


Table 1. Demographic and clinical characteristics of the study subjects

<table>
<thead>
<tr>
<th>Study</th>
<th>Treg frequency</th>
<th>CD4(+)CD25(+)Foxp3+ Treg cells</th>
<th>CD4(+)CD25(+)Foxp3+ Treg cells</th>
<th>CD8(+)CD25(+)Foxp3+ Treg cells</th>
<th>CD8(+)CD25(+)Foxp3+ Treg cells</th>
<th>CD4(+)CD25(+)Foxp3+ Treg cells</th>
<th>CD4(+)CD25(+)Foxp3+ Treg cells</th>
</tr>
</thead>
<tbody>
<tr>
<td>Study 1</td>
<td>25.2%</td>
<td>25.3%</td>
<td>25.4%</td>
<td>25.5%</td>
<td>25.6%</td>
<td>25.7%</td>
<td>25.8%</td>
</tr>
<tr>
<td>Study 2</td>
<td>26.9%</td>
<td>27.0%</td>
<td>27.1%</td>
<td>27.2%</td>
<td>27.3%</td>
<td>27.4%</td>
<td>27.5%</td>
</tr>
<tr>
<td>Study 3</td>
<td>28.6%</td>
<td>28.7%</td>
<td>28.8%</td>
<td>28.9%</td>
<td>29.0%</td>
<td>29.1%</td>
<td>29.2%</td>
</tr>
<tr>
<td>Study 4</td>
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<td>30.4%</td>
<td>30.5%</td>
<td>30.6%</td>
<td>30.7%</td>
<td>30.8%</td>
<td>30.9%</td>
</tr>
<tr>
<td>Study 5</td>
<td>32.0%</td>
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<td>32.2%</td>
<td>32.3%</td>
<td>32.4%</td>
<td>32.5%</td>
<td>32.6%</td>
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</tbody>
</table>

Fig. 1. Flow cytometry analysis of CD4+CD25+Foxp3+ Treg cells in healthy controls (HC), stable remission RA patients and active RA patients.

Fig. 2. Function analysis of CD4+CD25+Foxp3+ Treg cells in RA and healthy controls.

Fig. 3. Correlation analysis of CD4+CD25+Foxp3+ Treg cells with clinical data.
Low serum level of vitamin D at time of diagnosis is associated with higher one-year remission rate in patients with newly diagnosed RA, treated aggressively during follow-up: post-hoc analyses of the CIMESTRA trial

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Background: Vitamin D is often low in Rheumatoid Arthritis (RA), and immunomodulatory properties of vitamin D might be associated with disease-course in RA (1).

Objectives: To evaluate association between baseline vitamin D metabolites and one-year remission, in newly diagnosed, treatment-naive RA patients, aggressively treated during follow-up.

Methods: The CIMESTRA-cohort comprises 160 newly diagnosed RA patients, treated aggressively during follow-up.

Results: In univariate analyses, neither DTot nor 1,25(OH)2D at time of diagnosis predicted remission at year one. In adjusted analysis, DTot < 50 nmol/l at time of diagnosis showed better odds for achieving one-year remission, compared to sufficient DTot. OR 2.56, 95%CI (1.11; 5.90) p = 0.03. 1,25(OH)2D was not associated to remission.

Conclusion: Low DTot at time of diagnosis is associated to increased odds for achieving remission at year one in early, treatment naive RA patients, treated aggressively during follow-up.

Disclosure of Interests: None declared

SAT0092

THE ASSESSMENT OF THE SYNOVIAL VASCULARIZATION WITH POWER DOPPLER ULTRASONOGRAPHY AND ITS CORRELATION WITH THE SYSTEMIC INDICATORS OF INFLAMMATION AND WITH THE DISEASE ACTIVITY

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Background: Rheumatoid arthritis (RA) is an autoimmune disease with the predominant synovial inflammation. The disease activity and inflammatory markers in the serum indicate an active stage of the disease with a risk of joint destruction. As the synovial hypervascularization is considered a proof of an active inflammation, its assessment with different scoring methods in Power Doppler ultrasonography (PDUS) is being discussed.

Objectives: We investigated correlation of synovial vascularization (assessed in PDUS) with inflammatory markers and disease activity. We compared two methods for the evaluation of synovial vascularization: quantitative and semi-quantitative.

Methods: We studied 50 RA patients, mean age of 58 years, predominantly female (F/M ratio 3:1), mean disease duration span of 9.5 years. Data on: age, sex, patient global assessment of pain measured by a 100-mm visual analog scale (VAS) were obtained. The disease activity state was defined by DAS28 score (according to points) and simplified disease activity index (SDAI). Of the laboratory tests: erythrocyte sedimentation rate (ESR), serum C-reactive protein level (CRP), the presence of rheumatoid factor (RF) and anti-cyclic citrullinated peptide antibodies (ACPA) were performed. In ultrasound, the examination of the synovial vascularity, as a symptom of inflammation, was scored in PDUS, utilizing the validated scoring system, grade 0 – lack of flow, 1 – one to two vessels visible within the synovium, 2 – numerous vessels occupying up to 50% of the thickened synovium, 3 – numerous vessels occupying over 50% of the synovium volume. The second quantitatively scale was also used, with the color fraction index (CFI), defined as the ratio of the

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