biological therapies has not been investigated in detail, and little is known about the predictive value of sociodemographic and lifestyle factors.

**Objectives:** To investigate the predictive value of a panel of potential predictors of death in a cohort of patients with RA followed for up to 12 years during the era of biological treatments.

**Methods:** Outpatients with RA were recruited consecutively between July 2006 and July 2007 and followed in routine care with prospective registrations in the DANBIO registry until death or August 30th 2018, whichever occurred first. Baseline variables considered to be potential predictors were: disease activity, disease duration, IgM-rheumatoid factor (IgM-RF), radiographic status (erosive disease yes/no) and medical therapy as well as patient-reported marital status, educational level, comorbid conditions, smoking, exercise, body mass index (BMI) and health assessment questionnaire (HAQ). Vital status and date of death were extracted from the Danish National Register. A cox proportional hazards model was used to estimate the hazard ratio for death for each of the potential predictors.

**Results:** 3693 patients were recruited at baseline, 75% women, 77% IgM-rheumatoid factor positive, 65% with erosive disease, median (IQR) age 62 years (52-71), disease duration 7 years (3-15), DAS28 3.0 (2.2-3.9), HAQ 0.63 (0.25-1.25). 20% received a biological disease modifying anti-rheumatic drug (DMARD), 71% received a synthetic DMARD and 9% received no DMARD. The median (IQR) duration of follow-up was 11 years (9-11); 1041 patients (28%) died during follow-up. 640 patients were excluded from the regression model due to missing baseline data; these individuals were slightly (median of 3 years) older than those who entered, but with similar disease duration and disease activity. All baseline variables were statistically significant predictors in univariable analyses. Table shows hazard ratio estimates in the multivariable model which included 3053 patients; 762 (25%) deaths. IgM-RF positivity, higher HAQ score, glucocorticoid therapy, smoking (current and former) and two or more comorbid conditions were predictors of death. Low BMI was a borderline significant predictor for death. Female sex, weekly exercise and cohabiting decreased the risk of death.

**Conclusion:** In a large cohort of RA patients followed for a decade in the era of biological treatments, we identified strong clinical (high HAQ, comorbidity), treatment related (glucocorticoid last month), sociodemographic and lifestyle related (male sex, living alone, smoking, physical inactivity, low BMI) risk factors for death. In the effort to prevent a poor long term outcome in patients with RA, this study provides new insight into potentially modifiable baseline variables.

**Acknowledgements:** We thank the Danish Rheumatism Association for supporting the study.

**Disclosure of Interests:** Louise Linde: None declared, Merete L. Hetland Grant/research support from: BMS, MSD, AbbVie, Roche, Novartis, Biogen, Pfizer, Consultant for: Eli Lilly, Speakers bureau: Orion Pharma, Biogen, Pfizer, CellTrion, Merck, Samsung Bioepis

**Grant/research support from:** BMS, MSD, AbbVie, Roche, Novartis, Biogen, Pfizer, Consultant for: Eli Lilly, Speakers bureau: Orion Pharma, Biogen, Pfizer, CellTrion, Merck, Samsung Bioepis

**DOI:** 10.1136/annrheumdis-2019-eular.2967

**Figure 1**

**Conclusion:** There is a higher prevalence of unemployment in the AS population as compared to the general population. Unemployed AS patients tend to have decreased quality of life, poorer levels of function, and higher levels of disease activity. Further research is needed to determine a causation between level of disease activity and employment.

**REFERENCES:**


[3] Central Statistics Office Ireland
ASSOCIATION OF BODY COMPOSITION, PHYSICAL ACTIVITY AND PHYSICAL PERFORMANCE WITH KNEE CARTILAGE THICKNESS AND SUBCHONDRAL BONE AREA IN YOUNG ADULTS

Tao Meng1, Benny Antony1, Alison Venn1, Felix Eckstein2,3, Flavia Cicuttini4, Lyn March5, Marita Cross5, Terence Dwyer6, Graeme Jones1, Laura Laslett1, Changhai Ding7, 1Menzies Institute for Medical Research, University of Tasmania, Hobart, Australia; 2Institute of Anatomy, Paracelsus Medical University, Salzburg, Austria; 3Chondrometrics GmbH, Aining, Germany; 4Department of Epidemiology and Preventive Medicine, Monash University, Melbourne, Australia; 5Institute of Bone and Joint Research, University of Sydney, Sydney, Australia; 6The George Institute for Global Health, Nuffield Department of Obstetrics and Gynaecology, University of Oxford, Oxford, United Kingdom; 7Clinical Research Centre, Zhujiang Hospital, Southern Medical University, Guangzhou, China

Background: Body composition, physical activity and physical performance may play roles in the incidence of knee osteoarthritis. However, the effects of body composition, physical activity and physical performance on knee cartilage thickness and subchondral bone area in young adults were unknown.

