Methods: We selected patients from our prospective RA disease registry who have been treated for three months or fewer at study entry. We analysed the change of the disease activity, as defined by the DAS28–ESR, over the subsequent two years. A predictive model with parameters from three time points is proposed to stratify patients according to the outcomes.

Abstract AB0214 – Figure 1

Results: We analysed the data from 179 patients over 1044 study visits. We discerned three groups of patients according to disease activity trajectories:¹the first group (53%) has high DAS at study entry and approach remission after 18 months;²the second group (22%) has high DAS at entry that remained elevated throughout the study period; and,³the third group of patients (25%) started with moderately high DAS and reached remission after 3 months of treatment. Patients at risk of being in the third group can be identified using data from three time points, at initiation of DMARDs, at 3 months and at 6 months.

Conclusions: RA patients showed three distinct disease activity trajectories with treatment. Our model can categorize patients into these groups.

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AB0215

ASSOCIATION OF RHEUMATOID FACTOR IMMUNOGLOBULIN A SEROPOSITIVITY WITH RISK OF EROSIVE ARTHRITIS IN PATIENTS WITH RHEUMATOID ARTHRITIS: AN OBSERVATIONAL STUDY

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Background: In patients with rheumatoid arthritis (RA), erosive arthritis is a major determinant of long-term prognosis. Seropositivity for immunoglobulin (Ig) M rheumatoid factor (RF) or cyclic citrullinated peptide antibodies (anti-CCP) are risk factors for erosive arthritis. However, RA patients can also present IgA RF. The risk for erosive arthritis associated with RF IgA seropositivity is not established.

Objectives: To evaluate the risk for erosive arthritis associated with IgA RF seropositivity in RA patients.

Methods: Cross-sectional observational study, including RA patients (fulfilling the 2010 ACR/EULAR classification criteria) and consecutively observed in a hospital-based rheumatology outpatient clinic, from April to August 2017. At time of inclusion, patient characteristics were evaluated, including: gender, age, RA duration since time of diagnosis, smoking habits, seropositivity for IgA RF, IgM RF and anti-CCP, erosive arthritis in hand and feet X-rays. Risk association for erosive arthritis was analysed with univariate and multivariable logistic regression models for the putative risk factors and confounders. Odds ratios (OR) and 95% confidence intervals (CI) of IgM RF, IgA RF, and anti-CCP seropositivity for erosive arthritis were estimated. Statistical significance was set at 0.05.

Results: 86 patients were included. The univariate logistic regression showed significant positive associations of IgA RF, IgM RF and anti-CCP with erosive arthritis. In the multivariate analyses, adjusting for confounders (gender, age, disease duration and smoking), the OR for erosive arthritis associated with IgA RF, IgM RF and anti-CCP were respectively: OR=2.42 (95% CI 0.72–8.07; p=0.152); OR=3.54 (95% CI 1.16–10.83; p<0.05); OR=4.13 (95% CI 1.33–12.82; p<0.05). The seropositivity for IgM RF, IgA RF and anti-CCP were strongly associated among each other (Chi-square test with p<0.001 for all associations).

Conclusions: In this RA cohort, the IgA RF was associated with erosive arthritis in univariate analysis, but did not prove to be an independent risk factor in multivariate regression, due to its strong association with IgM RF and anti-CCP. Determination of IgA RF does not seem to add predictive value for erosive arthritis in RA patients.

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AB0216

LOW MORTALITY RATE IN ITALIAN RHEUMATOID ARTHRITIS PATIENTS FROM A TERTIARY CENTRE. PUTATIVE IMPLICATION OF A LOW ANTICARBAMYLATED PROTEIN ANTIBODIES PREVALENCE

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Background: Rheumatoid Arthritis (RA) is a chronic systemic inflammatory disorder associated with increased mortality, in particular from cardiovascular (CV) disease, infections and cancer. We recently demonstrate a incidence mortality rate (IMR) in 654 RA patients enrolled over a 6 year period in a South-Italian tertiary Rheumatology Centre lower than that reported in the Norfolk Arthritis Registry.¹

Objectives: The present study is devoted to investigate differences in IMR between our series and other European tertiary centre cohorts. Furthermore we evaluated the role, if any, of Anticarbamylated protein antibodies (anti-CarP Ab) in modulating the low IMR detected in our patients.

