Objectives: To evaluate the utilisation patterns, appropriateness, and associated cost of tests (ANA, ENA, anti-dsDNA, RF, and complement levels) in patients referred to rheumatologists 2 years after release of CRA choosing wisely guidelines.

Methods: A chart audit reviewing the records of all referred patients to five rheumatologists at an academic university out-patient rheumatology clinic over one year (including referrals that were rejected) was conducted. Specific tests requested prior to referral and their indication based on clinical presentation were extracted. Other data included reason for referral and the final diagnosis. The number of unnecessary laboratory tests and associated costs were calculated.

Results: Over 500 patients were reviewed. Most common referrals were for possible diagnosis of rheumatoid arthritis, lupus, and seronegative spondyloarthropathies. Prior to referral: 77% had undergone ANA testing at least once, in one-third of cases, ANA was repeated; 25% had ENA testing and 30% had anti-dsDNA. Among all ANA tests, 25% were requested when there was no clinical suspicion for connective tissues diseases based on American College of Rheumatology criteria. Half of ENA and anti-dsDNA testing was requested in the context of negative ANA. RF was requested in 65% of the referrals and in one third, there was no clinical suspicion of inflammatory arthritis.

Abstract OP0302 – Figure 1. Utilisation patterns and associated costs of laboratory investigations among referrals to rheumatologists

Conclusions: RF, ANA, ENA, and anti-dsDNA are among commonly ordered investigations prior to referral to rheumatology. Despite the recommendations by choosing wisely campaigns, up to 50% of investigations are inappropriately ordered. Based on our cost estimation, more selective ordering of the above tests, and minimising inappropriate investigations would lead to 45% cost reduction.

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OP0303

SYSTEMATIC SCREENING OF COMORBIDITIES IMPROVES VACCINATION RATES, SKIN CANCER SCREENING AND VITAMIN D SUPPLEMENTATION IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS: RESULTS OF THE COMEDSPA PROSPECTIVE, CONTROLLED, ONE YEAR RANDOMISED TRIAL

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Background: Specific recommendations for the detection/prevention of comorbidities have been proposed for patients with SpA. However, we know that often a gap exists between recommendation and their implementation in daily practice

Objectives: To evaluate the impact of a program of systematic screening of comorbidities and its management (detection/prevention).

Methods: Prospective, randomised controlled open, 12 month trial (NCT02374749). Patients: Axial SpA (according to rheumatologist). Study treatment: Collection of data by the nurse during a specific out-patient visit for the 5

studied SpA comorbidities (i.e. cardiovascular disease (CVD), osteoporosis, cancer, infection and peptic ulcer) according to the recommendations of the French Society of Rheumatology. In the event of non-agreement with the recommendation the patient was informed. A report summarising the results of this program prepared by the nurse was sent to the patient's attending physician and rheumatologist. Treatment allocation: After written informed consent, the study treatment was allocated randomly. Outcome variables: the main outcome was the change after one year of a comorbidity score. This weighted composite comorbidity score ranged from 0 to 100, where 0=optimal management of the 5 studied comorbidities and its weights were derived from the percentage of attributed mortality in SpA to each comorbidity in the literature, i.e. 40 points for CV disease, 20 points for cancer and infection, 10 points for osteoporosis and 10 points for peptic ulcer. The number of patients with actions undertaken against comorbidities according to the recommendations during the 12 months following this program were defined as secondary variables

Results: There were no differences in the baseline characteristics of the 502 recruited patients (252 and 250 in the active and control groups, respectively): Age: 46.7±12.2 years, male gender: 62.7%, disease duration: 13.7±11.0 y, X-ray sacroiliitis 62.8%, MRI sacroiliitis 65.7%, current biologic treatment: 78.3%, ASDAS-CRP: 1.9±0.8, BASFI: 25.6±22.3. During the 1 year follow-up period, the comorbidity score decreased more in the active group, but this difference was not significant (−3.20 vs −1.85).

The number of actions per patient was statistically higher in the group comorbidities: 4.54±2.08 vs 2.65±1.57 (p<0.001); the number of patients with actions performed to be in agreement with recommendations during the 12 months follow-up was higher in the active group for infections (flu vaccination: 28.6% vs 9.9%, p<0.01; pneumococcal vaccination: 40.0% vs 21.1%, p=0.04), skin cancer screening (36.3% vs 17.2%; p=0.04), and osteoporosis (BMD performed: 22.6% vs 8.7%, p<0.01; Vitamin D supplementation initiation: 51.9% vs 9.4%, p<0.01).

Conclusions: This study highly suggests the short-term benefit of program on the systematic screening of comorbidities for its management in agreement with recommendations, even if this young age population of axSpA patients.

