Objectives: 1) To assess the future risk of newly recorded MI and CVA events among incident cases of AS compared to non-AS controls from the general population by utilizing physician billing, medication, and hospitalization data that covers the entire province of British Columbia (BC), Canada.
Methods: Our data includes all outpatient visits and hospitalizations (1990–2012) and all dispensed medications (1996–2012) for all BC residents. We conducted a retrospective matched cohort study of all patients >18 years of age satisfying the following criteria: 1) two ICD-9 or 10 codes (720.0 or M45) for AS at least two months apart and within a 2-year period by any physician or hospitalization; 2) all AS cases had at least a 7-year run-in period before the 1st ICD code for AS in order to consider the case as incident. Each AS patient was matched with up to 10 controls by birth year, sex, and entry cohort time. The outcomes were a newly recorded MI (ICD-9-CM: 410 or ICD-10-CM: I21) or CVA (ICD-9 codes: 433–434, ICD-10 codes: I63-I66) event from hospital or death certificates. We estimated relative risks (RRs), adjusting for age, sex, and entry cohort time as well as multivariable models adjusting for confounders including glucocorticoids and non-steroidal anti-inflammatory drugs using a Cox proportional hazard model.
Results: 7,190 individuals with newly diagnosed AS were identified (48.7% female, mean age of 45.8 yrs). 7,148 and 7,107 were free of previous CVA/MI, respectively. 80 developed CVA (incidence rate=1.8 per 1000 patient years) and 115 had MI (incidence rate=2.6 per 1,000 patient years) (Table 1). The age-, sex-, and entry-time-matched RR for CVA was 1.60 (95% CI, 1.25–2.03) and MI was 1.52 (95% CI, 1.24–1.85). When adjusted for cardiovascular risk factors (obesity, angina, COPD, hospitalizations in year before index date, Charlson's comorbidity index, oral glucocorticoids, cardiovascular drugs, anti-diabetic medication, HRT, contraceptives, fibrates, statins, NSAIDs, and Cox-2 inhibitors), the estimated RR was 1.34 (1.04–1.73) for CVA and 1.21 (0.98–1.49) for MI.

Table 1. Relative risk of incident CVA and MI according to AS status

	AS (N=7,148)	Non-AS (N=71,489)
CVA events, n	80	492
Incidence Rate of CVA/1000 Person-Years	1.81	1.13
Incidence Rate Ratio of CVA (95% CI)	1.60 (1.25–2.03)	1.0
Multivariable RR of CVA (95% CI)	**1.34 (1.04–1.73)**	1.0
	AS (N=7,107)	Non-AS (N=71,033)
MI events, n	115	748
Incidence Rate of MI/1000 Person-Years	2.62	1.73
Incidence Rate Ratio of MI (95% CI)	1.52 (1.24–1.85)	1.0
Multivariable RR of MI (95% CI)	**1.21 (0.98–1.49)**	1.0

Conclusions: This large population-based study demonstrates an increased risk of CVA, but not for MI. These findings support that increased monitoring for this potentially fatal outcome and its modifiable risk factors is warranted for AS patients.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.6544

SAT0385 SIMILARITIES AND DIFFERENCES BETWEEN PATIENTS FULFILLING NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS AND UNDIFFERENTIATED SPONDYLOARTHRITIS CRITERIA: RESULTS FROM THE ESPERANZA COHORT

A. Juan Mas[1], X. Juanola Roura[2], E. de Miguel Mendieta[3], E. Collantes Estévez[4], J.C. Quevedo Abeledo[5], E. Alonso Blanco-Morales[6], V. Navarro-Compán[3] on behalf of ESPeranza working group. *[1]Rheumatology, Hospital Son Llàtzer, Palma de Mallorca; [2]Hospital Bellvitge, Barcelona; [3]Hospital la Paz, IdiPaz, Madrid; [4]Hospital Reina Sofía, Córdoba; [5]Hospital Gran Canaria Dr. Negrín, Gran Canaria; [6]Hospital Juan Canalejo, A Coruña, Spain*

