Methods: Descriptive, cross sectional, prospective study, in a Paraguayan cohort of patients with RA. This study had two phases: the first one, included a standardized questionnaire according to the variables included in the Cardiovascular Risk project (PINV15-0346), from the Consejo Nacional de Ciencias y Tecnología (CONACYT), and physical examination; the second one included laboratory sample collection performed by a specialized laboratory for serum biomarkers measurement for cardiovascular risk prediction (i.e. endothelin, alpha-TNF, E-selectin, t-PA, VCAM, PAI-1 and high sensitivity-CRP levels) and echocardiographic assessment with a Doppler 7 GE USA equipment at a private facility. All patients signed informed consent. SPSS Statistics v23 was used for data analysis. Quantitative variables were presented as means and qualitative variables as frequencies. Chi square test was performed for comparisons between dichotomous variables. A p value ≤ 0.05 was used for statistical significance.

Results: 100 patients were included, 87% women, with a mean age of 51.36 ± 11.03 years, mean disease duration of 130.9 ± 102.64 months. 84.4% had positive ACPA. 43.3% had bone erosions, with an average of DAS 28-ESR 3.42 ± 1.1 . 60% of patients presented with echocardiographic left ventricular delayed relaxation pattern. Regarding traditional CV risk factors, the same ones presented more frequently HBP (40% vs 19.4%, $p = 0.037$), DM2 (11.7% vs 0%, $p = 0.036$), obesity (38.3% vs 16.7%, $p = 0.025$), altered glycemia (27.1% vs 6.5%, $p = 0.02$), altered HbA1C (50.8% vs 22.6%, $p = 0.01$), higher mean weight (75.9 ± 17.62 $p = 0.02$), higher Framingham index high (20% vs 3.2%, $p = 0.03$). Regarding to clinical parameters, a higher frequency of erosions was found (55.8% vs 22.2%, $p = 0.004$), without other significant differences for disease activity, seropositivity or disease duration. As for serum biomarkers, higher levels of fibrinogen (639.71 ± 189.84 , $p = 0.04$), homocysteine (11.74 ± 7.81 , $p = 0.05$) and VCAM ($519, 16 \pm 203.68$, $p = 0.02$) were found.

Conclusion: We found a high frequency of diastolic dysfunction in patients with RA. They presented a significant association with traditional CV risk factors, erosions, and fibrinogen, homocysteine, and VCAM biomarkers. Adequate control of cardiovascular risk factors and echocardiographic assessment of these patients is essential in order to avoid the progression of heart functional damage.

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AB0160

HIGH NUMBER OF CONCOMITANT MEDICATIONS AND COMORBIDITIES AT BASELINE IN THE GLUCOCORTICOID LOW-DOSE OUTCOME IN RHEUMATOID ARTHRITIS (GLORIA) STUDY: AN OLDER POPULATION WITH RHEUMATOID ARTHRITIS

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Background: Treatment with low-dose glucocorticoids (GCs) (≤ 7.5 mg prednisolone) in combination with standard care is highly effective in rheumatoid arthritis (RA), but despite 70 years of clinical experience, evidence-based information on its balance of benefit and harm is incomplete. This leads to an ongoing debate, with under- and over-use of GCs as result. The GLORIA pragmatic trial was developed to assess harm, benefit and costs of low-dose GCs added to the standard treatment of older RA patients.

Objectives: The objective of this abstract is to document the baseline status and frequency of comorbid conditions in the GLORIA study population. The results of the unblinded data will be submitted as late-breaking abstract.

Methods: This double-blind, randomized, placebo-controlled, multicenter trial (1) was open for patients with RA according to the 1987 or 2010 (2) criteria, age ≥ 65 years, and disease activity score of 28 joints (DAS28) of ≥ 2.6 . Patients were recruited from rheumatology clinics in Germany, Hungary, Italy, The Netherlands, Portugal, Romania and Slovakia. Eligible patients were randomized to two years of treatment with daily 5 mg prednisolone or matching placebo. All other medication was allowed, except for GCs. The presented data are blinded because the database is not closed yet.

Results: The population consists of 451 patients with mean disease duration 10.6 (Q1-Q3: 3-15) years. The majority (70%) is female, mean age is 72.5 (Q1-Q3: 68-76, range: 65-88) years, 66% were positive for rheumatoid factor and 56% for ACPA. Patients had a mean of 4.3 (SD 2.8) comorbidities besides RA (3.4 active) and therefore used multiple concomitant medications (3.9 (SD 3.4)) (Table 1). The most common comorbidities (provisional data of 161 patients with complete coding) in this older population are: vascular disorders (58%), musculoskeletal and connective tissue disorders (57%) and a history of surgical and medical procedures (45%). Patients were most frequently on beta blocking agents (22%, mainly metoprolol) and HMG CoA reductase inhibitors (20%, mainly simvastatin). Most patients also have an extensive history of anti-rheumatic treatment. At the start of the trial most patients (82%) were on cDMARD treatment; 15% were on bDMARDs/tsDMARDs. Almost half of the patients previously had been treated with GCs, with a mean duration of 3.4 years and a mean last dose of 4.6 mg/day.