Objectives: To describe associations of body composition, physical activity and physical performance with knee cartilage thickness and subchondral bone area in young adults.

Methods: Body composition, physical activity and physical performance were measured 4-5 years prior to knee magnetic resonance imaging (MRI). Cartilage thickness and subchondral bone area of patella and lateral/medial femorotibial compartment were measured quantitatively from MRI. Total knee cartilage thickness was calculated as the weighted-average, according to bone area of each compartment; total knee bone area was calculated as the sum of each compartment. Associations were assessed using linear regression analysis. Age, gender, height (if fat mass or lean mass was predictor) and BMI (if physical activity or physical performance measures were predictors) were examined as potential confounders and were included in the regressions. Mediator was identified using mediation analysis (Stata’s medeff command).

Results: Participants were aged 31-40 years, 48% were female (n=186). Greater lean mass, but not fat mass, was positively associated with total knee cartilage thickness (β=6.85 μm/kg, 95% confidence interval (CI): 0.86 to 12.13) and subchondral bone area (β=13.66 mm²/kg, 95% CI: 5.73 to 21.59). Physical performance measures were positively associated with knee cartilage thickness (β=-2.36 μm/cm, 95% CI 0.68 to 4.04; hand grip strength: 7.65 μm/kg, 1.53 to 17.77; physical work capacity: 1.04 μm/watt, 0.27 to 1.81) and subchondral bone area (long jump: β=4.25 mm/cm, 95% CI 1.01 to 7.50; hand grip strength: 19.89 mm²/kg, 8.23 to 31.55; leg strength: 3.32 mm²/kg, 1.25 to 5.40; physical work capacity: 0.00 mm²/watt, 1.54 to 4.45). Mediation analysis suggested these associations were mediated by lean mass (effect mediated: 29-95%). Questionnaire based activity measures (including walking, moderate activity, vigorous activity and total activity) were not associated with total knee cartilage thickness or subchondral bone area.

Conclusion: Greater lean mass and better physical performance measures were associated with greater knee cartilage thickness and subchondral bone area in young adults, and the associations of physical performance were largely mediated by lean mass. These findings suggest lean mass may play an important role in maintaining knee joint health in young adults.


FR10682

LEISHMANIASIS IN PATIENTS WITH CHRONIC INFFLAMMATORY DISEASE TREATED WITH IMMUNOMODULATORS. MULTICENTER ANALYSIS

J. Montolivo-Chiva1, Elia Valls-Pascual1, D Ybáñez-García1, Á Martinez-Ferrer1, Marta Aguilar-Zamora1, Ana V Orenes Vera1, I Vázquez-Gómez1, A Sendra-Garcia1, Jm Paredes Arquía1, Meribell Fernandez Matilla1, L Gómez Escobar1, José Miguel Senabre-Gallego1, J Lluch Pons1, C Campos Fernández1, M Robustillo-Villarino1, María Dolores García-Armario1, S Antón-González1, Ana Urruticoechea-Araná1, Isabel de la Morena1, J Fiter-Areste1, Vega Jovani1, A Martínez-Cristóbal1, Lourdes Mateo4, Sergio Ordoñez1, D Reina-Sanz1, C Vergara-Dangond1, VNúñez-Monje1, I Torner-Hernández1, Juanjo J. Alegría-Sancho1, Universitary Peset Doctor Hospital, Valencia, Spain; ‘Arnau de Vilanova Hospital, Valencia, Spain; ‘Marina Baixa Hospital, La Vila Joiosa, Spain; ‘Belvitge Hospital, Hospital de Barcelona, Barcelona, Spain; ‘General Hospital, Valencia, Spain; ‘Plana Hospital, Villarreal, Spain; ‘Lluís Alcanyís Hospital, Xàtiva, Spain; ‘Vall d’Hebrón Hospital, Barcelona, Spain; ‘Can Misses Hospital, Ibiza, Spain; ‘Clinic Hospital, Valencia, Spain; ‘Son Espases Hospital, Mallorca, Spain; ‘General Hospital, Alicante, Spain; ‘Ribera Hospital, Alzira, Spain; ‘ Germans Trias i Pujol Hospital, Badalona, Spain; ‘Arnau de Vilanova Hospital, Lleida, Spain; ‘Mujess Broggi Hospital, Sant Joan Despi, Spain; ‘TrM Sanchinarro Hospital, Madrid, Spain

