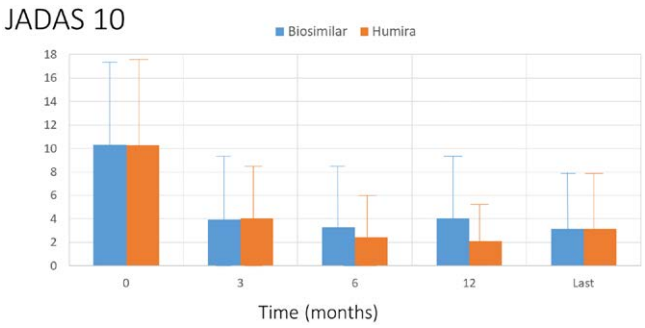
No difference in disease activity parameters between patients receiving the originator or biosimilars were noted, neither at baseline, during the course of treatment nor at last observation upon treatment (Figure 1). At the time of switching, 46 (92%) had JADAS minimal disease activity (MDA) and 30 (69%) were in JASDAS remission. At last observation, those numbers were comparable with 42 (86%) with JADAS MDA and 28 (57%) with JADAS remission.

In total, 45 adverse events (AE) were reported in 45 patients upon biosimilar treatment. 26 patients had 1, 12 patients had 2 and 6 patients reported 3 and 1 reported 4 events. Adverse event of special interest were Infection associated leukopenia (n=1), COVID 19 infection (n=1), Uveitis flare (n=8), other disease deterioration (arthritis flare) (n=20), injection site reaction n=2. A single serious AE was reported. A 16 year old female adolescent was admitted for unexpected CK elevation. In 10 patients, Adalimumab was discontinued, in 2 it was temporarily paused.

Conclusion: This article is the first attempt to present a large sample of data on JIA patients exposed to Adalimumab biosimilars. Since approval of Adalimumab-Biosimilars, limited experience from clinical practice is available. Biosimilars are used in a minority of patients and by a minority of centers although no difference in efficacy or safety was noted from our analysis.



Disclosure of Interests: Gerd Horneff Speakers bureau: Novartis, MSD, Sobi, Grant/research support from: MSD, Roche, Frank Dressler: None declared, Michael Rühlmann: None declared, Tilmann Geikowski: None declared, Sonja Mrusek: None declared, Ariane Klein: None declared

DOI: 10.1136/annrheumdis-2021-eular.1433

POS1304 JUVENILE SYSTEMIC SCLEROSIS (JSSC) PATIENTS WITH OVERLAP CHARACTERISTICS DO NOT HAVE MILD DISEASE. RESULTS FROM THE JSSC INCEPTION COHORT. WWW.JUVENILE-SCLERODERMA.COM

I. Foeldvari[1], J. Klotsche[2], O. Kasapcopur[3], A. Adrovic[3], K. Torok[3], M. T. Terreri[3], A. P. Sakamoto[3], B. Feldman[3], V. Stanevicha[3], J. Anton[3], F. R. Sztajnbok[3], R. Khubchandani[3], E. Alexeeva[3], M. Katsikas[3], S. Sawhney[3], V. Smith[3], S. Appenzeller[3], T. Avcin[3], M. Kostik[3], T. Lehman[3], E. Marrani[3], D. Schonenberg[3], W. A. Sifuentes-Giraldo[3], N. Vasquez-Canizares[3], M. Janarthanan[3], M. Moll[3], D. Nemcova[3], A. Patwardhan[3], M. J. Santos[3], C. Battagliotti[3], L. Berntson[3], B. Bica[3], J. Brunner[3], R. Cimaz[3], P. Costa Reis[3], D. Eleftheriou[3], L. Harel[3], G. Horneff[3], S. Johnson[3], D. Kaiser[3], T. Kallinich[3], D. Lazarevic[3], K. Minden[2], S. Nielsen[3], F. Nuruzzaman[3], S. Opsahl Hetlevik[3], Y. Uziel[3], N. Helmus[1]. *[1]Hamburg Centre for Pediatric and Adolescence Rheumatology, Schön Klinik Hamburg Eilbek, Hamburg, Germany*; *[2]German Rheumatism Research Center, German Rheumatism Research Center, Berlin, Germany*; *[3]JSSC Collaborative Group, Hamburg Centre for Pediatric and Adolescence Rheumatology, Hamburg, Germany*

Background: Juvenile systemic sclerosis (jSSc) is an orphan disease with a prevalence of around 3 in 1, 000,000 children. It is known that in pediatric jSSc cohorts, there are a significant number of patients with overlap features, such as arthritis and myositis. However, the disease burden between those with and without overlap features in jSSc has not been defined.

Objectives: Compare the clinical phenotype between children with and without overlap features in the juvenile systemic scleroderma inception cohort (jSScC).

Methods: A cross-sectional study was performed using baseline visit data. Demographic, organ system evaluation, autoantibody profile, treatment, and patient and physician reported outcome variables were extracted from jSScC. Comparison between patients with and without overlap features was performed using chi-square test and Mann Whitney U-test.

