Table1.

		Total (n=149)	Adults (n=92)	Elderly (n=57)
Age	mean(SD)	57(15.4)	47(12.2)	71(5.63)
Female	n(%)	128 (85.9)	77 (83.7)	51 (89.4)
Disease duration (year)	mean(SD)	8.4(10.0)	7.1(7.55)	10(12.9)
DAS28 ESR	mean (SD)	4.74(1.37)	4.54(1.38)	5.08(1.30)
HAQ	mean (SD)	0.61(0.66)	0.49(0.56)	0.78(0.76)

Table2.

	regression coefficient	95%CI	*p* value
Adults	reference	–	–
Elderly	-7.24	-11.7 to -2.7	0.0018

Multiple liner regression analysis
Adjuseted with sex, disease duration, DAS28-ESR, HAQ, and complications (interstitial lung disease, diabetes mellitus, and chronic kidney disease).

References:
[1] Izabela Roma (2014) Quality of life and elderly patients with rheumatoid arthritis, Rev Bras Reumatol 2014;54(4):279–286.
[2] ULF Jakobsson (2002) Pain and quality of life among a older people with rheumatoid arthritis and/or osteoarthritis, Journal of clinical Nursing 2002;11;430–443.
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AB0259 PREDICTORS OF HIGH DISEASE ACTIVITY IN A COHORT OF GREEK PATIENTS WITH ACPA POSITIVE EARLY RHEUMATOID ARTHRITIS

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Background: In Early Rheumatoid Arthritis, the presence of ACPA positivity is associated with increased disease activity.
Objectives: To investigate possible predictors, for high disease activity (DAS-28 >5.1), in a cohort of Greek patients with ACPA positive early RA.
Methods: From 2000 until December 2016, 156 patients with ACPA positive early RA, were diagnosed and subsequently followed up as outpatients at the Rheumatology Unit of our hospital. Demographic, clinical, laboratory and therapeutic parameters were evaluated during every follow-up. At the end of the study (last visit during 2016), all the above parameters were re-evaluated, considering the high disase activity (DAS-28 >5.1). The used methods were χ^2, ANOVA, Binary Logistic Regression (BLR) and ROC Curve.
Results: From 156 patients, 25% were males, 37.8% were current smokers, 76.9% were RF positive, 34.6% presenting with extra-articular manifestations and 16% with anemia of chronic disease (ACD). At the time of diagnosis, Univariate analysis revealed that smokers, RF positivity, high levels of CRP, patients with extra-articular manifestations and those with ACD, corellate statstically significant with high disease activity (p=0.011, p=0.006, p=0.03, p=0.001 and p=0.001 respectively). Using the BRL we found that the odds ratio for DAS-28 >5.1, were for smokers 2.95, for RF positivity 3.397 and for CRP 1.066 respectively. Based on the previous results the severity of disease can be predicted with sensitivity 80% (area unedr the curve: p<0.001, CI=0.723–0.878) using the ROC curve.
Conclusions: |High Diseasae Activity in ACPA positive early RA, at diagnosis, is best predicted by smoking, RF positivity and high levels of CRP.
References:
[1] Aletaha D et al, Rheum Dis North Am 2006;32:9–44.
[2] ScottDL et al, Lancet 2020;376:1094–1108.
[3] Papadopoulos N et al, Clin Rev Allerg Immunol 2008;34:11–15.
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AB0260 THE PREDICTORS OF FRAGILITY FRACTURES IN PATIENTS ON AROMATASE INHIBITORS: AN OBSERVATIONAL STUDY

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Background: The use of aromatase inhibitors (AIs), given after breast cancer, has been associated with a low bone mineral density (BMD) and as a risk factor for fragility fractures. We have reported on the risk factor for low BMD in a previous abstract and it showed that the use of AIs significantly reduced lumbar spine BMD and femoral neck BMD (1). The FRAX ™ tool uses the femoral neck BMD to predict fractures on a population basis but ignores the lumbar spine. Some patients who have undergone bilateral hip replacements would not be able to estimate their FRAX ™ risk accurately.
Objectives: To determine the predictors of fragility fractures in an observational cohort of female patients on aromatase inhibitors.
Methods: Female patients referred for BMD estimation in a scanner in the North West of England between 2004 and 2014 on aromatase inhibitors were identified from a dual X-ray absorptiometry database. Demographics and other risk factors, as well as fragility fractures, were recorded. Initially, those who had sustained a fracture were compared to those who had not sustained a fracture using chi-squared tests for categorical variables and T-tests for continuous variables. Following that, univariate and multivariate logistic regression models were fitted looking at the predictors of fracture. Variables included age at scan, height, weight, alcohol, smoking, family history, rheumatoid arthritis, secondary osteoporosis as defined by FRAX™, body mass index and steroid exposure, in addition to BMD in the lumbar spine and femoral neck.
Results: 2029 female patients were scanned in the referral period. The mean age at scan was 66 (SD 10.46). 356/2029 (17.55%) had sustained a fracture. Results of the univariate analysis are shown in table 1, significant predictors are indicated with an asterisk (*).

