

TREATMENT OF PSORIASIS WITH CALCIPOTRIENE AND BETAMETHASONE DIPROPIONATE (CAL/BDP) CREAM SHOWED SIGNIFICANTLY HIGHER PROPORTION OF PATIENTS WITH AN ABSOLUTE mPASI ≤ 2 COMPARED TO CAL/BDP GEL/TOPICAL SUSPENSION IN A POST-HOC ANALYSIS OF TWO PHASE 3 STUDIES

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INTRODUCTION

- Calcipotriene (50 µg/g) and betamethasone dipropionate (0.5 mg/g) (CAL/BDP) is an effective combined treatment for plaque psoriasis, and it has recently become available in an aqueous cream based on PAD Technology™¹.
- An absolute PASI ≤ 2 has been shown to represent a meaningful clinical and health-related quality of life improvement, and a relevant alternative to relative PASI response for determining treatment success²⁻⁴.

OBJECTIVE

- In this pooled post-hoc analysis we analysed achievement of an absolute mPASI ≤ 5 or ≤ 2 of CAL/BDP PAD-cream compared to an active comparator and to vehicle to better evaluate efficacy compared to relative improvement.

METHODS

- CAL/BDP cream was evaluated in two head-to-head, Phase 3, randomized, multicenter, investigator-blind, parallel-group trials (NCT03308799 and NCT03802344)^{5,6} comparing the efficacy of CAL/BDP PAD-cream with CAL/BDP gel/topical suspension (TS) and PAD-cream vehicle.
- Adult patients with mild-moderate psoriasis according to the Physician Global Assessment (PGA) were enrolled and applied trial medication once daily for up to 8 weeks.
- The statistical analysis of the pooled phase 3 data presented herein was performed as a post-hoc analysis based on a modified intention-to-treat population (incl. all patients with at least one assessment of PGA after starting treatment) using multiple imputation.

RESULTS

- 1271 patients were included in this analysis; 551 patients in the CAL/BDP PAD-cream group, 542 patients in the CAL/BDP gel/TS group and 178 patients in the vehicle group.

