# Quality of Life and Mental Health of Patients Stratified by Prior Biologic Exposure: Post Hoc Analysis of Brodalumab

**April Armstrong,[1] Brad Glick,[2] Tina Bhutani,[3] Abby Jacobson[4]**

[1]University of Southern California, Los Angeles, CA; [2]Glick Skin Institute, Margate, FL; [3]UCSF Psoriasis and Skin Treatment Center, San Francisco, CA; [4]Ortho Dermatologics (a division of Bausch Health US, LLC), Bridgewater, NJ

## OBJECTIVE

- **To evaluate patient-reported quality of life (QOL) and symptoms of anxiety and depression in patients stratified by prior biologic exposure in a post hoc analysis of the phase 3 AMAGINE-1 trial**

## CONCLUSIONS

- **Patients with psoriasis can experience a profound psychosocial burden that may negatively influence QOL**
- **Brodalumab demonstrated improvements in QOL and symptoms of mental health in patients with psoriasis regardless of prior biologic exposure**

**Presenting Author:** April Armstrong; aprilarmstrong@post.harvard.edu

## INTRODUCTION

- Psoriasis is associated with high rates of depression, anxiety, and difficulties with interpersonal relationships[1]
- Treatment with biologic agents is associated with a decreased incidence of depressive symptoms vs conventional systemic therapies[2]; however, treatment failure can lead to increased disease severity and exacerbate anxiety and depression among patients with psoriasis[3]
- Brodalumab, a human interleukin-17 receptor A antagonist efficacious for the treatment of moderate-to-severe psoriasis in adults, has a unique mechanism of action that blocks multiple inflammatory cytokines involved in psoriasis[4]

## METHODS

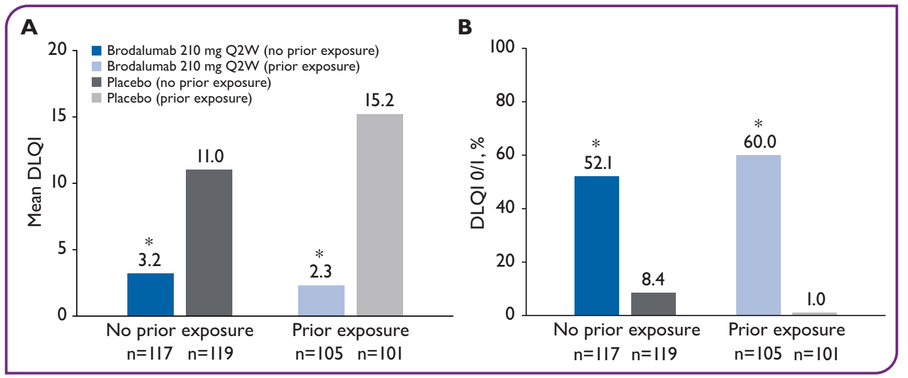
- In the AMAGINE-1 trial, patients with (n=305) or without (n=356) biologic exposure before entering the study received brodalumab 210 mg every 2 weeks or placebo
- The dermatology life quality index (DLQI) was used to measure patient-reported quality of life (QOL; total score range: 0 [no impairment to QOL] to 30 [maximum impairment to QOL])[5,6]
- The hospital anxiety and depression scale (HADS) was used to measure symptoms of anxiety and depression (total score range for each: 0 [normal] to 21 [severe])[7]

## RESULTS

### DLQI

- Mean DLQI at baseline in AMAGINE-1 was 14.2 and 14.1 for patients with or without prior biologic exposure, respectively
- Regardless of prior biologic exposure, those receiving brodalumab exhibited a significant reduction in mean DLQI at week 12 compared with those receiving placebo (Figure 1A)
- The percentage of patients with DLQI of 0 or 1 was significantly higher in patients treated with brodalumab vs placebo at week 12, regardless of prior biologic exposure (Figure 1B)

**Figure 1.** DLQI at week 12 for brodalumab vs placebo by prior biologic exposure. **(A)** Mean DLQI and **(B)** percentage of patients with DLQI of 0 or 1.