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OP0304

MULTIDISCIPLINARY COLLABORATION AMONG YOUNG SPECIALISTS: RESULTS OF AN ONGOING INTERNATIONAL SURVEY BY YOUNG ORGANISATIONS

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Background: Young clinicians and researchers frequently work alongside other medical specialists in order to share expertise, knowledge and skills. Multidisciplinary work is worthwhile but may be sometimes challenging.

Objectives: To describe current clinical and research collaboration among young specialists and to identify some perspectives to develop such collaborations.

Methods: An online survey was disseminated by email and social media (facebook and twitter) to members of the Emerging European League Against Rheumatism Network (EMEUNET), the Young Nephrologists' Platform (YNP), the Paediatric Rheumatology European Society Emerging Rheumatologists and Researchers (PReS EMERGE), and the European Academy of Allergy and Clinical Immunology Junior Members (EAACI JM).

Results: Of 354 respondents from 40 countries, 60% were female, 23% were aged below 30 years and 67% 31–40 years. Young rheumatologists were the most represented (36%), followed by young nephrologists (24%), young paediatricians (18%), young allergologists (11%) then young internists (3%) and several other specialties (as clinical immunology, dermatology, pulmonology, orthopaedics). 60% were certified specialists, 34% in training and 6% were researchers without clinical work. Overall, the top 3 specialties for clinical collaboration in daily practice were radiology, cardiology and dermatology. Collaborations were reported frequently by phone and email, also by various combined clinics while common local multidisciplinary meetings were uncommon. Of note, 71% of respondents found collaboration with young colleagues easier than with senior specialists. Research collaboration usually started by knowing other specialists (73%) and/or by attending common meetings (39%). 96% would like to develop

clinical research collaborations and 69% basic research collaborations. The majority of young specialists would be interested in online (84%) and/or 1–2 days (86%) common courses including cases discussion (80%) and training workshops (84%), as well as webinars recorded with several specialists on a specific disease (96%). Respondents were a bit less enthusiastic with developing collaboration through social media (facebook 61%, twitter 58%) but interested in common apps (71%).

Conclusions: This collaborative initiative highlighted wishes from young specialists for developing 1) regular local multidisciplinary meetings to discuss complex patients 2) clinical research collaboration with combined grants and 3) multidisciplinary online projects such as common courses, webinars and apps.

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FRIDAY, 15 JUNE 2018

The changing therapeutic landscape of PsA

OP0305

DISEASE INTERCEPTION IN PSORIASIS PATIENTS WITH SUBCLINICAL JOINT INFLAMMATION BY INTERLEUKIN 17 INHIBITION WITH SECUKINUMAB – DATA FROM A PROSPECTIVE OPEN LABEL STUDY

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Background: Musculoskeletal changes precede the onset of psoriatic arthritis (PsA). A subset of psoriasis patients is characterised by arthralgia as well as inflammatory changes in the joints visible by MRI assessment. These patients have a high risk to progress into PsA.

Objectives: To test the concept of a very early intervention in PsA we exposed psoriasis patients with subclinical joint inflammation to the anti-interleukin (IL)–17A antibody secukinumab. We hypothesised that IL-17A inhibition disrupted the early link between skin and joint disease in psoriasis.

Methods: Psoriasis (but not PsA) patients were included in the open prospective 24 weeks 'Interception in Very Early PsA' (IVEPSA) study. To fulfil the inclusion criteria patients had to have a PASI score greater than 6 or nail or scalp involvement as well as inflammatory or erosive changes in MRI or high-resolution peripheral quantitative computed tomography (HRpQCT) at baseline. Patients received treatment with secukinumab 300 mg sc. for 24 weeks. MRI scans and HRpQCT of the dominant hand were performed at baseline and at 24 weeks. MRI was scored according to PsAMRIS. HRpQCT evaluated for erosions and enthesiophytes.

Results: 20 patients (median age 49.5 years (IQR 42.8, 59), 70% males) with a median disease duration of 14 years (IQR 5, 20), were included into the study. At baseline, 85% reported arthralgia assessed by a Visual Analogue Scale (VAS) and 40% had tender joints on examination (TJC78). 83.3% had at least one inflammatory lesion in the MRI, 66.7% synovitis, 55.6% tendinitis/enthesitis, 27.8% osteitis and 16.7% periarticular inflammation. Erosions were present in 72.2% and 58.8% in the MRI and HRpQCT, respectively, while enthesiophytes were found in 33.3% and 41.2%. One patient was discontinued early due to lack of improvement (wk12) and one patient was unable to perform the follow-up MRI. Psoriatic skin disease (total PASI and BSA) significantly improved (both $p < 0.05$) and also arthralgia (VAS pain, tender joint count) significantly declined after secukinumab treatment (both $p < 0.05$). Total PsAMRIS score and synovitis subscore significantly improved at week 24 ($p = 0.005$ and $p = 0.008$, respectively). Importantly, improvement in total PsAMRIS score significantly correlated with the improvement in arthralgia ($p < 0.05$). Finally, neither erosions nor enthesiophytes in MRI and HRpQCT progressed during the 24 weeks of treatment. There was no new safety signal in the study.

