Maintenance and Improvement of Skin Clearance Response With Brodalumab Among Patients With Moderate-to-Severe Psoriasis

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INTRODUCTION

- Brodalumab is a human anti–interleukin-17 receptor A monoclonal antibody that is efficacious in treating moderate-to-severe psoriasis[1]
- Maintenance of skin clearance among patients receiving brodalumab 210 mg subcutaneously every 2 weeks (Q2W) stratified by categories of psoriasis area and severity index (PASI) response at 12 weeks was previously assessed in two phase 3 studies (AMAGINE-2/-3) of adults with moderate-to-severe plaque psoriasis[2]

OBJECTIVE

- To evaluate skin clearance response with brodalumab 210 mg Q2W through week 52 in the phase 3, double-blind, randomized, placebo-controlled AMAGINE-1 trial

METHODS

- Patients in AMAGINE-1 were initially randomized to brodalumab 210 mg Q2W or placebo for 12 weeks[3]
- After 12 weeks, those receiving brodalumab 210 mg Q2W who achieved static physician's global assessment score of 0 or 1 (sPGA 0/1) were re-randomized to brodalumab 210 mg Q2W or placebo
- Beginning at week 16, patients re-randomized to placebo who had return of disease, defined as sPGA ≥3, qualified for retreatment with their induction dose of brodalumab
- 128 patients from AMAGINE-1 who received continuous brodalumab 210 mg Q2W through week 52 were included in this post hoc analysis comprising
  - 83 patients who were re-randomized to brodalumab 210 mg Q2W
  - 45 non–re-randomized patients who received brodalumab 210 mg Q2W after inadequate sPGA response
- Skin clearance was monitored by categories of PASI response using nonresponder imputation

RESULTS

Week 12 PASI Responses

- At week 12, among 128 patients who received continuous brodalumab 210 mg Q2W, 63% achieved PASI 90% improvement (PASI 90) or greater (37% achieved PASI 100 and 26% achieved PASI 90 to <100; Table 1)

Table 1. PASI Response at Week 12 in AMAGINE-1

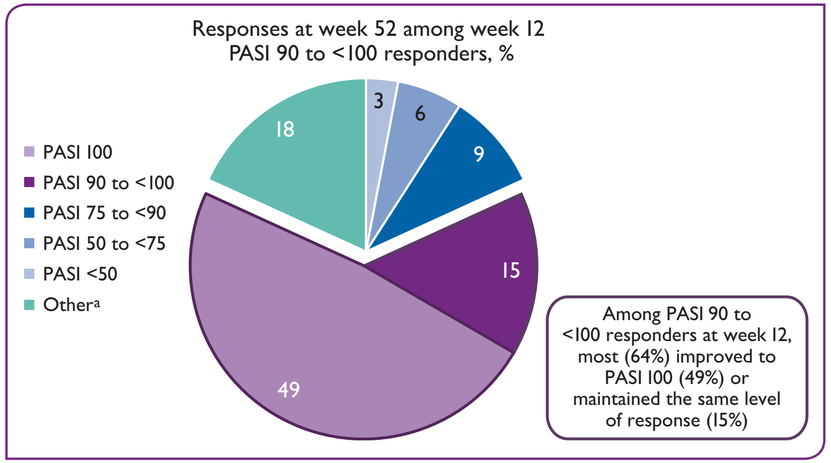
Response at week 12, n (%)	Continuous brodalumab 210 mg Q2W (N=128)
PASI 100	47 (37)
PASI 90 to <100	33 (26)
PASI 75 to <90	21 (16)
PASI 50 to <75	11 (9)
PASI <50	16 (13)

PASI, psoriasis area and severity index; Q2W, every 2 weeks.

PASI Responses at Weeks 16, 28, and 52

- Among patients achieving PASI 100 at week 12, >75% maintained PASI 100 at weeks 16 and 28
  - 81% maintained PASI 100 at week 16
  - 77% maintained PASI 100 at week 28
- Among patients achieving PASI 100 at week 12, 79% maintained PASI 100 through week 52
- Notably, most patients (64%) who achieved PASI 90 to <100 at week 12 either improved to PASI 100 (49%) or maintained the same level of clearance (15%; Figure 1) at week 52

Figure 1. PASI responses at week 52 among patients receiving brodalumab 210 mg Q2W who achieved PASI 90 to <100 at week 12.



PASI, psoriasis area and severity index; Q2W, every 2 weeks. [a]Other includes 6 patients who discontinued before week 52 (n=2), those who received retreatment after return of disease (static physician's global assessment score ≥3) at or after week 16 (n=3), and those with missing data (n=1).

- Of patients who achieved PASI 75 to <90 at week 12, 43% experienced improvement at week 52 (19% improved to PASI 100 and 24% improved to PASI 90 to <100)

CONCLUSIONS

- **These data demonstrate maintenance and continued improvement of skin clearance through week 52 with brodalumab**

Acknowledgments: This study was sponsored by Ortho Dermatologics. Medical writing support was provided by MedThink SciCom and funded by Ortho Dermatologics. Ortho Dermatologics is a division of Bausch Health US, LLC.

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