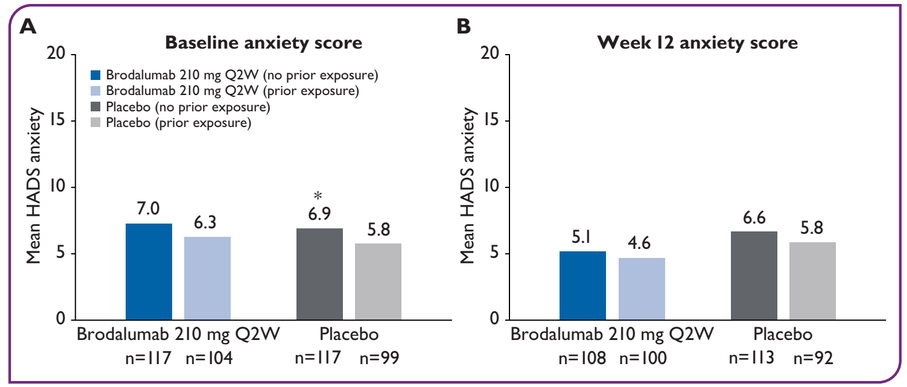



DLQI, dermatology life quality index; Q2W, every two weeks. *$P$<0.0001 vs placebo.

### HADS

- Mean HADS anxiety scores at baseline were similar for the brodalumab groups regardless of prior biologic exposure; for the placebo groups, baseline score was significantly lower in patients with vs without prior biologic exposure (Figure 2A)
- Regardless of prior biologic exposure, there was a marked reduction in mean HADS anxiety scores with brodalumab treatment from baseline to week 12; scores were unchanged from baseline to week 12 in the placebo groups (Figure 2A, 2B)

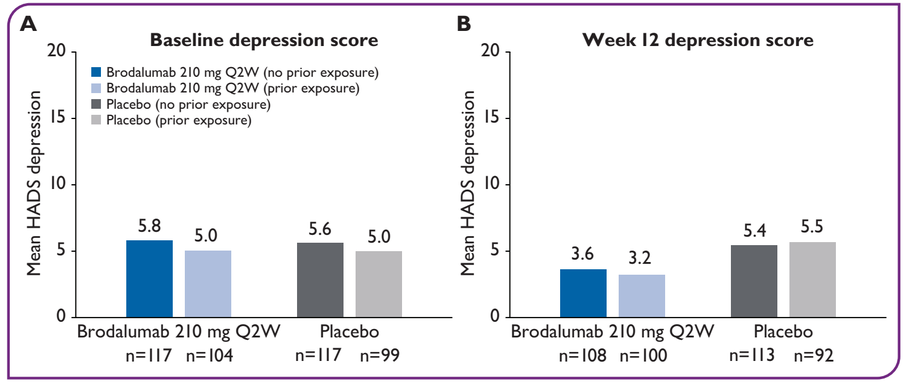
**Figure 2.** Mean HADS anxiety scores for brodalumab and placebo by prior biologic exposure at **(A)** baseline and **(B)** week 12.




HADS, hospital anxiety and depression scale; Q2W, every two weeks. *$P$=0.04 vs prior biologic exposure.

- A similar trend was seen in mean HADS depression scores, with the brodalumab groups exhibiting a marked reduction from baseline to week 12 (Figure 3A, 3B)

**Figure 3.** Mean HADS depression scores for brodalumab and placebo by prior biologic exposure at **(A)** baseline and **(B)** week 12.




HADS, hospital anxiety and depression scale; Q2W, every two weeks.

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**References: 1.** Kolli et al. *Cutis*. 2018;102(5S):21-25. **2.** Strober et al. *J Am Acad Dermatol*. 2018;78:70-80. **3.** Milan et al. *JAAD Int*. 2022;9:11-22. **4.** Kromer et al. *J Dermatolog Treat*. 2021;32:878-882. **5.** Mattei et al. *J Eur Acad Dermatol Venereol*. 2014;28:333-337. **6.** Lewis and Finlay. *J Investig Dermatol Symp Proc*. 2004;9:169-180. **7.** Papp et al. *Br J Dermatol*. 2016;175:273-286.

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