Figure 1. Proportion of patients with mPASI ≤ 5

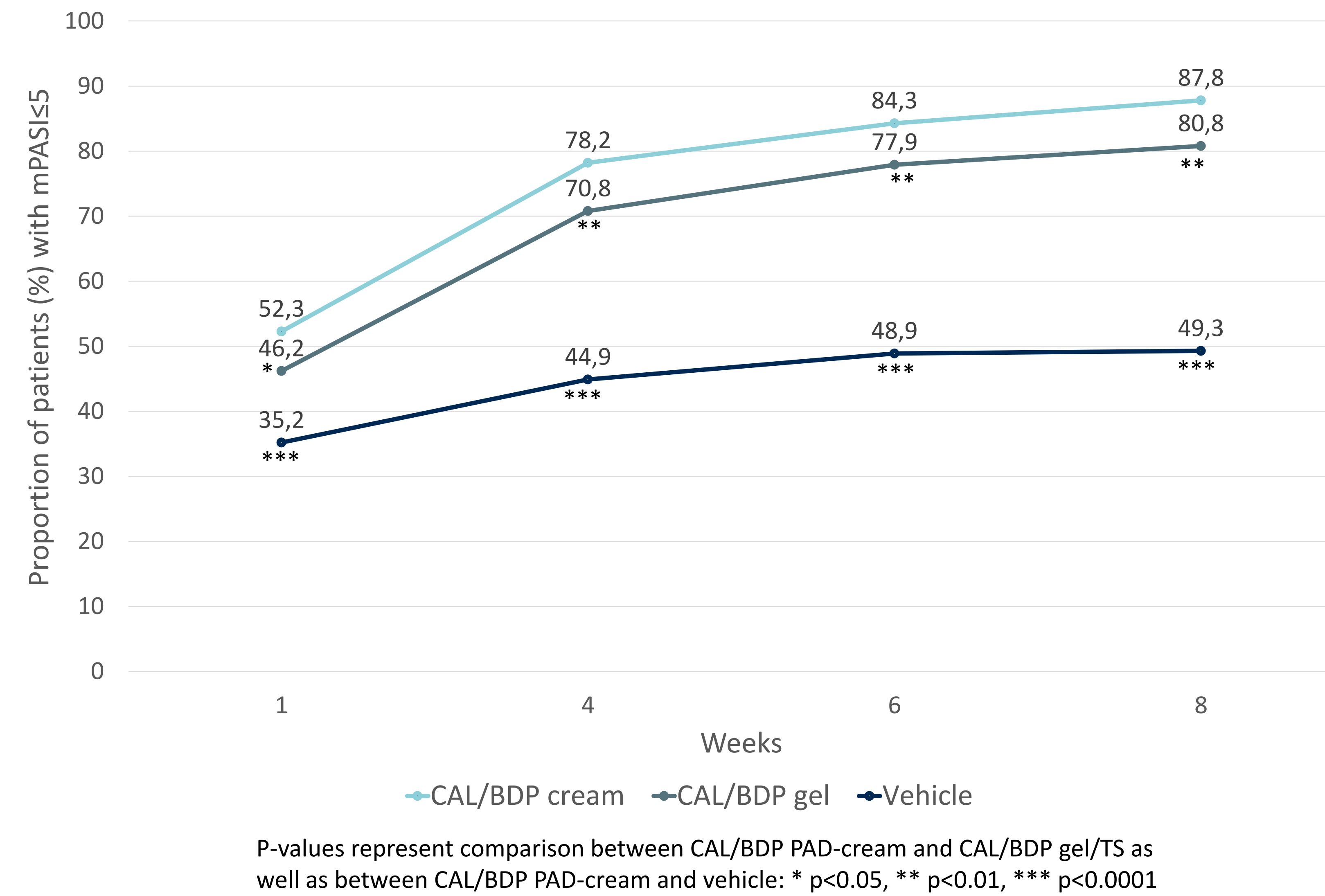
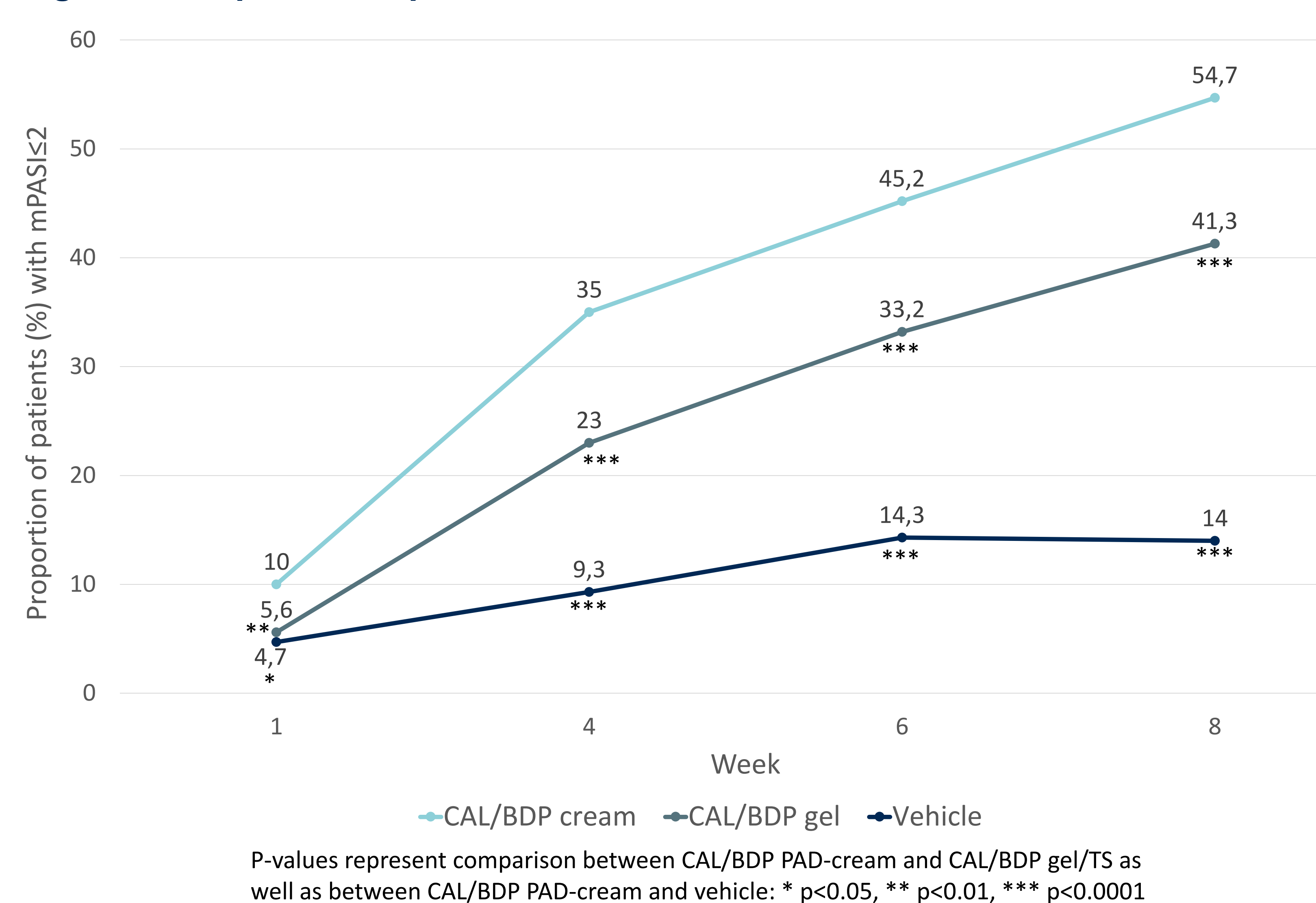