Methods: Clinical charts of patients consecutively admitted to our centre, from January 1st, 2008 to December 31st, 2014 were reviewed. IMRs and causes of death as assessed at December 31st 2015, were registered. Sera collected at the time of admission to our centre in 61 patients representative of our RA cohort were investigated for the presence and the level of anti-CarP Ab. Demographic and clinical features, mortality rates and prevalence of anti-CarP Ab detected in our series were compared with those reported in the Better Anti-rheumatic Farmaco-therapy (BARFOT) cohort, the Leiden Early Arthritis Clinic cohort (Leiden EAC) and a Spanish cohort.^{2,3}

Results: Six hundred and eight patients were observed for a median of 3.51 years. All causes and cause-specific IMRs were significantly lower in our cohort with respect to the BARFOT and the Spanish cohort, while only all causes and CV IMRs were significantly lower in our series with respect to the Leiden EAC. These discrepancies might depend on demographic and clinical differences among the various cohorts. Nevertheless, we failed to find putative differences with respect to each North European cohort, but we detected a significantly lower prevalence of anti-CarP Ab in our series with respect to that reported in the other European cohorts considered (table 1).

Conclusions: In conclusion, we confirm that the mortality rate in our South Italian RA cohort is lower than that detected in patients from both North and South European countries.

We detected a very low prevalence of anti-CarP Ab in our sample representative of the entire cohort. Whether this is the aspect underpinning the low mortality rate detected in our series, awaits to be further investigated.

Abstract AB0217 – Table 1

	Factor analysis		Chi-square	df	p	Item-fit statistics			
	Loadings					Outfit mean square	Infit mean square	Outfit t	Infit t
	All [†]	HA							
Item no. 1	0.721	0.460	224.213	183	0.020	1.219	1.111	1.96	1.05
Item no. 2	0.629	0.522	205.899	183	0.118	1.119	1.132	1.17	1.29
Item no. 3	0.750	0.522	142.900	183	0.987	0.777	0.740	-2.18	-2.65
Item no. 4	0.660	0.675	95.060	183	1.000	0.517	0.523	-4.90	-5.34
Item no. 5	0.534	0.807	131.885	183	0.998	0.7171	0.682	-3.05	-3.45
	Factor 1	Factor 2							
Sum of square loadings	2.210	1.869							
Proportion Variance	0.442	0.374							
Cumulative Variance	0.442	0.816							

Abstract AB0216 – Table 1

	NAPLES (n.654)	BARFOT (n.805)	LEIDEN (n.848)	SPAIN (n.331)
Sex F/M ratio	470/184	530/275 (66%) p 0.0137	571/277 (67%) p 0.0592	244/87 p 0.5392
Age in years Mean ±SD	55.7 ±12.4	57.7 ±15.7 p 0.0080	56.8 ±15.8 p 0.1429	68.7 ±8.1 p 0.0001
RF+/RF-	270/162 (62.5%)	452/353 (56%) p 0.0308	489/359 p 0.0901	198/133 p 0.4513
ACPA+/ACPA-	188/172 (52%)	462/343 (57%) p 0.1008	445/403 p 0.9355	215/116 (64.7%) p 0.0007
HAQ-DI Mean ±SD	1.13 ±0.79	1.00 ±0.66 p 0.0006	1.00 ±0.71 p 0.0008	-
IMR	0.79	2.49 p < 0.0001	2.07 p < 0.0001	4.1 p < 0.0001
CV-IMR	0.46	1.57 p < 0.0001	0.92 p 0.0384	1.2 p 0.0039
NEO-IMR	0.17	0.65 p 0.0049	0.39 p 0.1206	0.6 p 0.0137
RESP-IMR	0.13	0.69 p 0.0012	0.36 p 0.0750	1.2 p < 0.0001
antiCarP+ (%) (homemade technique)	3.3% (95% C.I. 0.3-10.9)	35% (95% C.I. 31.7-38.4) p < 0.0001	45% (95% C.I. 41.6-48.4) p < 0.0001	32.9% (95% C.I. 27-37.3) p < 0.0001
antiCarP+ (%) (commercial kit)	10% (95% C.I. 3.8-20.4)	35% (95% C.I. 31.7-38.4) p < 0.0001	45% (95% C.I. 41.6-48.4) p < 0.0001	32.9% (95% C.I. 27-37.3) p < 0.0003