Predictor	All Pts	Pts with Fracture	Pts without Fracture	p-value	Odds ratio (95% CI)
Age at scan (years)	65.85	69.41	65.09	0.00	1.04 (1.03,1.05)*
Height (cm)	160.40	159.60	160.57	0.02	0.98 (0.96,1.00)*
Weight (kg)	72.38	71.35	72.60	0.15	1.00 (0.99,1.00)*
Alcohol	123 (6.06%)	22 (6.18%)	101 (6.04%)	0.92	1.03 (0.64,1.65)
Smoking	698 (34.40%)	132 (37.08%)	566 (33.83%)	0.24	1.15 (0.91, 1.46)
Family Hx	247 (12.17%)	48 (13.48%)	199 (11.89%)	0.41	1.15 (0.82,1.62)
RA	32 (1.58%)	10 (2.81%)	22 (1.32%)	0.04	2.17 (1.02,4.62)*
Secondary op	183 (9.02%)	46 (12.92%)	137 (8.19%)	0.01	1.66 (1.17,2.37)*
Femoral Neck BMD (g/cm^2)	0.87	0.82	0.88	0.00	0.02 (0.01,0.05)*
Lumbar Spine BMD (g/cm^2)	1.10	1.05	1.12	0.00	0.12 (0.06,0.24)*
BMI (kg/m^2)	28.13	28.00	28.16	0.61	0.99 (0.97,1.02)
Steroid	466 (22.97%)	77 (21.63%)	389 (23.25%)	0.51	0.91 (0.69,1.20)

In the multivariate model, the variables that predicted fractures in this cohort were age at scan (OR 1.03 95% CI 1.02,1.05), femoral neck BMD (OR 0.74 95% CI 0.02,0.29) and lumbar spine BMD (OR 0.34 95% CI 0.14,0.80). Using the femoral neck multivariate model resulted in an area under the curve of 0.6720 and using the lumbar spine was 0.6653.
Conclusions: In the univariate analysis, many risk factors are associated with fractures within this cohort of female patients on aromatase inhibitors but both univariate analysis and multivariate analysis showed that lumbar spine BMD is a good predictor of fractures. This is not included in the FRAX ™ tool and would enable fracture risk to be calculated in patients who have undergone hip replacements.
References:
[1] Ann Rheum Dis 2014;73 Suppl3 SAT0472.
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AB0261 CLINICAL AND STRUCTURAL RESPONSES OF PATIENTS WITH ACTIVE RHEUMATOID ARTHRITIS (RA) USING STEP-UP DOSAGES OF TOFACITINIB IN A TREAT TO TARGET APPROACH

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Background: Tofacitinib has been shown to reduce the clinical signs and symptoms of some RA patients at an approved dose of 5 mg bid. Studies report that 10 mg bid is an effective dose. This is the first community practice trial to measure the clinical and structural benefits of stepping up the initial dose of 5 mg bid in non-responders to 10 mg bid in order to achieve a clinical response using a treat to target approach.
Objectives: This study evaluates the optimal dose of tofacitinib (5 mg bid VS 10 mg bid) needed to reach treatment target in a cohort of patients with active RA while comparing the corresponding structural findings measured by low field MRI.
Methods: 20 RA patients who were unresponsive to either methotrexate (10–25 mg weekly) or MTX plus up to 2 prior biologics with synovitis, osteitis or erosions on Baseline MRI (Esaote 0.3T) were treated with 5 mg bid tofacitinib with a treat to target goal of Low Disease Activity (LDA) or remission depending on the Clinical Activity Index (CDAI) score at Baseline. If the target was not met and sustained for 3 months, the dose of tofacitinib was increased to 10 mg bid in an attempt to reach target. MRIs of the hand/wrist were blindly read by a musculoskeletal radiologist using a rheumatoid arthritis MRI scoring system (RAMRIS). A CDAI score of >10 was needed at study entry.
Results: Of the 20 enrolled patients, 6 remained at 5 mg bid and 14 were dose escalated to 10 mg bid most at the 12 week period. Of the 5 mg bid group, 3 completed the trial at target and 3 early termed (ET) for lack of efficacy, relocation and AE. Structurally, there was no change in erosions in all 3 patients; 2 showed regression of synovitis and 1 showed no change; 2 showed regression in osteitis and 1 no change. Of the 14 patients escalated to 10 mg bid, 11 completed the trial with 7 remissions, 2 at LDA, and 1 at MDA. 3 patients ET due to lack of efficacy. In the 10 mg bid group, 9 patients showed no change in erosions, 1 regression and 1 progression. 5 patients showed no change in synovitis and 6 showed regression, and 7 showed no change in osteitis, 3 showed regression and 1 showed progression. The CRP values correlated with the improvement of