Background: Patients with spondyloarthritis (SpA) were classified in five subgroups: ankylosing spondylitis (AS), psoriatic arthritis, arthritis associated with inflammatory bowel disease, reactive arthritis and undifferentiated SpA (uSpA). ASAS criteria classify patients in peripheral SpA and axial SpA (axSpA), being the latest classified in two groups: classical AS and non-radiographic axSpA (nr-axSpa). Whether or not patients with nr-axSpA represent the same group of patients that used to be classified as uSpA remains unclear.
Objectives: To evaluate the similarities and differences between patients with predominant axial disease classified currently as nr-axSpA versus those traditionally classified as uSpA.
Methods: Baseline data from the ESPeranza program (a multicenter national initiative to early diagnose SpA between 2008 and 2011) was used. Inclusion criteria for this program were: age <45 years and inflammatory back pain plus ≥1 SpA features with symptoms duration between 3 and 24 months. Demographic, clinic, laboratory and image results were compared between two groups: 182 patients with nr-axSpA and 166 patients classified as uSpA. In order to get a deeper knowledge of the differences between nr-axSpA and uSpA, we also compared: i) 88 patients only classified as nr-axSpA, ii) 72 patients only classified as uSpA; iii) 94 patients fulfilling both criteria. Student-t test for continuous variables and Pearson Chi-square test for categorical variables were used.
Results: Compared to patients classified as uSpA patients with nr-axSpA were younger, had HLA-B27 positive more frequently and higher values of CRP. On the other hand, they had history of SpA less frequently and lower values for BASDAI, BASFI and ASQoL (table). No differences were observed for gender, work incapacity, dactilitis, enthesitis, Pt's and Phy's VAS, BASMI and BASRI.

Table 1. Results are presented in mean ± standard deviation for continuous variables and n (%) for categorical variables

	Both, nr-axSpA & undifferentiated SpA N (%) = 94	Only nr-axSpA N (%) = 88	Only undifferentiated SpA N (%) = 72	p value*
Age (years)	30.9±7.3	32.2±6.9	35.2±6.9	**<0.01**
Male	61 (64.9)	50 (56.8)	34 (47.2)	0.2
Family history	48 (51.1)	21 (23.9)	30 (41.7)	**<0.05**
HLA-B27	81 (86.2)	65 (73.9)	6 (8.3)	**<0.001**
Enthesitis	29 (30.9)	18 (20.5)	22 (30.6)	0.1
BASDAI	3.7±2.3	3.8±2.1	4.7±2.3	**<0.01**
BASFI	2.2±2.2	2.1±2.1	2.9±2.5	**<0.05**
ASQoL	5.9±4.7	5.2±4.5	7.4±5.2	**0.01**
CRP (mg/L)	10.7±14.3	9.8±16.5	5.1±9.1	**<0.05**

*p value for differences between nr-axSpA and undifferentiated SpA (Student-t test for continuous variables and Pearson Chi-square test for categorical variables).

Conclusions: Compared with patients traditionally classified as uSpA, patients who are currently classified as nr-axSpA are diagnosed earlier, are more frequently HLA-B27 carriers and have higher disease activity according to objective parameters. On the other hand, they report lower values for patient reported outcomes.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.5675

SAT0386 EXTREME PATIENT REPORTED OUTCOME (PRO) IN EARLY SPONDYLOARTHRITIS: A SURROGATE FOR FIBROMYALGIA? ITS IMPACT ON TNF-ALPHA BLOCKERS TREATMENT EFFECT?

B. Meghnathi[1], A. Etcheto[1], P. Claudepierre[2], M. Dougados[1], A. Moltó[1]. *[1]Paris Descartes University, Medicine Faculty; APHP, Rheumatology B Department, Cochin Hospital; [2]Paris XII University; Rheumatology Department, Hôpital Henri-Mondor, Paris, France*

