hospitalization was performed (n = 14). The first group included 6 patients who retained low disease activity during 1 month follow-up (RA, stabilization). The second group consisted of 8 patients who had exacerbation during follow-up period. As a control group, we used data from 43 comparable healthy donors.

Subsets of T regulatory cells and monocytes were studied. A comparison was made among the indicators of receptors number and proportion of cells expressing the corresponding receptor.

**Results:** For T regulatory cells, the key differences for patients who did not retain low disease activity were significantly higher number of TNF type 1 and type 2 receptors on double-positive cells with a lower percentage of these cells compared to stable patients. At the same time, higher differences between proportions of double-positive cells in comparison with control values of healthy donors were associated with higher probability of maintaining in remission.

For monocytes, the key differences in stable patients were the very high quantitative expression of type 1 receptors on double-positive cells, with a lower percentage of these cells compared to patients with exacerbation. At the same time, lower differences between proportions of double-positive cells in comparison with control values of healthy donors were associated with higher probability of maintaining in remission.

**Conclusion:** Obtained data confirm the previously proposed hypothesis about the essential role of balance in quantitative expression of TNF receptors type 1 and 2 on double-positive cells to determine the intensity and type of cell response to the mediator and its association with the level of disease activity and response to therapy.

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**POS0502**

**WHAT IS THE ROLE OF VITAMIN D STATUS IN DISEASE ACTIVITY IN RHEUMATOID ARTHRITIS PATIENTS TREATED WITH DMARDs? – DATA FROM A RHEUMATOLOGY CENTER**

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**Background:** Rheumatoid arthritis (RA) is a chronic autoimmune disease with no cure, characterized by episodes of exacerbation and remission, which requires permanent use of medications. Clinics of excellence are multidisciplinary and centralized programs that improve adherence to treatments. Information on the benefits of these models of care has been published but is not definitive. In Colombia, the clinical registry of patients with RA is kept in the Cuenta de Alto Costo (CAC).

**Objective:** To demonstrate the difference in the percentages of sustained remission at 2 years, between an institution with non-centralized management or standard of care (Hospital Militar Central-HMC) compared to another institution with centralized management or clinic of excellence (Biomab-IPS) and determine if the results are determined by any of the intervention variables or by the program.

**Methods:** The 2-year clinical records for the CAC were compared between an institution with non-centralized management (HMC) in comparison with another institution with centralized management (Biomab-IPS), performing a sociodemographic description, measuring control of the disease DAS28 clinimetry, Fisher’s test non-parametric bivariate analysis, multiple regression model, and population matching with Propensity score Matching (PSM).

**Results:** Complete information was obtained from 2 years of follow-up, in centralized management 3,437 patients and for the non-centralized unit 114 patients. Most of them corresponded to 2,962 women (82%), with time of illness of 9.5 years and 10.2 years, respectively, without statistically significant differences. A difference was observed in the 2 programs to maintain remission at 2 years, in favor of the centralized program 54.7% vs 28.6% (p < 0.00). With the binomial generalized linear regression model, it was confirmed that this difference was not explained by variables such as the use of biological therapy (RR = 0.77; 95% CI 0.69-0.86), use of DMARDs (RR = 0.71; 95% CI 0.62-0.82) and number of rheumatology consultations (RR = 0.97; 95% CI 0.92-1.02) in comparison with the centralized care model (RR = 2.32; 95% CI 1.58-3.35). Due to the biases between the groups due to the non-probability sampling, a PSM was performed, with a 1:1 match, caliper of 0.065, obtaining a pseudo population with well-balanced covariates (see table 1). In the common support area, statistically significant differences were documented in sustained remission over 2 years, in favor of the centralized care group 45 vs 17.9% (p = 0.001).

**Conclusion:** With the information from the clinical records, statistical strategies can be used to evaluate important differences in centralized care programs, observing favorable results of these types of care that are not related to isolated elements of the program, but to the overall effect of the program.

**References:**


**Disclosure of Interests:** Juan Manuel Bello-Gualltero: None declared, Esperanza Peña: None declared, Pedro Iván Santos Moreno: None declared, Jasmin Vesga Gualdrón: Employee of: Baxter, Ginna Saavedra: None declared, Clara Perez: None declared

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The DS was shown to be mediating the effect of DAS28CRP on any future PRF (Table 1). On the other hand, there was no mediation effect of the DS in the prediction of the LF and an inconsistent mediation effect when predicting the CF. Moreover, the DS at week 16 significantly predicted (p<0.0001) RAQoL scores at year 1 with an effect of β 19.05 (SE 1.56) and an R² of 0.32 (CI 0.24-0.40).

