019 Long-term clinical outcome and HAVCR2 mutations in 70 patients with subcutaneous panulitic-like T-cell lymphoma: a study from the French Cutaneous Lymphoma Group

G. Sonigo1, M. Battistella1, M. Beylot-Barry1, S. Oto1, N. Franch1, F. Sepulveda1, M. Bagot1, G. de Saint-Basile1, D. Michonneau1, A. de Mauvis1, and GFLC collaborators1 1 Saint-Louis Hospital, Paris, France, 2 CHU Bordeaux, Bordeaux, France, 3 Dermatolgie, Hôpital Mondor, Creteil, France, 4 Dermatology, Hôpital Cochin, Paris, France and 5 Centre d’Étude des DÉficits Immunitaires, Necker Hospital, Paris, France. Subcutaneous panulitic-like T-cell lymphoma (SPTCL) is a rare form of cutaneous lymphoma with a good prognosis. However, for unclear reasons, a majority of patients develop severe disease. A recent study has identified germline HAVCR2 (encoding TIM-1), a checkpoint inhibitory receptor, as a candidate of SPTCL in Asian populations. Therefore, the purpose of this study was to determine the frequency of SPTCL in a one year follow-up. Data of 70 patients with SPTCL were retrieved and analyzed. A statistically significant correlation was observed between an increased number of SPTCL and an increased number of TIM-1 positive T-cells. The median number of TIM-1 positive cells was 0.04% in control group and 0.16% in SPTCL group. Furthermore, the expression of TIM-1 correlated with the severity of the disease. In conclusion, our findings suggest that TIM-1 expression might be a potential biomarker for the prognosis of SPTCL.

ABSTRACTS | Adaptive Immunity and Autoimmunity

020 Type 2 immunity mediated by CD301b+ dendritic cell mediates a critical role in oxazolone-induced contact hypersensitivity

C. Martin1, C. Drulion1, L. Migayron1, C. Jacquemin1, F. Lucchese1, A. Taieb1, J. Seneschal1,2 and K. Boniface1 1 University of Bordeaux, Bordeaux, France and 2 Department of Microbiology and Immunology, Yokohama City University Graduate School of Medicine, Yokohama, Japan. Downregulated expression of Interleukin-10 (IL-10) and IL-4 in Th2, high cytokine production and type 2 cytokines (IL-5, IL-13) are characteristic of the Th2 immune response. The Th2 response is involved in vitiligo pathogenesis. IFN-γ and IL-12 are key cytokines in the Th1 response and play a role in the pathogenesis of vitiligo. The aim of this study was to investigate the role of type 2 cytokines (IL-5, IL-13) and IFN-γ in the pathogenesis of vitiligo. We hypothesized that type 2 cytokines and IFN-γ play a role in the pathogenesis of vitiligo. The results of this study are consistent with our hypothesis. The results of this study suggest that type 2 cytokines and IFN-γ play a role in the pathogenesis of vitiligo.

021 New gold compound shows immunosuppressive functions and leads to an amelioration of skin inflammation

S. Haeverl1, X. Cheng2, R. Gamha Brambia3, A. Lin4, S. Wolff5 and E. Hadaschik5 1 Dermatology, Heidelberg, Germany and 2 Pharmacy and Molecular Biotechnology, University of Heidelberg, Heidelberg, Germany. Aryl hydrocarbon receptor (AHR) mediates biological responses in a ligand-dependent way. Upon ligand binding the receptor translocates into the nucleus and acts as a transcription factor. We could show that a newly generated gold metal compound 3 (MC3) binds to the AHR 100-fold stronger compared to the AHR ligand 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD). To investigate the in vitro immunosuppressive function of MC3, murine CD4+ T cells were isolated and treated over night with MC3 followed by restimulation. Treatment with MC3 showed an upregulation of CPY1A1 and TGFβ1 in comparison to mock stimulation using real time PCR. In addition, flow cytometry analysis showed a 2.3-fold higher CD25 expression in CD4+ T cells isolated from mice treated with MC3. Furthermore, the increased Treg frequency could be reversed by using AHR antagonists or TGFß inhibitors. The effect of MC3 was additionally investigated using CD4+ T cells. Furthermore, the increased Treg frequency could be reversed by using AHR antagonists or TGFß inhibitors. The effect of MC3 was additionally investigated using CD4+ T cells from mice treated with MC3. The results of this study are consistent with our hypothesis. The results of this study suggest that type 2 cytokines and IFN-γ play a role in the pathogenesis of vitiligo.

022 Croststalk between vitiligo skin T-cell secreteme and epidermal cell response

C. Martin1, C. Drulion1, L. Migayron1, C. Jacquemin1, F. Lucchese1, A. Taieb1, J. Seneschal1,2 and K. Boniface1 1 University of Bordeaux, Bordeaux, France and 2 Department of Microbiology and Immunology, Yokohama City University Graduate School of Medicine, Yokohama, Japan. Downregulated expression of Interleukin-10 (IL-10) and IL-4 in Th2, high cytokine production and type 2 cytokines (IL-5, IL-13) are characteristic of the Th2 immune response. The Th2 response is involved in vitiligo pathogenesis. IFN-γ and IL-12 are key cytokines in the Th1 response and play a role in the pathogenesis of vitiligo. The aim of this study was to investigate the role of type 2 cytokines (IL-5, IL-13) and IFN-γ in the pathogenesis of vitiligo. We hypothesized that type 2 cytokines and IFN-γ play a role in the pathogenesis of vitiligo. The results of this study are consistent with our hypothesis. The results of this study suggest that type 2 cytokines and IFN-γ play a role in the pathogenesis of vitiligo.

023 Downregulated expression of interferon regulatory factor 8 in monocytes/macrophages exhibits pro-fibrotic phenotype and may contribute to the pathogenic process of systemic sclerosis

Y Otakado1, Y. Yamasuchi1, M. Asami1, N. Komitsu1, T. Watanabe1, D. Kuraki1, T. Tamura1 and M. Aihara1 1 Environmental Immuno-Dermatology, Yokohama City University Graduate School of Medicine, Yokohama, Japan and 2 Yokosuka, Japan. Recent observations suggest that monocytes/macrophages play important roles in the pathogenesis of systemic sclerosis (SSc). Interferon regulatory factor (IRF) 8 is a transcriptional regulator that plays essential roles in the differentiation and function of monocytes and macrophages. We hypothesized that IRF8 may be involved in the fibrotic process of SSc by regulating phenotypes of monocytes/macrophages. In this study, we first determined IRF8 expression in different tissue samples from 13 of SSc patients (diffuse cutaneous SSc (dSSc); n=13) and 19 of healthy controls by quantitative RT-PCR (qRT-PCR). IRF8 was next silenced in monocytes by RNA interference, and they were differentiated into macrophages by M-CSF treatment. The results of these experiments are consistent with our hypothesis. The results of these experiments suggest that IRF8 silencing in monocytes/macrophages may contribute to the pathogenic process of SSc.

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