Background: Patients with chronic inflammatory disease in treatment with immunosuppressants have an increased risk of opportunistic infections, including leishmaniasis.

Objectives: To describe a multicenter case series of leishmaniasis in patients with chronic inflammatory diseases treated with immunosuppressants. To analyze factors related to the infection.

Methods: Observational retrospective study. We reviewed the clinical history of patients with chronic inflammatory diseases treated with immunosuppressants, who were diagnosed with leishmaniasis between 2007 and 2018. Demographic (age, sex) and clinical (type and time of evolution of the inflammatory disease, comorbidities, current treatment, leishmaniasis form) variables were collected. Immunosuppressant withdrawal, subsequent reintroduction and recurrence were recorded. We analyzed differences in clinical presentation related to anti-TNFx treatment. Statistical analysis were performed using SPSS 22.0 program.

Results: 55 cases were collected. 58.2% were men and the average age was 57.2 (SD 1.9) years. Twenty-one patients had spondyloarthropathy, 17 rheumatoid arthritis, 14 inflammatory bowel disease, 1 systemic lupus erythematosus, 1 Behçet and 1 uveitis. The average duration of the disease was 11.4 (SD 1.4) years and 30.9% of patients had other causes of immunosuppression. Thirty-eight patients received treatment anti-TNFx (19 infliximab, 11 adalimumab, 5 golimumab, 2 certolizumab and 1 etanercept), 15 with DMARD (14 methotrexate, 1 lefunomide), 1 with tocilizumab and 1 with azathioprine. 27.3% patients received corticoids. 52.7% showed cutaneous form, 38.2% visceral form, 7.3% mucocutaneous form and 1 presented visceral and cutaneous involvement. Treatment was withdrawn in 37 cases and it was reintroduced in 23 cases (8 anti-TNFx). Four patients relapsed. More cases of visceral leishmaniasis were seen in patients treated with non-anti-TNFx drugs and in those treated with glucocorticoids. Most of the recurrences were associated with mucocutaneous form.

Conclusion: In our series, the majority of cases of leishmaniasis occurred in patients treated with anti-TNFx, but non-anti-TNFx patients developed more serious forms. It’s important to keep in mind this infectious complication in daily clinical practice.

Disclosure of Interests: J. Montolivo-Chiva: None declared, Elia Valls-Pascual: None declared, D Ybáñez-García: None declared, Á Martinez-Ferrer: None declared, Marta Aguilar-Zamora: None declared, Ana V Orenes Vera: None declared, I Vázquez-Gómez: None declared, A Sendra-Garcia: None declared, Jm Paredes Arquía: None declared, Meribell Fernandez Matilla: None declared, L Gómez Escobar: None declared, José Miguel Senabre-Gallego: None declared, J Lluch Pons: None declared, C Campos Fernández: None declared, M Robustillo-Villarino: None declared, María Dolores García-Armario: None declared, S Antón-González: None declared, ANA URRUTICOECHEA-ARANA: None declared, AO RISKIN: None declared, Narena J. Almora: None declared, Lloren Mora: None declared, Laura Laslett: None declared, Changhai Ding: None declared DOI: 10.1136/annrheumdis-2019-eular.1557

Disclosure of Interests: Tao Meng: None declared, Benny Antony: None declared, Alison Venn: None declared, Felix Eckstein: Shareholder of Chondrometrics GmbH, Consultant for: Consulting fees from Merck KGaA, Samumed LLC, Abbvie, Bioclinica, TissueGene, Servier, and Roche, Employee of: Employee of Chondrometrics GmbH, Flavia Cicuttini: None declared, Lyn March: None declared, Marita Cross: None declared, Terence Dwyer: None declared, Graeme Jones: None declared, Laura Laslett: None declared, Changhai Ding: None declared DOI: 10.1136/annrheumdis-2019-eular.2501