**Table 1. Results of mediation analyses for prediction of future burden based on previous DAS28CRP and mediated by discordance.**

<table>
<thead>
<tr>
<th>Timepoint</th>
<th>Predictor variables</th>
<th>Direct Effect</th>
<th>95% Cls</th>
<th>R²</th>
<th>Mediation effect</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Patient-reported factor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W16 DAS28CRP at BL</td>
<td>-0.0091</td>
<td>-0.0240, 0.0008</td>
<td>0.1450</td>
<td>Present</td>
<td></td>
</tr>
<tr>
<td>W52 DAS28CRP at W16</td>
<td>0.0215*</td>
<td>0.0010, 0.0419</td>
<td>0.3394</td>
<td>Partial</td>
<td></td>
</tr>
<tr>
<td>W104 DAS28CRP at W16</td>
<td>0.0586*</td>
<td>0.0442, 0.0739</td>
<td>0.2794</td>
<td>Present</td>
<td></td>
</tr>
<tr>
<td><strong>Clinical factor</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>W16 DAS28CRP at BL</td>
<td>0.0153*</td>
<td>0.0074, 0.0232</td>
<td>0.0599</td>
<td>Absent</td>
<td></td>
</tr>
<tr>
<td>W52 DAS28CRP at W16</td>
<td>0.0363*</td>
<td>0.0267, 0.0463</td>
<td>0.1944</td>
<td>Absent</td>
<td></td>
</tr>
<tr>
<td>W104 DAS28CRP at W16</td>
<td>0.0033</td>
<td>-0.0031, 0.0095</td>
<td>0.2794</td>
<td>Present</td>
<td></td>
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<tr>
<td><strong>Laboratory factor</strong></td>
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<td></td>
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<tr>
<td>W16 DAS28CRP at BL</td>
<td>0.0063*</td>
<td>0.0015, 0.0111</td>
<td>0.0634</td>
<td>Partial</td>
<td></td>
</tr>
<tr>
<td>W52 DAS28CRP at W16</td>
<td>0.0030*</td>
<td>0.0012, 0.0050</td>
<td>0.1786</td>
<td>Absent</td>
<td></td>
</tr>
<tr>
<td>W104 DAS28CRP at W16</td>
<td>0.0007</td>
<td>-0.0079, 0.0064</td>
<td>0.0141</td>
<td>Absent</td>
<td></td>
</tr>
</tbody>
</table>

D: week BL: baseline DS: discordance scoreDAS28CRP; disease activity score in 28 joints with C-reactive protein*p<0.01

**Conclusion:** Early discordance between patient-reported and biological/clinical factors may help provide opportunities to prevent patient’s unmet needs by additional non-pharmacological interventions, hence broadening the scope of T2T.

**REFERENCES:**

**Disclosure of Interests:** None declared

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**POS0504**

**IS BIOELECTRICAL PHASE ANGLE ASSOCIATED WITH FUNCTIONAL STATUS AND DISEASE IMPACT IN PATIENTS WITH RHEUMATOID ARTHRITIS?**

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**Background:** Rheumatoid arthritis (RA) affects 1% of European population, and results in significant mortality and morbidity due to social disability. RA is characterised by systemic inflammatory response, which causes many health-related quality of life (HRQoL) impairments. Absence of early monitoring and early intervention may lead to severe joint damage and increased mortality. Although biological and functional outcomes are strongly associated with RAQoL, the influence of body composition on functional outcomes has not been thoroughly studied. Previous studies showed that body composition measured by bioelectrical impedance analysis (BIA) is associated with health outcomes in RA. However, previous studies were limited by sample size and lack of validation of the results. This study aimed to assess the association between body composition index (BMI) and functional outcomes in RA.

**Aim:** To investigate the association between body composition and functional outcomes in RA.

**Methods:** This cross-sectional study included patients with RA (n=47) who met the American College of Rheumatology (ACR) 1987 or 2010 criteria. Patients were recruited from a tertiary referral center in Portugal. Functional outcomes were evaluated using the Health Assessment Questionnaire (HAQ-DI) and the Functional Outcomes of Rheumatoid Arthritis (FOTO) questionnaires. Body composition was assessed using BIA (MedBody 5.0, Medicam, Portugal). Data were analyzed using SPSS (version 25).

**Results:** Of the 47 patients included, 34 (72.3%) were females, and the mean age was 60.7 ± 11.2 years. The mean BMI was 26.5 ± 4.4 kg/m², and the mean body fat percentage was 34.5 ± 10.7%. The mean HAQ-DI score was 0.8 ± 0.8, and the mean FOTO score was 21.5 ± 7.3. The mean body fat percentage was significantly associated with the HAQ-DI score (p = 0.002). Additionally, the mean body fat percentage was significantly associated with the FOTO score (p = 0.001). The results showed that BMI and body fat percentage were significantly associated with functional outcomes in RA.

**Conclusion:** The results of this study suggest that body composition is associated with functional outcomes in RA. Further studies are needed to confirm these findings and explore the potential mechanisms underlying this association.