benign oral aphthosis to IBD, both in homozygous and heterozygous forms. Our finding suggests that the presence of this mutation is a risk factor for inflammatory aphthosis. Whether this mutation will eventually lead to IBD is uncertain. Other unknown environmental and genetic factors might have a role in the final phenotype of the disease.

As bipolar aphthosis and recurrent fever can be misdiagnosed as Behçet disease, pro-inflammatory genetic mutations such as IL-10RA mutations should be considered in the setting of incomplete Behçet disease.

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THU0551 TREATMENT STRATEGY STUDY IN NEW ONSET DMARD NAIVE JUVENILE IDIOPATHIC ARTHRITIS FIRST RESULTS ON 24 MONTHS CLINICAL OUTCOME

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Background: In rheumatoid arthritis treatment, targeted treatment has shown to improve disease outcomes including the option of drug tapering and discontinuation. In non-systemic juvenile idiopathic arthritis (nsJIA) this has not been tried in a trial.

Objectives: To investigate which of three treatment strategies, targeting at drug-free inactive disease, is most effective and safe in recent onset DMARD-naïve nsJIA.

Methods: We conducted a randomised, multicenter, treatment strategy study with 24 months of follow up. Patients, 2–16 years old with symptom duration <18 months were randomised to 1) Sequential DMARD-monotherapy (sulfasalazine (SSZ) or methotrexate (MTX), 2) Combination therapy MTX +6 weeks prednisolone, 3) Combination therapy MTX +etanercept. Treatment to target entailed three-monthly treatment intensifications in case of persistent disease activity. DMARDs were tapered to nil in case of inactive disease for at least 3 (in oligoarticular) or 6 (in polyarticular) months. After 24 months, primary outcomes were time-to-inactive-disease and time-to-flare after DMARD discontinuation. Secondary outcomes were adapted ACRPedi30/50/70/90scores, functional ability and toxicity. Missing data were imputed.

Results: 94 children (67% girls) with a median (InterQuartile Range) age of 9.1 (4.6–12.9) years were enrolled: 32 in arms 1 and 2, 30 in arm 3. Eleven had oligoarticular JIA, n=73 polyarticular JIA and n=8 juvenile psoriatic arthritis, 37% were ANA positive. At baseline VAS physician was median (IQR) 50^{39–58} mm, VAS patient 54^{37–70} mm, ESR 6 (2–14) mm/hr, active joints 8, ^{5–12} limited joints 2.5 (1–5), and CHAQ score 0.9 (0.6–1.5).

After 24 months 61% (arm 1), 63% (arm 2) and 61% (arm 3) of patients had inactive disease and 45% (arm 1) 31% (arm 2) and 38% (arm 3) had stopped all DMARD(s). Time to inactive disease (median 9.0 (6.0–12.0) months) was not significantly different between arms, nor was time to flare (18.0 (15.0–21.0) months). Adapted ACRPedi-scores were comparably high between arms. Functional ability

improved and remained almost normal. Toxicity reports showed mild events in similar rates across all arms.

	Arm 1 n=31	Arm 2 n=32	Arm 3 n=29
ACRPedi50 (%) (CI)	85.5 (72.4–98.6)	83.8 (70.1–97.4)	93.1 (83.7–102.4)
ACRPedi70 (%) (CI)	69.0 (52.1–85.9)	68.8 (51.6–85.9)	82.8 (68.8–96.8)
ACRPedi90 (%) (CI)	58.4 (40.6–76.1)	55.3 (37.3–73.3)	69.0 (51.8–86.1)
Inactive disease (%)	61.0 (39.7–82.3)	63.1 (43.6–82.7)	61.0 (40.9–81.2)

Results after 24 months by GEE.

- arm 1 Sequential monotherapy
- arm 2 Combo MTX + 6 wks prednisone
- arm 3 Combo MTX + Etanercept

Conclusions: Treatment to target drug free inactive disease is feasible in recent onset non-systemic JIA, resulting, regardless of initial treatment, in over 60% of patients in inactive disease and 38% drug free.

Disclosure of Interest: None declared

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THU0552 ARTICULAR AND EXTRA-ARTICULAR DAMAGE IN PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS – RESULTS FROM THE INCEPTION COHORT OF NEWLY DIAGNOSED PATIENTS WITH JUVENILE IDIOPATHIC ARTHRITIS (ICON)

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Background: Juvenile idiopathic arthritis (JIA) may lead to disability and damage, preventing both is an important therapeutic goal. The frequency of damage in children and adolescents with JIA and the question of whether the damage increases with the duration of the disease also in the biologic treatment era have hardly been investigated.

Objectives: To assess the prevalence and accrual of damage in patients with JIA over six years and to analyse damage association with disease activity, quality of life and functional limitations.

Methods: We analysed data of patients with JIA who were enrolled in ICON. Clinical characteristics such as disease activity (e.g. JIA core set criteria) and details on current treatment as well as patient's quality of life (PedsQL) and functional limitations (CHAQ) were assessed quarterly during the first 12 months in ICON and half-yearly thereafter. The Juvenile Arthritis Damage Index (JADI, range 0–89, best=0) was reported by the physician at the 3 year, 4 year and 6-year-FU, respectively. The JADI is composed of two sub-scores, the JADI-A scores joint