world clinical practice in subjects with any scalp and/or hair condition, the clinical benefit, satisfaction and improvement of QoL with SeS₂ shampoo.

3 MATERIAL & METHODS

- A real-world, observational study was conducted in 759 Chinese subjects with any scalp and hair condition who used the SeS₂ shampoo as indicated by their dermatologist.
- Dermatologists assessed clinical signs at baseline.
- At the end of the study, dermatologists rated the product performance and satisfaction while subjects rated product satisfaction and QoL using a modified DLQI.

4 RESULTS

- A total of 759 subjects were included. 55.2% were women, 84.2% were aged between 18 and 49 years, 86% had an oily or mixed skin type among 264 cases with details.
- A total of 967 diagnoses were made :
 - 74.8% had SD/dandruff
 - 23.3% had AGA
 - 5.1% had scalp folliculitis 3.8% scalp psoriasis
 - 19.9% had multiple diagnoses combined with 84.8% SD.
- 59.8% had moderate to very severe scaling (59.8%), pruritus (71.7%), or scalp greasiness (78.9%).
- SeS₂ shampoo was applied in average during 3 weeks, 3 times/week. It was used alone by 75.6%, or as an adjunct to medication especially in those who had multiple diagnosis/conditions, such as hair loss patients along with SD/dandruff.
- Dermatologists agreed that regimens including SeS₂ shampoo are beneficial (89.6%) and or very well tolerated (95.4%) with subjects being highly compliant to treatment (94.8%). Dermatologists highly recommended SeS₂ shampoo (97.5%). See Figure 1 for detailed results.
- Overall, 86.0%, 87.2%, and 84.3% subjects with report detail (N=580), respectively reported that their dandruff, itching, and greasy scalp had improved or disappeared. Refer to Figure 2 for detailed results.
- Results for the modified DLQI are given in Figure 3. 89.8 and 81.6%, respectively stated that, based on the DLQI, their scalp itch/pain or stinging, embarrassed or self-conscious feeling, problems with partner/close friends / relatives, had improved or totally relieved; 93.3% of the subjects were highly satisfied with the SeS₂ shampoo, 91.4% were willing to continue its use.

