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 JADAS 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.

JADAS 10

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POS1304

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

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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 sclerosis 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)	10.0 (± 3.8)	10.0 (± 3.7)	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-PM/Scl	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."

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POS1305

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

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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 $\pm$ 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 $\pm$ comedication were collected at baseline, 3 and 6 months.

Changes in disease activity and absolute remission rates after 3 and 6 months were calculated. Remission rates and change in disease activity from baseline were compared between JIA patients and a weighted RA cohort with weights based on age and gender, using linear and logistic regression for continuous and categorical variables, respectively.

Results: 281 JIA patients (68.9% female, mean (SD) age 32.1 (11.1) years, mean (SD) diagnosis duration 23.5 (12.2) years) and 1374 RA patients (71.6% female, mean (SD) age 52.7 (14.5) years, mean (SD) diagnosis duration 9.5 (10.0) years) were included in the analyses. Age, gender distribution and disease duration differed significantly between cohorts.

Both groups had a significant improvement across all disease activity measures after 3 months (Table 1), which was maintained after 6 months across all measures except MHAQ. The RA group had a significantly greater 3- and 6-month improvement in SJC28. Both groups had an overall 6-month increase in absolute remission rates. The JIA group had a significantly higher 3-month DAS28 remission rate (Figure 1). This difference was not significant after 6 months, as remission rates from 3 to 6 months in the JIA group declined across all measures.

Table 1.

	Baseline			Change to 3 months			Change to 6 months		
	JIA*	RA*	Diff.‡	JIA*	RA*	Diff.‡	JIA*	RA*	Diff.‡
ESR, mm/h	18.7 (18.9)	25.5 (22.0)	1.3 (-2.3 to 4.9)	-7.4 (15.8)	-7.6 (16.6)	-0.3 (-4.4 to 3.8)	-7.4 (16.8)	-8.5 (18.2)	0.0 (-5.7 to 5.7)
SJC28	2.5 (3.6)	5.5 (5.4)	1.6 (1.3 to 2.0)	-1.4 (3.4)	-3.1 (4.7)	-1.0 (-1.7 to -0.3)	-1.6 (3.2)	-3.5 (5.1)	-1.0 (-1.9 to -0.1)
TJC 28	4.0 (5.6)	6.6 (6.4)	1.3 (0.4 to 2.3)	-1.8 (3.9)	-3.1 (5.9)	-0.6 (-1.4 to 0.2)	-1.8 (3.9)	-3.9 (6.2)	-1.0 (-2.0 to 0.1)
DAS28	3.6 (1.4)	4.5 (1.6)	0.3 (0.1 to 0.6)	-1.2 (1.3)	-1.2 (1.4)	-0.0 (-0.3 to 0.3)	-1.2 (1.3)	-1.5 (1.4)	-0.2 (-0.6 to 0.2)
SDAI	16.8 (10.6)	23.1 (14.3)	2.4 (0.3 to 4.5)	-7.7 (9.9)	-10.9 (12.7)	-2.0 (-4.2 to 0.2)	-7.9 (8.6)	-13.2 (13.6)	-2.8 (-5.8 to 0.2)
PGA	51.4 (26.3)	49.9 (25.5)	-4.0 (-8.5 to 0.5)	-20.6 (26.7)	-17.0 (26.7)	2.7 (-2.2 to 7.6)	-21.6 (25.3)	-19.1 (28.7)	3.4 (-3.0 to 9.8)
MHAQ	0.6 (0.5)	0.7 (0.5)	0.0 (-0.1 to 0.1)	-0.24 (0.42)	-0.22 (0.42)	0.0 (-0.1 to 0.1)	-0.23 (0.40)	-0.25 (0.45)	0.0 (-0.1 to 0.1)

*Mean (SD)‡ Weighted group difference, RA coefficient (95 % confidence interval)

Figure 1. Mean 3- and 6-month remission rates with error bars (SE)

Conclusion: TNFi was equally effective in reducing disease activity in the JIA and RA cohort after 3 and 6 months, and in inducing remission after 6 months. Absolute remission rates in the JIA group declined from 3 to 6 months across all measures, and studies with longer duration are needed to explore the long-term efficacy of TNFi in the patient groups.

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POS1306

TREATMENT STRATEGIES IN CHRONIC RECURRENT MULTIFOCAL OSTEOMYELITIS (CMRO) OR CHRONIC NON-BACTERIAL OSTEOMYELITIS (CNO): SYSTEMATIC REVIEW AND META-ANALYSIS

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Background: Glucocorticoids (GC), bisphosphonates (BP), non-steroidal anti-inflammatory drugs (NSAID) and classical synthetic or biological disease-modifying antirheumatic drugs (cs/bDMARD) have been employed in the treatment of chronic recurrent multifocal osteomyelitis (CRMO) or chronic non-bacterial osteomyelitis (CNO).^{1,2} This one is a rare bone childhood illness and none treatment guidelines have been carried out till present.³

Objectives: To assess which treatment schedule employed in CRMO had the best response rates and try to expose a treatment recommendation.

Methods: A systematic literature review was made using Medline, Embase, Cochrane library and the Web of Science databases. The search strategy focused on synonyms of CRMO. A prevalence meta-analysis was performed to evaluate each treatment response. Stata 15.1 was used to perform statistical analysis.

Results: The search identified 1883 articles, of which 43 were finally selected. Complete response rate reached with NSAIDs was acceptable [50% (CI95% 40-60)]. Lower response rates were reached by GC treatment [44% (CI95% 25-63)] or csDMARD [38% (CI95% 28-48)]. The best complete response rates were reached by bDMARD and BP treatments [69% (CI95% 56-82) and 73% (CI95% 62-84), respectively].

Conclusion: This review and meta-analysis supports, taking into account its remission rates and its risk-benefit profile, NSAIDs as potential first-line agents in CRMO treatment. bDMARD and BP have reached the higher remission rates, turning into helpful treatment alternatives. There is not any treatment guidelines driving CRMO patients, but this analysis could help to select a suitable agent for each patient. Decision-making should be individualized.

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POS1307

ULTRASOUND-DETECTED TENOSYNOVITIS IN ANKLES WITH CLINICALLY ACTIVE DISEASE OF CHILDREN WITH NEW-ONSET JUVENILE IDIOPATHIC ARTHRITIS DOES NOT AFFECT THE CHANCE TO ACHIEVE DISEASE REMISSION

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