Background: In case of a concomitant fibromyalgia (FM) with axial spondyloarthritis (axSpA), there is a risk of misclassifying a patient as active (e.g. BASDAI >4), and to falsely consider him as refractory to NSAIDs/ biologics, since FM patients often report higher level of pain and fatigue[1]. We hypothesized that not only are extreme patient reported outcome (PRO) potentially surrogate marker of FM in axSpA, but also that this extreme PRO may have an impact on the TNF-α blockers (TNFb) treatment effect
Objectives: A) To describe the prevalence of extreme PRO in an early axSpA cohort. B) To compare the phenotype of axSpA patients with and without extreme PRO. C) To assess the impact of extreme PRO on the TNFb efficacy.
Methods: This analysis was performed on the DESIR cohort which included 708 adult patients (>18 and <50 years) with inflammatory back pain suggestive of axSpA (according to the rheumatologist's conviction of ≥5/10) for >3 months but <3 years duration. All patients were biologic naïve at inclusion and were followed up every 6 months for the first 2 years. At baseline, data pertaining to demographics, BASDAI, history of depression, type of medications (antidepressants or muscle relaxants) used and concomitant diseases were collected. It is worth noting that no systematic assessment of the fulfilment of the ACR criteria for FM was performed in this study; thus, we created a "FM gold standard" according to the available data (i.e., presence of either Muscle relaxants/ Depression/ Anti-depressant drug treatment/ Fibromyalgia comorbidity reported in the CRF). BASDAI was the selected PRO for this study due to its widespread use in clinical practice. BASDAI was tested against this "FM gold standard": we plotted ROC curves to define the best cut-off to define an "extreme PRO" for BASDAI. Phenotype of patient's with/without extreme PRO scores was compared. Impact of extreme PRO score on TNFb efficacy was assessed by comparing the retention rate of the first TNFb by Cox analysis.
Results: ROC curves to define an "extreme PRO" determined a different cut-off for each BASDAI question (i.e. >6, >5, >1, >4, >5 and >3 for question 1 to 6, respectively), and the need of at least 4 out of these 6 cut-offs to fulfil the "extreme PRO" condition; giving us a prevalence of 42.9% (304 patients) of extreme PRO in DESIR. Phenotypically, this group with extreme PRO, consisted of older patients (34.6 (8.3) vs 33.1 (8.8)), had more females (184 (60.5%) vs 195 (48.8%)), reported less sacroiliitis [radiographic and MRI, (36 (12%) vs 76 (19.4%)) and (82 (27.6%) vs 148 (37.8%)), respectively], showed less HLA B27 positivity (160 (52.6%) vs 248 (62.2%)), had higher CRP values (102 (34.3%) vs 102 (26.5%)), and more arthritis/ enthesitis history (212 (69.7%) vs 190 (47.5%)/ 182 (59.9%) vs 166 (41.5%)). A lower retention rate was observed in the group of patients with "extreme PRO" (Figure 1)
Conclusions: Coexistence of extreme PRO might be considered as a surrogate marker for FM in axSpA patients. Moreover, it appears to have a negative impact on TNF-α blockers retention rate.
References:
[1] Wendling D, Prati C. Spondyloarthritis and fibromyalgia: interfering association or differential diagnosis? Clin Rheumatol 2016;35:2141–43.

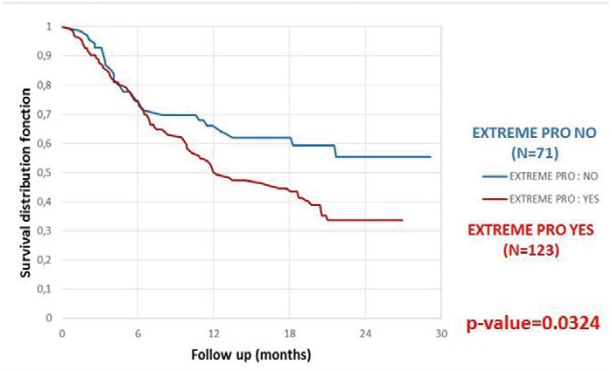

Figure 1. Impact of extreme PRO on first TNF-α blocker retention rate (first 2years) [Kaplan Meier curves and Log Rank test]

Acknowledgements: The DESIR cohort is financially supported by unrestricted grants from the French Society of Rheumatology and Pfizer France.
Disclosure of Interest: B. Meghnathi Grant/research support from: ASAS Society (ASAS FELLOW), A. Etcheto: None declared, P. Claudepierre: None declared, M. Dougados: None declared, A. Moltó: None declared
DOI: 10.1136/annrheumdis-2017-eular.3827

SAT0387 "DO NOT DO" RECOMMENDATIONS IN THE MANAGEMENT OF COMORBIDITY IN PATIENTS WITH AXIAL SPONDYLOARTHRITIS. GECOAX PROJECT