Conclusion: The baseline data shows that we have an older study population who have relatively many other comorbidities next to RA and who are almost all treated with multiple concomitant medications in addition to the study medication. Therefore, we expect to report a high adverse event rate. Research among older patients is urgently needed, but the frailty of this population as represented by the multiple comorbidities and concomitant medications have to be taken into account in the analyses and interpretation of the results.

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Table 1. Comorbidities and concomitant medications at baseline in the GLORIA trial.

	Mean	SD	Range
Comorbidities	4.3	2.8	0-15
Active	3.4		
Past	1.9		
Concomitant medications (count)	3.9	3.4	0-15
Beta blocking agents (%)	22		
HMG CoA reductase inhibitors (%)	20		
Platelet aggregation inhibitors (%)	16		
ACE inhibitors (%)	12		
Angiotensin II antagonists (%)	11		
DAS28	4.52	1.05	
DAS28CRP	4.06	0.97	
HAQ (0-3)	1.2	0.7	
RA treatment	Current (%)		Previous (%)
cDMARD	84		92
bDMARD/tsDMARD	15		22
NSAID	51		29
Glucocorticoids	0		49

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AB0161

THE IMPACT OF BIOLOGICAL AGENTS ON CARDIOVASCULAR RISK FACTORS OF PATIENTS DIAGNOSED WITH RHEUMATOID ARTHRITIS

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Background: The risk of cardiovascular disease in patients with rheumatoid arthritis (RA) is 1.5-2 fold higher than in people of the same age and sex of the general population.^{1,2,3} This marked risk is attributed to the systemic chronic inflammation which is characteristic of the disease.

Objectives: The aim of this study is to evaluate cardiovascular risk factors and early atherosclerosis in rheumatoid arthritis patients, treated with biological agents.

Methods: This is a prospective, observational study. Thirty-five patients treated with synthetic DMARDs with no previous history of a cardiovascular event included. We compared total cholesterol (TC), high-density lipoprotein cholesterol (HDL-c), low-density lipoprotein cholesterol (LDL-c), triglycerides (TGs), Apolipoprotein A1 (ApoA1), Apolipoprotein B (ApoB) and Lipoprotein A (LpA), the titer of autoantibodies against oxidised LDL (anti-oxLDL), systolic blood pressure, inflammatory markers as C-reactive protein (CRP) and erythrocytes sedimentation rate (ESR) between baseline and after 6 months of biological agents initiation. An ultrasonographic measurement of intima-media thickness (IMT) of carotids was also performed by an experienced sonographer at baseline and after one-year follow-up.

Results: As regards the demographic characteristics of patients, the mean (SD) age was 54(14) years, disease duration 4,3(1.4) years, 22.9% were smokers and 68,6% were women. Anti-TNF was administered in 71,4% of patients while the rest non anti-TNF was given as treatment. Six months after treatment initiation, patients presented with a significant increase in mean (SD) HDL[69(19)vs58(15)] and ApoA1[177(34)vs162(31)] levels (p value <0,001) with a simultaneous significant reduction of mean (SD) systolic blood pressure [128(12)vs136(14)] and the titer of anti-oxLDL[0,132(0,042)vs0,190(0,056)]. IMT was also reduced after one-year reassessment [0,8(0,3) mm vs 0,9(0,3)mm, (p value <0,001 for all comparisons)].

Conclusion: Biological agents administration was accompanied by an improved lipid profile in a six-month period and a significant reduction of IMT, confirming that RA patients are prone to early atherosclerosis and probably biological agents initiation correlates strongly with cardiovascular risk reduction.

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AB0162 OCULAR MANIFESTATIONS IN PATIENTS WITH RHEUMATOID ARTHRITIS

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Background: Rheumatoid arthritis (RA) is the most common systemic autoimmune disease and is associated with a number of extra-articular organ manifestations, including ocular complications.

Objectives: The aim of this study is to evaluate the frequency and characteristics of ocular manifestation in patients with rheumatoid arthritis (RA).

Methods: The study involved 87 patients with RA. All the study subjects underwent complete ophthalmological examination involving visual acuity assessment, examination of anterior and posterior eye segments, Schirmer's test, diameter and mobility of pupils, as well as eyeball mobility assessment of intraocular pressure. Data regarding age, gender, disease duration, age at diagnosis, systemic corticosteroid use, blood pressure, ocular symptoms and detailed ophthalmic history were recorded. The presence of rheumatoid factor in serum

was evaluated by standard test methods based on principle of agglutination. All patients were seropositive.

