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RELATIONSHIP BETWEEN ASDAS STATES AND INHIBITION OF STRUCTURAL DAMAGE PROGRESSION WITH SECUKINUMAB IN ANKYLOSING SPONDYLITIS: DATA FROM MEASURE 1 TRIAL

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Background: The primary treatment goal in patient with axial Spondyloarthritis (axSpA) is to optimize health-related quality of life through control of signs and symptoms, no structural damage progression and preservation of function.¹ The 2017 Treat to Target recommendations (T2T) outlined Ankylosing Spondylitis Disease Activity Score (ASDAS) -inactive disease (ID) as an optimal treatment target for axSpA patients.¹ ASDAS states were shown to correlate with syndesmophyte formation as assessed with X-Ray and MRI changes.² Secukinumab, a fully human monoclonal antibody that directly inhibits IL-17A, demonstrated sustained efficacy and low radiographic progression through 4 years in patient with ankylosing spondylitis (AS) in MEASURE 1 study (NCT01863732).³

Objectives: To investigate the relationship between ASDAS states and inhibition of radiographic structural progression in patient with AS treated with secukinumab 150 mg from the MEASURE 1 study over 4-years using *post hoc* analysis.

Methods: Lateral radiographs of the cervical and lumbar spine were assessed using the modified Stoke Ankylosing Spondylitis Spinal Score (mSASSS: range 0-72). Images were scored twice at baseline/Week (Wk) 104 and baseline/Wk 208 by 2 central readers blinded to treatment/visit; mean change from baseline to Wk 104 or 208 in mSASSS scores were used. The ASDAS-CRP was used to define the disease activity states at Wks 16, 52, 104, and 208: ID (ASDAS-CRP < 1.3), Low Disease Activity (LDA, 1.3 ≤ ASDAS-CRP < 2.1) or pooled High/Very High Disease

Activity (HDA/VHDA, ASDAS-CRP ≥ 2.1) given low number of patients with VHDA. Sustained ASDAS state at Wk 104 was defined as reaching the same state at Wk 104 and Wk 16 and/or 52. Sustained ASDAS state at Wk 208 was defined as reaching the same state at Wk 208 and Wk 16 and/or 52. Overall, 87 patients on secukinumab 150 mg were in the extension trial; of these, 57 and 71, respectively, had evaluable X-rays at Wks 104 and 208.

Results: The proportion of patients achieving each ASDAS state are shown in **Table**. Patients with ASDAS-ID were associated with numerically lower mSASSS mean change from baseline to Wks 104/208 compared to other ASDAS states (**Figure**).

Conclusion: In this *post hoc* analysis, patients with ASDAS-ID state and sustained ASDAS-ID state had lower radiographic progression than patients with higher disease activity at 2 and 4-years suggesting a potential relationship between ASDAS state and structural progression in patients with AS. Further confirmation is needed in larger prospective studies.

REFERENCES:

- [1] Smolen JS, et al. Ann Rheum Dis. 2018;77:3-17.
- [2] Poddubnyy D, et al. Ann Rheum Dis. 2014;73:422.
- [3] Braun J, et al. *Rheumatology (Oxford)* 2018. Doi: 10.1093/rheumatology/key375.

Table: Proportion of Patients with ASDAS States through Wk 208

ASDAS states	Wk 16 N = 86	Wk 52 N = 84	Wk 104 N = 80	Wk 208 N = 78
ID	24.4	25.0	30.0	26.9
LDA	34.9	39.3	38.8	33.3
HDA/VHDA	40.7	35.7	31.3	39.7

ID, Inactive Disease (ASDAS-CRP < 1.3); LDA, Low Disease Activity (1.3 ≤ ASDAS-CRP < 2.1); HDA/VHDA, High/very high Disease Activity (ASDAS-CRP ≥ 2.1)
N, total number patients with ASDAS

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