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booster while on tocilizumab, 7 on anakinra, and 5 on canakinumab. There was no relation between disease activity, type or duration, sex, age and outcome of vaccinations. No vaccine infection related to measles, rubella, mumps and varicella were reported.

Conclusion: This large, retrospective data collection demonstrates that live-attenuated booster vaccine is probably safe in children with rheumatic diseases, on immunosuppressive therapies. This strengthens the new PRES recommendation: "Vaccination of live-attenuated vaccines in patients on high-dose DMARD, high-dose glucocorticosteroids or biological agents can be considered on a case-by-case basis, weighing the risk of infections against the hypothetical risk of inducing infection through vaccination." These data provide the basis for a large, prospective data collection study that is planned by the PReS vaccination study group. It will increase the current level of evidence for the safety of vaccinations in our pediatric rheumatology population.

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### THURSDAY, 13 JUNE 2019

# Exercise - more than a wonderdrug\_

OP0206-HPR

BENEFICIAL LONG-TERM EFFECT OF A SUPERVISED EXERCISE PROGRAM ON PHYSICAL ACTIVITY LEVEL IN PATIENTS WITH AXIAL SPONDYLOARTHRTIS: 12 MONTHS FOLLOW-UP OF A MULTICENTER RANDOMIZED CONTROLLED TRIAL

Silje Halvorsen Sveaas<sup>1</sup>, Hanne Solveig Dagfinrud<sup>1</sup>, Melissa Woll Johansen<sup>2</sup>, Elisabeth Pedersen<sup>3</sup>, Annelie Bilberg<sup>4</sup>. <sup>1</sup>Diakonhjemmet Hospital, Norwegian National Advisory Unit on Rehabilitation in Rheumatology, Oslo, Norway; <sup>2</sup>Martina Hansens Hospital, Department of physiotherapy, Bærum, Norway; <sup>3</sup>University Hospital of North Norway, Department of physiotherapy, Tromsa, Norway; <sup>4</sup>University of Gothenburg, Institute of Neuroscience and Physioloty, Section of Health and Rehabilitation, Gothenburg, Sweden

**Background:** Exercise is recommended in the management of axial spondyloar-thritis (axSpA)<sup>1</sup> as it may reduce the burden of the disease.<sup>2</sup> Despite this, patients with axSpA tend to have a low physical activity (PA) level<sup>3</sup> and few patients engage in high intensities of exercise<sup>4</sup>.

**Objectives:** To investigate the long-term effect of a three months supervised exercise program on PA-level in patients with axSpA.

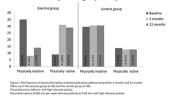
**Methods:** 100 patients with axSpA were randomized to either an exercise group (EG) or a no-intervention control group (CG). The exercise group participated in a three months high intensity cardiorespiratory and strength exercise program supervised by a physiotherapist. PA-level was a secondary outcome measured at 12 months follow-up with a standardised questionnaire (frequency, duration, intensity and mode)<sup>5</sup>. Being physically active was defined as ≥1 hour/week with high intensity PA. Statistical analyses were performed on an intention-to-treat basis using chi-square tests and logistic regression.

**Results:** A total of 87 of 100 (87%) patients were included in the analyses (table 1). At 12 months follow-up, significantly more patients in the EG than in the CG were physically active, p<0.001 (figure 1). Further, significantly more patients in the EG than in the CG exercised 2-3 times per week (25 [58%] vs. 15 [34%], p=0.02). Fewer patients in the EG reported to exercise at a low intensity level (low intensity reported by 3 [8%] in the EG vs. 14 [44%] in the CG, p=0.002). The regression analysis showed that participating in the exercise program (p<0.001) and earlier exercise experience (p=0.01) were the factors most associated with being physically active at 12 months follow-up (table 2).

Table 1. Baseline descriptive of the exercise group and the control group

	Exercise group (n=43)	Control group (n=44)
Age, years, mean (min-max)	45.5 (23-68)	47.4 (24-69)
Sex, male, n (%)	22 (51%)	20 (46%)
Radiographic axSpA	32 (74%)	28 (64%)
TNF-inhibitor, n (%)	38 (44%)	20 (46%)
ASDAS, mean (SD)	2.6 (0.7)	2.5 (0.7)

ASDAS, Ankylosing Spondylitis Disease Activity Score



**Conclusion:** A three month supervised exercise program delivered by physiotherapists had a significant long-term beneficial effect on PA-level in patients with axSpA. As regular exercise is an important part of the treatment recommendations for patients with axSpA<sup>1</sup>, the results indicate that a time-limited supervised exercise program may be used as an effective intervention to succeed in reaching this recommendation.

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### THURSDAY, 13 JUNE 2019

# Getting a grip on the co-morbidities in gout\_

OP0207

URATE-LOWERING THERAPY WITH VERINURAD AND FEBUXOSTAT REDUCES SERUM URIC ACID AND ALBUMINURIA IN HYPERURICEMIC PATIENTS WITH DIARFTES

Robert Terkeltaub<sup>1</sup>, Nalina Dronamraju<sup>2</sup>, Susanne A Johansson<sup>3</sup>, Joanna Parkinson<sup>3</sup>, Eva Johnsson<sup>3</sup>, Fredrik Erlandsson<sup>3</sup>, Austin Stack<sup>4</sup>. <sup>1</sup>VA San Diego Healthcare System, UC San Diego, United States of America; <sup>2</sup>AstraZeneca RandD, Gaithersburg, United States of America; <sup>3</sup>AstraZeneca, Gothenburg, Sweden; <sup>4</sup>Department of Nephrology, University Hospital Limerick and Health Research Institute, University of Limerick, Limerick, Ireland

**Background:** Hyperuricemia is implicated as a major risk factor for chronic kidney disease (CKD), and emerging clinical data suggest that lowering serum uric acid (sUA) may protect kidney function by reducing albuminuria and slowing the rate of CKD progression. We evaluated the efficacy and safety of an intensive sUA-lowering strategy of verinurad (RDEA3170), a novel urate transport inhibitor of URAT1, and febuxostat in patients with Type 2 diabetes mellitus (T2DM) and albuminuria (clinicaltrials.gov: NCT03118739).

**Objectives:** To compare the efficacy of verinurad + febuxostat to placebo in reducing albuminuria in patients with T2DM.

**Methods:** A Phase 2 parallel group, randomised, double-blind, placebo-controlled clinical trial. Patients were assigned 1:1 to either verinurad 9 mg + febuxo-stat 80 mg (n=32) or placebo (n=28). Inclusion criteria: aged  $\geq$ 18 years, sUA concentration  $\geq$ 6.0 mg/dL, estimated glomerular filtration rate (eGFR)  $\geq$ 30 mL/min/1.73 m², urinary albumin-to-creatinine ratio (UACR) 30–3500 mg/g and T2DM diagnosis. Exclusion criteria: history of gout or recent treatment with urate-lowering therapy. The primary endpoint was change in UACR. Secondary endpoints included sUA, renal function biomarkers, and eGFR.

**Results:** Baseline characteristics were similar between groups. For treatment vs placebo, respectively, mean (SD) sUA was 7.5 (1.6) vs 7.0 (0.8) mg/dL, eGFR was 59.2 (25.3) vs 68.1 (23.2) mL/min/1.73 m², and UACR was 459 (825) vs 412 (548) mg/g at baseline. The study met the primary endpoint as verinurad/febuxo-stat reduced UACR by 39% vs placebo after 12 weeks of treatment (p=0.07,