Results: 87 patients (26 male, 59 female, mean age 45,6 ± 13,1 years; mean disease duration 7,4 ± 6,2 years) with RA were enrolled in this study. 31 (35,63 %) of them had no ocular symptoms. Among the patients with ocular symptoms, 39 (69,64 %) complained of decreased vision, 33 (58,93 %) - of dry eye, 32 (57,14 %) - of burning, 29 (51,78 %) - photophobia, 28 (50 %) - of gritty sensation, 27 (48,21 %) - of itching, 18 (32,14 %) - of redness, 13 (23,21 %) - of ocular pain, 3 (5,36 %) - of floaters. Ophthalmological examination revealed higher incidence of the following abnormalities in the study group: myopic astigmatism - in 10 (5,74 %) eyes, vascular abnormalities within fundus - in 22 (12,64 %) eyes, increased intraocular pressure (> 21 mm Hg) - in 11 (6,32 %) eyes. Mean IOP values were 17,34 ± 5,12 mm Hg. In 48 eyes Schirmer's test results were below 10 mm, and in 18 eyes - below 5 mm. Keratoconjunctivitis sicca was present in 31 (35,63 %) of all patients. Episcleritis was diagnosed in 4 patients (4,6 %), scleritis - in 3 (3,45 %). Retinal vasculitis was present in 2 (2,3 %) patients and involves veins and arteries peripheral branches. Lens opacity was found in 13 (14,94 %) patients (21 eyes), mostly in the form of posterior subcapsular cataract (in 16 eyes) and nuclear cataract (in 5 eyes). The mean age of patients with cataracts was 52,3 ± 14,2 years. 13 of the patients with cataracts were either currently taking or had previously taken systemic corticosteroids.

Conclusion: In patients with RA numerous abnormalities within the vision of organ may be found. Ocular symptoms are relatively common complications of RA, and may result in irreversible changes in the organ of vision. Regular ophthalmological examinations are essential among the patients with RA.

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AB0163 ELECTROCARDIOGRAPHIC MANIFESTATIONS IN PATIENTS WITH SEROPOSITIVE RHEUMATOID ARTHRITIS

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Background: Cardiovascular disease in rheumatoid arthritis (RA) is more common than in general population. Particular attention should be paid to cardiac dysfunction, as their timely diagnosis strongly affects the general outcome.

Objectives: To assess the prevalence of arrhythmias and conduction disorders in patients with seropositive RA without clinical manifestations of coronary artery disease, as well as to determine their relationship with activity and duration of RA.

Methods: The research was carried out in agreement with the WMA Declaration of Helsinki principles. 48 patients with seropositive RA were included in the study. The exclusion criteria were: age over 60 years; obesity; congenital heart defects; coronary artery disease; peripheral atherosclerosis; thyroid disease; diabetes mellitus. All patients were assessed using general physical, laboratory and instrumental survey including CBC, blood chemistry panel, as well as ECG. RA diagnosis was verified using the 2010 ACR / EULAR classification criteria. Central tendencies were expressed as mean ± SD.

Results: All the included persons were women. Their average age was 50.50 ± 7.22 years, and average duration of the disease was 8.13 ± 2.34 years. All patients had articular form (without systemic manifestations) of moderate and high activity. The patients were treated with basic and NSAIDs therapy; no glucocorticoids were applied at the time of the examination. Using 12-lead ECG arrhythmias and conduction disorders were revealed in 27 (56.25%) of RA patients. Sinus rhythm deviations had the highest (31.25%) prevalence for all arrhythmias, comprising sinus tachycardias (18.75%), sinus bradycardias (6.25%), and sinus arrhythmias (6.25%). Premature beats were registered in 12.5% cases, being supraventricular and ventricular ones in equal proportions. We have found left anterior bundle branch block in 6 (12.5%) of patients. Despite absence of any angina symptoms, 9 (18.75%) of patients had myocardial repolarization disturbances, either as ST depression deeper than 0.1 mV or as negative T wave appearance, which were quite similar to silent myocardial ischemia manifestations. All the patients with these two features had RA history of more than 10 years. There was no relationship between the prevalence of the manifestations and radiographic stage of RA.

Conclusion: Arrhythmias and conduction disorders are quite frequent finding in seropositive RA (56.25% and 18.75%, respectively). Their incidence and severity do not coincide exactly with the radiographic progression in joints, while their prevalence generally increases with disease duration.

These data highlight the importance of additional Holter ECG monitoring in RA for revelation and treatment of silent life-threatening cardiovascular complications.

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