(SC35, SRp40, SRp55, SRp20 and hnRNP A1), and the ratios between exon4 inclusion/exclusion were evaluated by RT-PCR. Second, we examined the effects of different cytokines on Δ4BAFF induction.

Results RAMOS cells presented exon 4 skipping (ratio inclusion/exclusion: 6.8) after minigene transfection. Following co-transfection of the minigene with coding plasmids for splicing proteins, only the overexpression of SC35 showed effect in the splicing of exon 4, promoting exon 4 inclusion (ratio: >30). Incubation of different cell lines with several cytokines showed that IFN-γ was able to induce Δ4BAFF-transcript. Thus, after IFN-γ stimulation in the minigene model, the ratio inclusion/exclusion markedly decreased (1.5). IFN-γ modifies the balance between SC35 and another member of hnRNP family (hnRNP C1/C2) favouring the alternative splicing of exon 4.

Conclusions These results demonstrated that IFN-γ induces Δ4BAFF, modifying the function of SC35 protein and increasing the hnRNPC1/C2. Our study provides an expanded conceptual view of BAFF gene regulation, and contributes to a better understanding of the mechanisms involved in BAFF up-regulation in autoimmunity.

A5.11 DETECTION OF ACPA PRODUCING B-CELLS BY A CITRULLINE PEPTIDE PANEL

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Background and Objectives Anti-citrullinated protein/peptide antibodies (ACPAs) are the most sensitive and specific serological markers of RA. To identify the optimal epitopes that detect different subgroups of RA patients with high sensitivity and specificity, we have investigated citrulline and arginine containing peptides derived from filaggrin, collagen or vimentin. We have identified a citrulline-containing peptide panel that was recognised by RA sera with high specificity. Our aim was to compare this peptide panel with the conventionally used serological assays and to detect peptide-specific ACPA producing B-cells in vitro cultures.

Materials and Methods Previously selected citrulline- and arginine-containing filaggrin, vimentin and collagen peptide epitopes were investigated. We compared the recognition of these peptides by RA and control sera using indirect ELISA. B-cells were purified from peripheral blood by negative selection, IgG production was stimulated by B-cell activators (R848 and recombinant human IL-2) and antibodies/isotypes showed different kinetics of appearance/disappearance. These results were followed with repeated serum samplings at baseline and after 1, 3, 6 and 12 months. Thawed samples were investigated simultaneously concerning rheumatoid factor (RF) iso-

A5.12 DISAPPEARANCE AND REAPPEARANCE OF IGG, IGA AND IGM AUTOANTIBODY ISOTYPES AND IMMUNE COMPLEXES IN RITUXIMAB-TREATED SLE PATIENTS


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Background and Objectives We have earlier investigated the content of specific IgG autoantibodies in SLE immune complexes (IC; Åhlin et al, Lupus 2012; 21:586). For that purpose we have developed a line blot technique for the quantification also of non-

A5.13 EFFECT OF RITUXIMAB ON B CELL SUBPOPULATIONS EXPRESSING THE 9G4 IDIOTYPE IN PATIENTS WITH RHEUMATOID ARTHRITIS


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Background and Objectives Antibodies encoded by the V \(_{\gamma}4–34\) gene are inherently autoreactive, binding to red blood cell antibody producing cells, thus enables us to study ACPA producing B-cells of RA patients.

Conclusions These results demonstrated that IFN-γ induces Δ4BAFF, modifying the function of SC35 protein and increasing the hnRNPC1/C2. Our study provides an expanded conceptual view of BAFF gene regulation, and contributes to a better understanding of the mechanisms involved in BAFF up-regulation in autoimmunity.

Materials and Methods Nine SLE patients initially treated with two infusions of Rituximab were followed with repeated serum samplings at baseline and after 1, 3, 6 and 12 months. Thawed samples were investigated simultaneously concerning rheumatoid factor (RF) iso-

Conclusions Measurement of non-classical isotypes of RF and ANA-associated autoantibodies might yield clinically useful information when monitoring SLE patients treated with B cell depleting therapy. 