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How to treat SpA? From physiotherapy to new IL-17 blocking drugs

OP0231

DUAL NEUTRALISATION OF IL-17A AND IL-17F WITH BIMEKIZUMAB WAS ASSOCIATED WITH IMPROVEMENTS IN PATIENT-REPORTED AND QUALITY-OF-LIFE OUTCOMES IN PATIENTS WITH ACTIVE ANKYLOSING SPONDYLITIS: RESULTS FROM A PHASE 2B, RANDOMISED, DOUBLE-BLIND, PLACEBO-CONTROLLED, DOSE-RANGING STUDY

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Background: Ankylosing spondylitis (AS) is a chronic immune-mediated inflammatory disease primarily affecting the sacroiliac joints and spine, causing pain, stiffness and loss of mobility and function. These manifestations can severely impair patients' quality of life (QoL).[1] Dual neutralisation of IL–17F in addition to IL-17A has been shown to reduce inflammation to a greater extent than inhibition of IL-17A alone in disease–relevant cell models.[2] Results previously reported from this Phase 2b study (NCT02963506) demonstrated that, during the 12-week double-blind treatment period, bimekizumab provided substantial clinical improvements in disease outcome measures, including Assessment of SpondyloArthritis international Society 40% (ASAS40), in patients with active AS.[3]

Objectives: To assess the impact of bimekizumab on patient-reported and QoL outcomes at Week 12 in patients with active AS.

Methods: In this 48-week Phase 2b study (double blind to Week 12 then dose blind to Week 48), 303 patients with active AS (Bath Ankylosing Spondylitis Disease Activity Index [BASDAI] $\geq$4; spinal pain $\geq$4 [0–10 numerical rating scale]), fulfilling the modified New York criteria, were randomised 1:1:1:1:1 to receive subcutaneous bimekizumab 16mg, 64mg, 160mg, 320mg or placebo Q4W for 12 weeks. Prior exposure to one anti-TNF therapy was permitted. Secondary and other endpoints included: BASDAI, $\geq$50% improvement in BASDAI (BASDAI 50), Bath Ankylosing Spondylitis Functional Index (BASFI), Ankylosing Spondylitis Quality of Life (ASQoL) and Patient's Global Assessment of Disease Activity (PGADA) at Week 12. Safety was also assessed.

Results: Overall, 297 (98.0%) patients completed the 12-week double-blind period. Baseline scores on patient-reported and QoL outcomes were similar across treatment groups (Table). At Week 12, BASDAI 50 was achieved by 23.7–47.5% of bimekizumab-treated patients versus 11.9% receiving placebo. All bimekizumab doses were associated with greater reductions in individual BASDAI components, including: fatigue (range: -1.6 to –2.5 vs -0.8); neck, back or hip pain (-2.0 to -3.3 vs -1.2); discomfort due to tenderness to touch or pressure (-1.6 to -3.0 vs -1.1); level of morning stiffness (-2.5 to -3.5 vs -1.2) and duration of morning stiffness (-1.7 to -3.3 vs -1.4) (Table). Compared with placebo, greater reductions from baseline were also achieved with bimekizumab for BASFI (-1.4 to -2.2 vs –0.6), ASQoL (-2.3 to -4.6 vs -1.3) and PGADA (-1.9 to -3.3 vs -1.0). The overall incidence of treatment-emergent adverse events was 89/243 (36.6%) for bimekizumab-treated patients versus 23/60 (38.3%) for placebo; the majority were of mild or moderate intensity. No unexpected safety findings were observed.

Table. Disease outcome measures at baseline and Week 12 (full analysis set)

Mean (SD)	Placebo (n=60)	Bimekizumab 16mg (n=61)	Bimekizumab 64mg (n=61)	Bimekizumab 160mg (n=60)	Bimekizumab 320mg (n=61)
BASDAI: fatigue					
Baseline	6.7 (1.6)	7.1 (1.6)	6.8 (1.3)	6.3 (1.8)	6.4 (1.9)
Week 12	5.8 (2.3)	5.5 (2.2)	4.3 (2.3)	4.3 (2.3)	4.4 (2.4)
BASDAI: neck/back/hip pain					
Baseline	7.4 (1.6)	7.7 (1.2)	7.7 (1.2)	7.0 (1.7)	7.5 (1.5)
Week 12	6.3 (2.5)	5.8 (2.4)	4.5 (2.4)	4.4 (2.5)	4.2 (2.4)
BASDAI: discomfort due to tenderness to touch/pressure					
Baseline	5.9 (2.1)	6.2 (2.4)	6.2 (2.0)	5.5 (2.3)	6.2 (2.3)
Week 12	4.9 (2.6)	4.6 (2.5)	3.6 (2.4)	3.2 (2.5)	3.2 (2.5)
BASDAI: level of morning stiffness					
Baseline	7.3 (1.8)	7.3 (2.0)	7.3 (1.9)	6.9 (2.0)	7.1 (2.1)
Week 12	6.2 (2.4)	4.8 (2.6)	4.0 (2.5)	4.1 (2.4)	3.6 (2.4)
BASDAI: duration of morning stiffness					
Baseline	6.3 (2.4)	5.8 (2.5)	6.4 (2.6)	6.0 (2.3)	6.1 (2.6)
Week 12	5.0 (2.6)	4.1 (2.8)	3.4 (2.4)	3.3 (2.3)	2.8 (2.0)
BASFI: overall score					
Baseline	5.6 (2.0)	5.9 (1.7)	6.0 (1.8)	5.6 (2.2)	5.9 (2.0)
Week 12	5.0 (2.4)	4.5 (2.4)	4.1 (2.4)	3.8 (2.2)	3.7 (2.5)
ASQoL					
Baseline	8.9 (4.7)	8.9 (4.2)	8.6 (4.1)	8.5 (4.3)	8.7 (4.3)
Week 12	7.6 (5.2)	6.6 (5.0)	4.5 (3.5)	4.9 (4.5)	4.1 (4.1)
PGADA					
Baseline	7.0 (1.7)	7.1 (1.5)	7.3 (1.6)	6.5 (1.8)	7.1 (1.9)
Week 12	6.0 (2.4)	5.3 (2.3)	4.0 (2.2)	4.3 (2.5)	3.9 (2.2)