Conclusions: IL-17 inhibition by secukinumab over 24 weeks led to resolution of inflammation and no progression of bone changes in the joints in psoriasis patients with subclinical peripheral joint involvement. These data suggest that very early disease interception in PsA is a feasible approach. IVEPSA also provides the guide for further very early interventions in PsA providing concepts for imaging-based identification and the sensitivity to change subclinical inflammation through biological disease modifying anti-rheumatic drug therapy.

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OP0306

SUBCUTANEOUS SECUKINUMAB INHIBITS RADIOGRAPHIC PROGRESSION IN PSORIATIC ARTHRITIS: ANALYSIS BY PRIOR ANTI-TNF THERAPY AND CONCOMITANT METHOTREXATE USE

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Background: Psoriatic arthritis (PsA) is associated with joint inflammation, characterised by synovitis, presence of erosions, joint space narrowing (JSN) and new bone formation leading to structural damage, increased disability and reduced quality of life. Secukinumab (SEC) provided significant and rapid clinical efficacy, and inhibition of radiographic progression in PsA patients (pts) in the FUTURE 5 study.¹

Objectives: To assess the effect of subcutaneous (sc) SEC on radiographic progression by prior anti-TNF therapy or concomitant methotrexate (MTX) use in the FUTURE 5 study.

Methods: Adults (n=996) with active PsA, stratified by prior anti-TNF therapy (naïve and inadequate response/intolerance [IR]) were randomised 2:2:2:3 to sc SEC 300 mg with loading dose (LD), 150 mg LD, 150 mg no LD, or placebo (PBO) at baseline (BL), Wks 1, 2, 3, 4, and every 4 wks thereafter. At Wk 16, PBO non-responders were switched to SEC 300 or 150 mg. Concomitant MTX (≤ 25 mg/week) was allowed. Radiographic progression (mean change in van der Heijde-modified total Sharp score for PsA [vdH-mTSS] and its components: erosion and joint space narrowing [JSN] scores from BL to Wk 24) was based on hand/wrist/foot X-rays obtained at BL, Wks 16 (non-responders) assessed by two blinded readers (plus an adjudicator if required). Average scores were used. Statistical analyses used linear extrapolation at Wk 24 for all PBO non-responders and for all other pts with missing Wk 24 X-rays.

Results: At BL, 30% pts were anti-TNF-IR and 50% were on concomitant MTX. Radiographic progression was significantly inhibited at Wk 24 in the overall population with SEC vs PBO; mean change from BL in vdH-mTSS was 0.08 (300mg; $p < 0.01$), 0.17 (150mg; $p < 0.05$), -0.09 (150mg no LD; $P < 0.01$) vs 0.50 (PBO). Lower radiographic progression (vdH-mTSS, erosion and JSN scores) was observed with SEC vs PBO regardless of prior anti-TNF therapy or concomitant MTX use (table 1).

Abstract OP0306 – Table 1. Radiographic findings (mean change in scores from BL to Wk 24)

	Radiographic findings (mean change in scores from BL to Wk 24)			
	SEC 300mg		SEC 150mg	
	LD	LD	No LD	PBO
Anti-TNF-naïve	n=152	n=149	n=151	n=214
vdH-mTSS	0.01 [§]	0.12 [‡]	-0.25 [‡]	0.48
Erosion	0.03 [§]	0.09 [‡]	0.01 [‡]	0.36
JSN	-0.02	0.03	-0.25 [‡]	0.12
Anti-TNF-IR	n=65	n=64	n=59	n=82
vdH-mTSS	0.23	0.29	0.31	0.54
Erosion	0.10	0.19	0.27	0.30
JSN	0.13	0.10	0.04	0.24
Without concomitant MTX	n=107	n=106	n=95	n=151
vdH-mTSS	0.06 [‡]	0.16	-0.17 [‡]	0.46
Erosion	0.07 [‡]	0.13	-0.09 [§]	0.41
JSN	-0.01	0.03	-0.07	0.05
With concomitant MTX	n=110	n=107	n=115	n=145
vdH-mTSS	0.10 [‡]	0.18 [‡]	-0.03	0.54
Erosion	0.04 [‡]	0.11	0.22	0.27
JSN	0.06	0.07	-0.25 [‡]	0.26

[‡] $P < 0.0001$; [§] $P < 0.001$; [‡] $P < 0.01$; [‡] $P < 0.05$ un-adjusted P-values vs. PBO

Conclusions: Subcutaneous secukinumab 300 mg with loading dose, and 150 mg with and without loading dose, inhibited radiographic progression in patients with active PsA. Low rates of radiographic progression were observed regardless of previous anti-TNF therapy or concomitant MTX use.

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