J.C. Torre-Alonso[1], C. González[2], S. Castañeda[3], R. Curbelo[4], E. Collantes[5], M.V. Hernández[6], A. Urruticoechea-Arana[7], J.C. Nieto[2], J. García[8], M.Á. Abad[9], J. Ramírez[6], C. Suárez[10], R. Dalmau[11], M.D. Martín-Arranz[12], L. León[13], J.C. Hermosa[14], J.C. Obaya[15], T. Otón[4], L. Carmona[4].
[1]Rheumatology, HU Monte Naranco, Oviedo; [2]Rheumatology, HU Gregorio Marañón; [3]Rheumatology, HU la Princesa, IIS-IP; [4]InMusc, Madrid; [5]Rheumatology, HU Reina Sofía, Córdoba; [6]Rheumatology, HU Clinic i Provincial, Barcelona; [7]Rheumatology, H Can Misses, Ibiza; [8]Rheumatology, HU 12 de Octubre, Madrid; [9]Rheumatology, H de Plasencia, Plasencia; [10]Internal Medicine, HU la Princesa, IIS-IP; [11]Cardiology; [12]Gastroenterology, HU la Paz; [13]Psychology, UCJC, Madrid; [14]Centro de Salud Ciudades, Getafe; [15]Centro de Salud Alcobendas, Alcobendas, Spain

Background: During the development of recommendations and implementation aids of the GECOAx project, the importance of avoiding certain situations was highlighted.
Objectives: To recognize what prescriptions, risk assessments, or preventive strategies are wrong practices and should thus be avoided in clinical practice. To establish not to do recommendations in the management of the comorbidity of AxSpA.
Methods: A multidisciplinary group was selected [10 rheumatologists, 1 internist, 1 cardiologist, 1 gastroenterologist, 1 psychologist and 2 family physicians]. With the support of 3 methodologists, and after interactions aimed to edit a document for the management of comorbidity launched by the same panel, a list of Not to do recommendations was issued. In a discussion meeting, evidence was provided to support the recommendations, items without sufficient basis were removed, and the final list was produced.
Results: A summary list of Not to do recommendations (Table 1) was issued.

Table 1

– DO NOT prescribe NSAIDs to patients with high cardiovascular (CV) risk and particularly with hypertension.
– DO NOT prescribe NSAIDs to patients with CKD, heart failure or liver cirrhosis and, if necessary, exert caution.
– DO NOT use CV risk scores in patients who already suffered a CV event or those with multiple risk factors (smoking, obesity, sedentary lifestyle, DM, hypertension, dyslipidemia) or a family history of premature CV disease; All should be considered high CV risk.
– DO NOT base renal disease screening on a single glomerular filtration test and/or albuminuria (ALWAYS should be confirmed); serum creatinine should not be used as the only test to evaluate renal function.
– DO NOT administer biological therapy in case of active, serious and uncontrolled infection, sepsis or risk of sepsis or tuberculosis or without a previous screening of chronic HBV, HCV, HIV and TB.
– DO NOT repeat HBV vaccination unless HBV antibody levels are not achieved.
– DO NOT vaccinate a patient in therapy with biological agents or in immunosuppressive treatment with live viruses

Conclusions: These recommendations aim to avoid making common mistakes in clinical practice and to help better management of frequent comorbidity in patients with AxSpA.
Acknowledgements: This project was funded by Merck Sharp & Dohme Spain. Merck Sharp & Dohme had no influence on either the development of the project or the final content of the manuscript.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.5029

SAT0388 ANALYSIS OF THE MUSCULOSKELETAL MANIFESTATIONS IN INFLAMMATORY BOWEL DISEASE PATIENTS AND ITS RELATIONSHIP WITH BIOLOGICAL TREATMENT

S. Mainero Mendoza[1,2], C.M. Feced Olmos[1], L. Gonzalez Puig[1], J. Ivorra Cortes[1], I. Martínez Cordellat[1], C. Nájera Herranz[1], R. Negueroles Albuixech[1], J.E. Oller Rodriguez[1], F.M. Ortiz-Sanjuan[1], E. Vicens Bernabeu[1], E. Grau Garcia[1], E. Labrador Sánchez[1], K. Arévalo Ruales[1], J.J. Fragio Gil[1], R. González Mazarío[1], C. Alcañiz Escandell[1], I. Cánovas Olmos[1], I. Chalmeta Verdejo[1], V. Fornés Ferrer[3], J.A. Román Ivorra[1,2]. *[1]Rheumatology Department, HUP la Fe; [2]Medical School, UCV; [3]Biostatistics Unit, IIS la Fe, Valencia, Spain*