FIGURE 1: Investigator satisfaction of 1% SeS₂-based shampoo

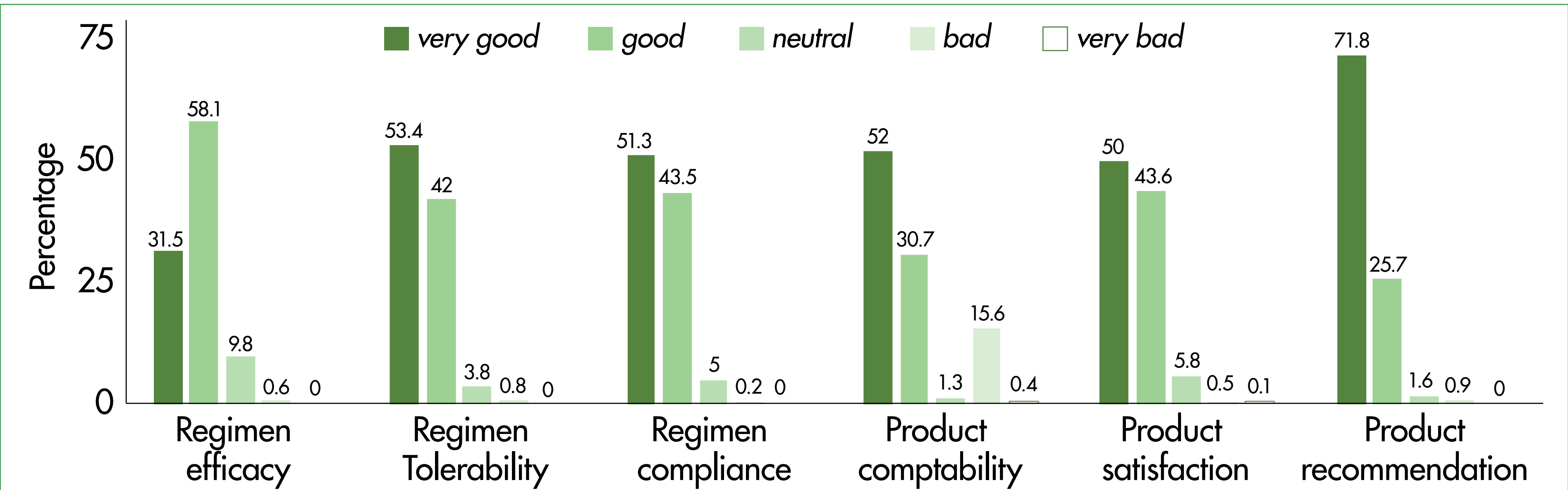


FIGURE 2: Subject self-reported symptoms with 1% SeS₂-based shampoo

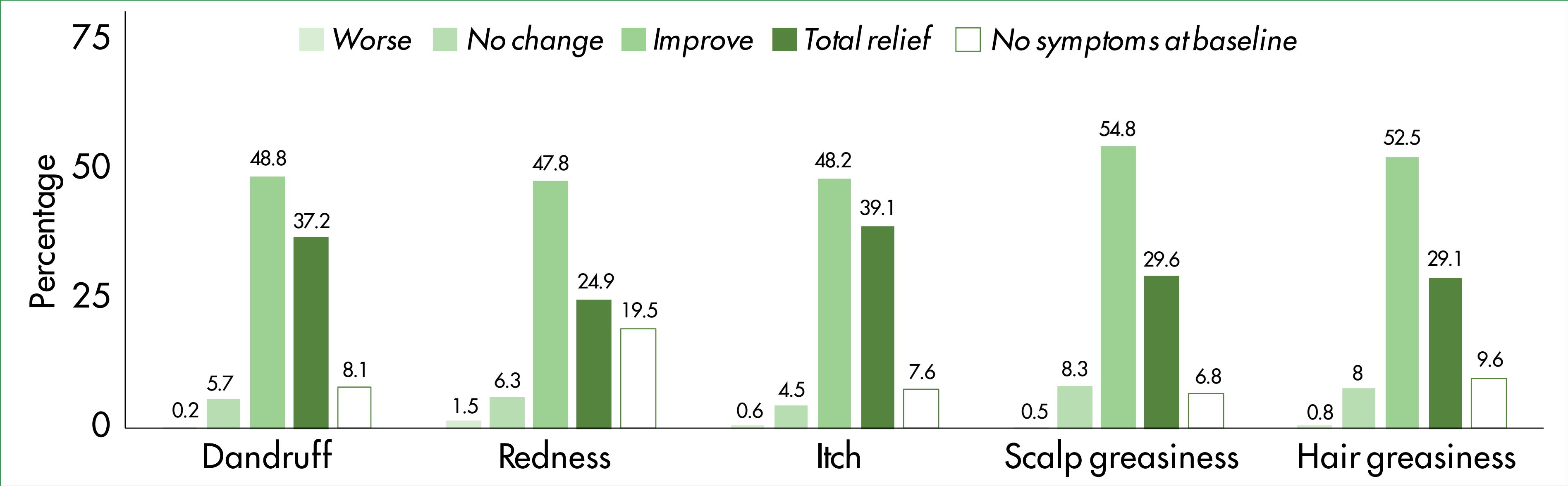
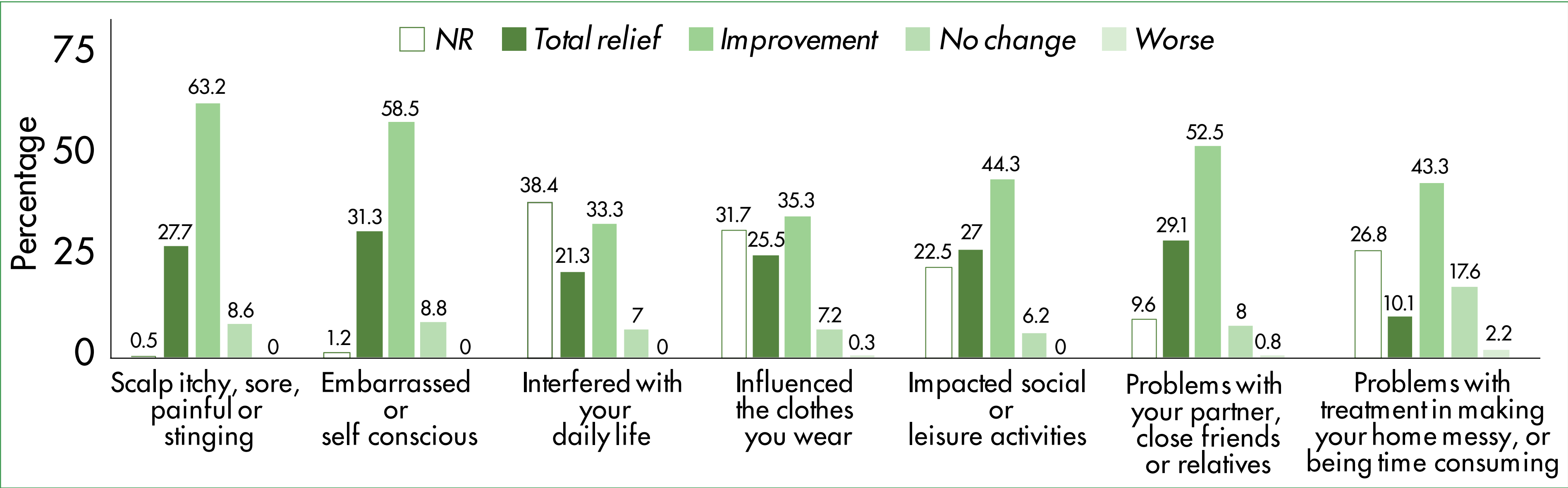


FIGURE 3: Subject rated quality of life using the modified DLQI



5 CONCLUSION

The tested 1% SeS₂-based shampoo is beneficial and highly appreciated by both dermatologists and subjects of various, common scalp and hair diseases.

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Acknowledgments: Karl Patrick Göritz, SMWS, France for the writing support and Dominique Poisson for the art work