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EFFICACY OF GUSELKUMAB, A MONOCLONAL ANTIBODY THAT SPECIFICALLY BINDS TO THE P19 SUBUNIT OF IL-23, ON AXIAL-RELATED ENDPOINTS IN PATIENTS WITH ACTIVE PsA WITH IMAGING-CONFIRMED SACROILIITIS: WEEK-52 RESULTS FROM TWO PHASE 3, RANDOMIZED, DOUBLE-BLIND, PLACEBO-CONTROLLED STUDIES

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BACKGROUND

Guselkumab (GUS), an interleukin-23 inhibitor, improved axial symptoms of active psoriatic arthritis (PsA) through week 24 in a pooled analysis from two phase 3 trials (DISCOVER-1 and DISCOVER-2). We now report the efficacy of GUS through 1 year in PsA patients.

MATERIALS AND METHODS

In DISCOVER-1 and DISCOVER-2, 381 and 739 patients with active PsA, respectively, were randomized 1:1 to GUS 100 mg q4w, GUS 100 mg q8w (wk0, wk4, then q8w), or placebo (PBO). Placebo patients crossed over to GUS 100 mg q4w at wk24. Only patients with sacroiliitis at baseline who had either documented imaging confirmation of sacroiliitis in the past or pelvic radiograph confirmation of sacroiliitis at screening were included in this analysis (pooled data from DISCOVER 1 and 2). Efficacy was assessed by BASDAI score, BASDAI50, modified BASDAI (mBASDAI; excludes Q#3), spinal pain (BASDAI Q#2), ASDAS(-CRP) score, and ASDAS responses of inactive disease (< 1.3), major improvement (decrease ≥ 2.0), and clinically important improvement (decrease ≥ 1.1) through week 52. For response endpoints, patients who met treatment failure rules or had missing data were counted as nonresponders through week 24; patients with missing data were counted as nonresponders from weeks 24–52. For changes in scores, a change of 0 was assigned for treatment failures through week 24, and patients who discontinued or had missing data were set to 0 for weeks 24–52. Human leukocyte antigen HLA-B27 was assayed in a subset of 190 of these patients.

RESULTS

Three hundred twelve patients across both studies presented with imaging confirmed sacroiliitis (PBO, n = 118; GUS q8w, n = 91; GUS q4w, n = 103). At baseline, mean BASDAI and ASDAS scores ranged from 6.5–6.6 and 3.9–4.0, respectively; 57/190 (30%) patients were HLA-B27+, and 133/190 (70%) were HLA-B27. Improvements in axial symptoms of PsA were greater in the GUS q4w and q8w groups vs PBO through week 24. The LS mean changes from baseline in BASDAI, spinal pain, mBASDAI, and ASDAS were maintained from week 24 to week 52 in the GUS groups; improvements from baseline to week 52 in the PBO patients who crossed over to GUS were similar to those in the GUS groups. Similar trends were observed for the proportions of patients achieving BASDAI50 (Table 1) and ASDAS responses of inactive disease, major improvement, and clinically important improvement (Fig. 1) at week 52.

Table 1. Efficacy results of GUS at weeks 24 and 52 in PsA patients with axial involvement consistent with sacroiliitis at baseline and either a history of imaging confirmation or pelvic radiograph at screening (pooled data from DISCOVER-1 & 2).

	GUS 100 mg every 4 weeks (n = 103)	GUS 100 mg every 8 weeks (n = 91)	PBO a GUS 100 mg every 4 weeks (n = 118)
Week 24			
LS Mean change in BASDAI (0-10)	-2.7*	-2.7*	-1.3
LS Mean change in spinal paina	-2.5*	-2.7*	-1.2
LS Mean change in modified BASDAIb	-2.6*	-2.7*	-1.4
BASDAI50c, %	(38%) 36/95**	(40%) 34/84 **	(19%) 21/110
LS Mean change in ASDAS	-1.4*	-1.4*	-0.7
Week 52			
LS Mean change in BASDAI (0-10)	-3.1	-2.8	-2.8
LS Mean change in spinal paina	-3.0	-2.7	-2.7
LS Mean change in modified BASDAIb	-3.1	-2.7	-2.8
BASDAI50c, %	48% (46/95)	43% (36/84)	49% (54/110)
LS Mean change in ASDAS	-1.7	-1.6	-1.6

aQuestion 2 of the BASDAI. bPatients with BASDAI > 0 at baseline. c Excludes question 3 of the BASDAI. Unadjusted p-values as noted: *p < 0.001, ** p < 0.01. No statistical comparisons were performed at week 52.

Figure 1. Proportion of patients with ASDAS clinically important improvement, major improvement, and inactive disease.

CONCLUSION

Improvements in axial symptoms were maintained through week 52 in GUS-treated patients with active PsA who had imaging-confirmed sacroiliitis.