Results: At the time of data extraction, 175 jSSc patients were enrolled in the cohort, 81% were Caucasian and 81% female. Mean disease duration was 3.1 year (±2.7). Mean age at Raynaud´s onset was 10 years (±3.8) and mean age of first non-Raynaud´s was 10.2 years (±3.8). Overlap features occurred 17% (n=30) of the cohort, 12.5% in the diffuse cutaneous (dc) jSSc and in 30% in the limited cutaneous (lc) jSSc. Significant differences in clinical characteristics were found between those patients with compared to without overlap characteristics. Patients with overlap features presented more frequently with Gottron papules (p=0.007), swollen joints (p=0.019), muscle weakness (p=0.003), and lung involvement documented by decreased DLCO < 80% (p=0.06) and/or abnormal high resolution computed tomography (p=0.049). Anti-PM/Scl autoantibodies were also more common in this group (p=0.001). Significantly more patients without overlap features had Raynaud´s (p=0.006). Physician Global Assessment of disease activity was significantly higher in patients with overlap features (41 vs 34; p=0.041). (Table 1.)

Table 1. Demographic and clinical characteristics of jSSc patients with and without overlap features.

	Whole Cohort N=175	Patients without overlap N=145	Patients with overlap N=30	P value
Female to Male Ratio	4.3:1 (142/33)	4:1 (116/29)	6.5:1 (26/4)	0.395
Cutaneous subtype				
Diffuse subtype (N)	73% (128)	112	16	
Limited subtype (N)	27% (47)	33	17	
Mean disease duration (years)	3.1 (± 2.7)	3.2 (± 2.8)	3.1 (± 2.2)	0.291
Mean age of onset of Raynaud´s (years)	10.0 (± 3.8) 17 non-Raynaud	10.0 (± 3.8) 10 non-Raynaud	10.0 (± 3.7) 7 non-Raynaud	0.931
Mean age of onset of non-Raynaud´s (years)	10.2 (± 3.8)	10.2 (± 3.9)	9.8 (± 3.7)	
Disease modifying drugs (N)	88% (154)	89% (129)	83% (25)	0.388
Raynaud´s phenomenon	90% (158)	93% (135)	77% (23)	0.006
Anti-PMScl	18% (12/68)	9% (5/53)	47% (7/15)	0.001
Gottron Papules (N)	27% (46/171)	23% (33/144)	48% (13/27)	0.007
DLCO <80% (N)	44% (39/88)	39% (28/71)	65% (11/17)	0.06
Abnormal findings in HRCT (N)	44% (59/133)	40% (43/107)	62% (16/26)	0.049
Proportion of patients with swollen joints	18% (32)	14% (21)	37% (11)	0.019
Muscle Weakness (N)	21% (31/149)	16% (20/123)	42% (11/26)	0.003
Physician global disease activity (0-100) min -max	35 (0-90) n=141	34 (0-90) n=114	41 (0-80) n=27	0.041

Conclusion: Results from this large international cohort of jSSc patients demonstrate significant differences between patients with and without overlap features. Patients with overlap have significantly more interstitial lung disease and more physician rated disease activity and should not be considered to have more "mild disease".

Supported by the "Joachim Herz Stiftung"

Disclosure of Interests: None declared

DOI: 10.1136/annrheumdis-2021-eular.1613

POS1305 TREATMENT RESPONSE TO TUMOR NECROSIS FACTOR INHIBITORS IN ADULTS WITH JUVENILE IDIOPATHIC ARTHRITIS: DATA FROM THE NOR-DMARD STUDY

I. Bardan[1], K. M. Fagerli[2], J. Sexton[2], G. Bakland[3], P. Mielnik[4], L. M. Paucar Loli[5], T. K. Kvien[1,2], E. Kristianslund[2], A. B. Aga[2,6]. *[1]University of Oslo, Faculty of Medicine, Oslo, Norway*; *[2]Diakonhjemmet Hospital, Division of Rheumatology and Research, Oslo, Norway*; *[3]University Hospital Northern Norway, Department of Rheumatology, Oslo, Norway*; *[4]Helse Førde, Section for Rheumatology, Department for Neurology, Rheumatology and Physical Medicine, Førde, Norway*; *[5]Lillehammer Hospital for Rheumatic Diseases, Department of Rheumatology, Lillehammer, Norway*; *[6]Oslo University Hospital, Department of Rheumatology, Oslo, Norway*

Background: Juvenile idiopathic arthritis (JIA) can cause considerable pain and disability in childhood and adulthood. Studies exploring the efficacy of medications in adult JIA patients are limited, although tumor necrosis factor inhibitors (TNFi) have been increasingly used in this patient group.

Objectives: To explore the efficacy of TNFi ± comedication on disease activity in adult JIA patients, compared to a weighted rheumatoid arthritis (RA) cohort.

Methods: Data from NOR-DMARD, a longitudinal observational study including patients > 18 years starting or switching DMARD treatment, was used [1]. Patients with a clinical JIA diagnosis, or patients with other inflammatory joint diseases diagnosed before 16 years were identified from the study population. RA patients were included for comparative purposes.

Disease activity measurements and remission rates among patients starting treatment with TNFi ± comedication were collected at baseline, 3 and 6 months.