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AB0217 CONSTRUCT VALIDATION OF THE ITALIAN VERSION OF THE 5-ITEM COMPLIANCE QUESTIONNAIRE FOR RHEUMATOLOGY (I-CQR5)

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Background: The 5-item Compliance Questionnaire for Rheumatology (CQR5) allows the identification of patients likely to be high adherers (HA) to anti-rheumatic treatment (i.e. taking ≥80% of their medications correctly), or “low” adherers (LA).¹

Objectives: The objective was to validate the construct of an Italian version of CQR5 in rheumatoid arthritis (RA).

Methods: Cross-cultural adaptation comprised: forward translation, synthesis of the translations, back-translation, expert committee assessment and field-testing. Validation was conducted administering the adapted version (I-CQR5) to RA patients (disease duration >1 year, treated with ≥1 self-administered disease-modifying anti-rheumatic drug, capable of completing the questionnaire unaided) on one occasion. Questionnaires were anonymous but contained self-reported data. Construct validity and reliability were assessed with Rasch analysis (Partial Credit model Parametrisation, PCM). Martin-Loef Likelihood ratio test assessed invariance for gender, age, education, social status and disease duration.

Results: The adaptation process was closed by the expert committee assessment. I-CQR5 is reported in Figure 1. Among 604 patients, 274 were included in the validation process, 6 questionnaires were incomplete. Median age was 57 years (48–67), females were 201 (77%), disease duration was 13.5 years (8–19.3), most patients lived with partner/family (159,75%) and had a middle/secondary school education (184,69%). HA were 93 (67%) and LA 179 (35%). Factor analysis revealed ordered thresholds in most items, 2 factors were sufficient to explain variability (Chi-square=0.46, p=0.5) (Tab.1). Item-fit statistics showed overall agreement of items with parametrisation (Infit statistics=0.6–1.4; excluding item no.5). Chi-square showed agreement with PCM parametrisation by item (excluding the item no.1). Martin-Loef likelihood ratio test confirmed unidimensionality (Chi-square 65.8, df=53, p=0.11) and Separation Reliability Index confirmed internal consistency (Patient Separation Index 0.91) (Tab.1). I-CQR5 was invariant to age (Chi-square=40.6, df=28, p=0.059), education level (Chi-square=49.9, df=42, p=0.187), social status (Chi-square=10.5, df=15, p=0.79), disease duration (Chi-square=13.6, df=36, p=0.220); Martin-Loef test was significant for gender (Chi-square=25.4, df=14, p=0.031).

Abstract AB0217 – Table 2
Questionario sulla Compliance in Reumatologia a 5 domande (I-CQR-5)

Di seguito sono riportate delle affermazioni di pazienti affetti da una malattia reumatica. Indichi quanto è d'accordo con ciascuna affermazione cercando il numero che riflette maggiormente la Sua opinione.

	Completamente in disaccordo	In disaccordo	D'accordo	Completamente d'accordo
Prendo i farmaci antireumatici perché in questo modo ho meno disturbi.	1	2	3	4
Non mi permetto mai di saltare la somministrazione dei farmaci antireumatici.	1	2	3	4
Metto sempre le medicine nello stesso posto per non dimenticare di prenderle.	1	2	3	4
Prendo i farmaci prescritti perché ho completa fiducia nel mio reumatologo.	1	2	3	4
Seguo sempre le indicazioni del mio medico.	1	2	3	4

Conclusions: I-CQR5 was well understood by patients and construct validity, unidimensionality and internal consistency were confirmed by factor analysis and PCM.