Background: Crohn's disease (CD) and ulcerative colitis (UC) are the main entities of inflammatory bowel disease (IBD). Both present extraintestinal manifestations that do not always depend on the IBD activity. The most common manifestations involve the musculoskeletal system and they are included in the seronegative spondiloarthritis group. If there is active or known IBD, treatment of this is priority because it usually improves joint disease. However, joint disease can also have an independent course of the intestinal manifestations as in patients with IBD and ankylosing spondylitis (AS).
Objectives: To analyze the prevalence of extraintestinal manifestations in IBD patients and treatment provided.
Methods: Retrospective observational analysis of IBD patients that have been remitted to the rheumatology department of HUP La Fe with musculoskeletal manifestations. Demographic, clinical and treatment data of patient were collected. Biostatistical analysis with R (3.3.2.) was performed.
Results: We recruited 183 patients diagnosed with IBD (57.4% women), 117 with CD and 66 with UC, with a mean age at diagnosis of 37.03±14.02 years old. 29 of them have axial affection and 51 peripheral affection, and simultaneously in 22 cases. We observed no statistical differences in axial or peripheral affection according to the IBD diagnosis. 79 cases were on biological therapy, and these treatments were conducted by Rheumatology in the 44% of cases and by Digestive Department in the 66% of cases. We observed that patients with axial affection present higher probability that the treatment has been conducted by Rheumatology (P=0.007), and broken down axial affections AS diagnosis had the most probability to be conducted by Rheumatology (n=36 P=0.0102). Related to peripheral manifestations, uveitis diagnosis had the most probability to be conducted by Rheumatology (n=14 P=0.0337).
Conclusions: In our patient series with IBD and musculoskeletal manifestations, the most common were peripheral affection. Among patients with IBD and axial and/or peripheral manifestation, 44% were conducted by Rheumatology, and are cases with axial predominance, where IBD treatment does not improve musculoskeletal disease and a primary spondyloarthritis treatment is needed.
Disclosure of Interest: None declared
DOI: 10.1136/annrheumdis-2017-eular.5687

SAT0389 COMPARISON OF ANKYLOSING SPONDYLITIS AND NON-RADIOGRAPHIC AXIAL SPONDYLOARTHRITIS IN A MULTI-ETHNIC ASIAN POPULATION OF SINGAPORE

C. Hong[1], Y.H. Kwan[2], W. Fong[1]. *[1]Department of Rheumatology and Immunology, Singapore General Hospital; [2]Programme in Health Services and Systems Research, Duke-NUS Medical School, Singapore, Singapore*

Background: The relationship between non-radiographic axial spondyloarthritis (nr-axSpA) and ankylosing spondylitis (AS) is currently debated. Till date, there is no study exploring the differences between AS and nr-axSpA in Asia.
Objectives: The primary objective of this study was to compare clinical characteristics, disease activity, patient-reported outcomes and associated co-morbidities between patients with AS and nr-axSpA in a multiethnic Asian population of Singapore.
Methods: All patients fulfilled 2009 ASAS classification criteria for axial SpA. Of these, all AS patients fulfilled the modified New York criteria. AS and nr-axSpA patients were retrieved from the PREcision medicine in SPONdyloarthritis for Better Outcomes and Disease Remission (PRESPOND) registry in Singapore General Hospital. Patients were followed up over 2 years. Baseline characteristics, medications, disease activity, patient-reported outcomes and inflammatory markers prior and 6 months post treatment were recorded using standardized questionnaires.
Results: 262 AxSpA patients (82% Chinese, 79% males) were included. Current mean age (S.D.) was 41.7 (13.7) years, mean age of diagnosis was 31.7 (12.5) years, mean length of disease was 10.1 (8.3) years and body mass index was 24.7 (6.3) kg/m^2, which was similar between AS and nr-axSpA patients. AS patients were older [mean age 42.7 (13.5) vs 37.4 (13.8) years, p=0.02], had longer disease duration [mean disease duration 10.9 (8.7) vs 6.4 (4.8) years, p<0.01], more frequently HLA-B27 positive (82% vs 68%, p=0.03), associated with uveitis (33% vs 17%, p=0.03), and hypertensive (17% vs 0%, p<0.01) compared to nr-AxSpA respectively. nr-axSpA patients had higher BASDAI [mean BASDAI 4.2 (1.6) vs 3.5 (1.9), p=0.02], BAS-G [mean BAS-G 4.7 (1.7) vs 3.9 (2.1), p<0.01] and ASQOL [mean ASQOL 4.9 (4.8) vs 3.5 (4.1), p=0.04] scores