Figure 2. Proportion of patients with mPASI ≤ 2



- At Week 8, the proportion of patients achieving a mPASI ≤ 5 was significantly higher for the CAL/BDP PAD-cream group (87.8%) compared to the PAD-cream vehicle group (49.3%, p<0.0001) and the CAL/BDP gel/TS group (80.8%; p=0.0020). At Week 1, 4, and 6 there were also significant differences between CAL/BDP PAD-cream and CAL/BDP gel/TS (p=0.0416, p=0.0062 and p=0.0082 respectively) (Figure 1).
- The proportion of patients achieving an mPASI ≤ 2 was significantly higher for CAL/BDP PAD-cream (54.7%) compared to PAD-cream vehicle (14%; p<0.0001), and CAL/BDP TS/gel (41.3%; p<0.0001) at Week 8. The difference between CAL/BDP PAD-cream and CAL/BDP gel/TS was also significant at Week 1 (p=0.0069), 4 (p<0.0001) and 6 (p<0.0001) (Figure 2).

CONCLUSIONS

- CAL/BDP PAD-cream is an effective and convenient psoriasis treatment based on PAD Technology™¹.
- In this post-hoc analysis of pooled phase 3 data, treatment with CAL/BDP PAD-cream showed significantly higher proportion of patients with an absolute mPASI ≤ 5 and ≤ 2 already at Week 1 and throughout to Week 8 compared to treatment with CAL/BDP gel/TS.

REFERENCES

¹Praestegaard M, Steele F, Crutchley N. Polyaphron Dispersion Technology, A Novel Topical Formulation and Delivery System Combining Drug Penetration, Local Tolerability and Convenience of Application. *Dermatol Ther (Heidelb)*. 2022;12(10):2217-2231. ²Mahil SK, Wilson N, Dand N, Reynolds NJ, Griffiths CEM, Emsley R, et al. Psoriasis treat to target: defining outcomes in psoriasis using data from a real-world, population-based cohort study (the British Association of Dermatologists Biologics and Immunomodulators Register, BADBIR). *Br J Dermatol*. 2020;182(5):1158-66. ³Puig L, Dossentbach M, Berggren L, Ljungberg A, Zachariae C. Absolute and Relative Psoriasis Area and Severity Indices (PASI) for Comparison of the Efficacy of Ixekizumab to Etanercept and Placebo in Patients with Moderate-to-severe Plaque Psoriasis: An Integrated Analysis of UNCOVER-2 and UNCOVER-3 Outcomes. *Acta Derm Venereol*. 2019;99(11):971-7. ⁴Gerdes S, Korber A, Biermann M, Karnthaler C, Reinhardt M. Absolute and relative psoriasis area and severity index (PASI) treatment goals and their association with health-related quality of life. *J Dermatolog Treat*. 2020;31(5):470-5. ⁵Stein Gold et al. *J Drugs Dermatol*. 2021 Apr 1;20(4):420-425. doi: 10.36849/JDD.2021.5653. ⁶Pinter A, Reich A, Arenberger P, et al. Randomized Phase 3 trial demonstrating high efficacy, favourable safety and convenience of a novel calcipotriol and betamethasone dipropionate cream for the treatment of psoriasis [published online ahead of print, 2023 Jul 11]. *J Eur Acad Dermatol Venereol*. 2023;10.1111/jdv.19330. doi:10.1111/jdv.19330

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ABBREVIATIONS

PGA, Physician Global Assessment; mPASI, modified PASI; BDP, betamethasone dipropionate; CAL, calcipotriene; TS, topical suspension; PAD, Polyaphron Dispersion