for extended indication for immunisation against Haemophilus in vulnerable groups of adults and has implications for targeted adult Haemophilus influenzae vaccine development.

### SAT0113 DISCORDANCE OF CLINICAL REMISSION AND IMAGING REMISSION BY ULTRASONOGRAPHY IN PATIENTS WITH RHEUMATOID ARTHRITIS WITH BIOLOGIC AGENTS

Y. Kondo1, Y. Kano1, S. Saito1, Y. Ohta1, K. Sakata1, Y. Inoue1, C. Takahashi1, K. Hiramoto1, J. Inamo1, T. Takeuchi1.

**Background:** Residual synovitis can be detected by sensitive modalities such as ultrasonography in patients with rheumatoid arthritis in clinical remission. On the other hand, a previous study has shown that ultrasound-guided treatment provides modest benefit compared to a conventional strategy aiming clinical remission in early patients. It is still unclear how discordant clinical remission is from imaging remission by ultrasonography in patients treated with biologic agents.

**Objectives:** To clarify the discordance between clinical remission and imaging remission in patients with rheumatoid arthritis treated with biologic agents.

**Methods:** Patients with rheumatoid arthritis who were treated with biologic agents and in clinical remission defined as disease activity score for 28 joints (DAS28)<2.6 were enrolled. All patients were performed comprehensive ultrasound examination of 44 joints as well as physical examinations. Ultrasound images of gray scale (GS) and power doppler (PD) were evaluated with a semi-quantitative score of 0-3. Imaging remission with ultrasound was defined as no PD signal detected in any joints. Clinical information was collected from their medical charts.

**Results:** A total of 41 patients were enrolled with 22 patients treated with tumor necrosis factor (TNF)-α inhibitors and 19 with interleukin (IL)-6 inhibitors. The mean age, female ratio, the mean disease duration, and the mean duration of clinical remission were 60 years old, 87%, 5.1 years and 11.5 years. The imaging remission by ultrasonography was observed only in 51.2%. When patients were divided according to biologic agents, baseline characteristics including median age, disease duration and clinically remission duration were comparable between both groups, while the rates of seropositivity and the stage of radiological progression was higher in IL-6 group (seropositivity, p=0.04; radiological progression, p=0.02). The mean DAS28 was 1.93 in the TNFα group and 1.02 in the IL-6 group. The discordance of clinical remission and imaging remission was observed in 28.6% of the TNFα group and 71.4% of the IL-6 group (p=0.03). The residual synovitis scores of GS and PD in 44 joints were significantly lower in the TNFα than the IL-6 group (GS, 1.1±1.8 vs 4.7±4.6, p<0.01; PD, 0.6±1.3 vs 3.3±3.5, p<0.01, respectively). A receiver operating characteristic curve demonstrated an optimal score of DAS28 that discriminated imaging remission as 1.89 in the TNFα group and 1.25 in the IL-6 group.

**Conclusion:** Our results showed that there was substantial discordance between clinical remission and imaging remission, especially in the patients treated with IL-6 inhibitors. In patients treated with biologic agents, clinical remission should be assessed more stringently than the usual 2.6, and ultrasono-guided management may be useful.

**References:**


**Disclosure of Interests:** None declared DOi: 10.1136/annrheumdis-2020-eular.2635