N numbers shown are group totals at randomisation. Multiple imputation data presented for ASQoL; observed data are presented for BASDAI, BASFI and PGADA. ASQoL, Ankylosing Spondylitis Quality of Life; BASDAI, Bath Ankylosing Spondylitis Disease Severity Index; BASFI, Bath Ankylosing Spondylitis Functional Index; PGADA, Patient's Global Assessment of Disease Activity; SD, standard deviation.

Conclusion: Dual neutralisation of IL-17A and IL-17F with bimekizumab was associated with improvements in patient-reported and QoL outcomes including pain, fatigue and tenderness in patients with active AS after 12 weeks of treatment. No new safety findings were observed versus previous studies of bimekizumab.[3,4]

REFERENCE:

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Disclosure of Interests:

Désirée van der Heijde Consultant for: AbbVie, Amgen, Astellas, AstraZeneca, Bristol-Myers Squibb, Boehringer Ingelheim, Celgene, Daiichi, Eli-Lilly, Galapagos, Gilead, GlaxoSmithKline, Janssen, Merck, Novartis, Pfizer, Regeneron, Roche, Sanofi, Takeda, Union Chimique Belge, Lianne S. Gensler Grant/research support from: Abbvie, Amgen, UCB Pharma, Consultant for: Novartis, Lilly, Janssen, Atul Deodhar Grant/research support from: AbbVie, Amgen, Eli Lilly, GSK, Janssen, Novartis, Pfizer, and UCB, Consultant for: AbbVie, Amgen, BMS, Eli Lilly, Janssen, Novartis, Pfizer, and UCB, Xenofon Baraliakos Grant/research support from: AbbVie, Boehringer Ingelheim, Bristol-Myers Squibb, Celgene, Centocor, Chugai, Janssen, MSD, Novartis, Pfizer Inc, Roche and UCB, Grant/research support from: AbbVie, Pfizer, Merck Sharp & Dohme, UCB Pharma, Novartis, Consultant for: AbbVie, Bristol-Myers Squibb, Boehringer Ingelheim, Celgene, Chugai, Janssen Biologics, Novartis, Pfizer, UCB Pharma, Galapagos, Speakers bureau: AbbVie, Chugai, Janssen, Novartis, Pfizer, UCB Pharma, Denis Poddubnyy Grant/research support from: AbbVie, Merck Sharp & Dohme, Novartis, Consultant for: AbbVie, Bristol-Myers Squibb, Janssen, Merck Sharp & Dohme, Novartis, Pfizer, UCB Pharma, Speakers bureau: AbbVie, Bristol-Myers Squibb, Janssen, Merck Sharp & Dohme, Novartis, Pfizer, Roche, UCB Pharma, Mary Katherine Farmer Employee of: UCB Pharma, Dominique Baeten Shareholder of: UCB Pharma, Employee of: UCB Pharma, Jason Coarse Employee of: UCB Pharma, Marga Oortgiesen Shareholder of: UCB Pharma, Employee of: UCB Pharma, maxime dougados Grant/research support from: Eli Lilly and Company, Pfizer, AbbVie, and UCB Pharma, Consultant for: Eli Lilly and Company, Pfizer, AbbVie, and UCB Pharma

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OP0232

NETAKIMAB REDUCES THE DISEASE ACTIVITY OF RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS. RESULTS OF ASTERA STUDY

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Background: Efficacy and safety of netakimab (NTK), a humanized anti-IL17A antibody, was established in phase 2 clinical trials in patients (pts) with radiographic axial spondyloarthritis (r-axSpA)[1] and psoriasis[2].

Objectives: The abstract presents 16-week data from ongoing ASTERA study (NCT03447704) in pts with active r-axSpA.

Methods: ASTERA is a phase 3 international double-blind placebo (PBO)-controlled study. 228 adult pts with r-axSpA, active (BASDAI $\geq$ 4) despite the standard NSAIDs, were randomly assigned (1:1) to receive 120 mg NTK or PBO SC at Week (Wk) 0,1,2 and then q2w through Wk 16. After Wk 16 all pts will start to receive NTK up to Wk 52. Primary endpoint was ASAS40 rate at Wk 16.