Abstracts

351 AUTOIMMUNE-ASSOCIATED GENE CLEC16A REGULATES NLPR3 BUT NOT AIM2 INFLAMMASOME PATHWAY IN HUMAN MACROPHAGES
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Background and aims C-type lectin domain family 16 member A (CLEC16A) has been associated with autoimmune diseases such as systemic lupus erythematosus, multiple sclerosis and type 1 diabetes in various genome-wide association studies. Subsequent studies revealed that mouse/human CLEC16A and its Drosophila homolog endosomal maturation defective isoform A (EMA) are involved in different aspects of autophagy, the regulated degradation of cellular components that are in excess or dysfunctional. Crosstalk between autophagy and inflammasome activity of innate immune responses has been reported and inflammasomes are activated in various autoimmune diseases. We thus sought to investigate the role of CLEC16A in inflammasome pathway in this study.

Methods Functional genetic studies of CLEC16A in NLPR3 and AIM2 inflammasome pathways using monocyte-derived macrophages isolated from peripheral blood mononuclear cells of healthy individuals were performed.

Results During induction of NLPR3 inflammasome pathway by nigericin, a knockdown of CLEC16A using specific siRNAs inhibited secretion of interleukin-1β (IL-1β), an inflammasome pathway effector. Its secretion during AIM2 inflammasome induction by intracellular dsDNA poly(dA:dT) however was not affected in the siCLEC16A group. The induction of NLPR3 mRNA level upon lipopolysaccharide stimulation was suppressed in the siCLEC16A group. No significant changes in mRNA levels was observed in other selected genes of NLPR3 inflammasome pathway, namely the adaptor protein ASC, interleukin-1 converting enzyme caspase-1 and precursor pro-IL-1β.

Conclusions These data suggest that CLEC16A regulates NLPR3 but not AIM2 inflammasome pathway and affects IL-1β secretion in part via NLPR3 level. The mechanism involved and its association with autoimmune diseases such as systemic lupus erythematosus remains to be elucidated.

352 FROM ANIMAL MODELS TO HUMAN – A PHENOTYPIC AND FUNCTIONAL STUDY OF PDCS
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Background and aims To study the role of plasmacytoid dendritic cells(pDCs) in the pathogenesis of systemic lupus erythematosus (SLE) we performed a cross-sectional analytical study in 731 Colombian patients with SLE in whom coffee consumption and its frequency was assessed. Differences in clinical outcomes (i.e., cardiovascular disease, age-at-onset, organ damage, polyautoimmunity, acute activity determined by SLEDAI, and clinical remission) were determined between drinkers and non-drinkers, as well as by frequency of consumption. Association was examined by chi-square test and multiple regression analysis.

Results Sociodemographic and clinical characteristics of the patients are shown in table 1. Out of a total of 731 patients, 70% were current coffee drinkers, 57% reported daily consumption, 10% weekly consumption and 3% monthly consumption. 70% were current coffee drinkers, 57% reported daily consumption, 10% weekly consumption and 3% monthly consumption. Coffee intake was found to be associated with SLE age at onset, cardiovascular disease and 6 months clinical remission (Table 2). Coffee intake was found to be associated with SLE age at onset, cardiovascular disease and 6 months clinical remission. According to the frequency of intake, daily consumption was associated to reduced risk of early age-at-onset and a positive association with 6 months clinical remission (OR: 0.45 95% CI 0.25–0.81 and OR: 1.55 95% CI 1.07–2.25, respectively). No differences were found for organ damage, polyautoimmunity and acute SLE activity.

Conclusions In Colombian SLE patients with coffee consumption, a reduced risk of early age-at-onset and cardiovascular disease was recognised. Also, a positive association with 6 month clinical remission was found. Due to the

Microbiome, infections, probiotics and nutritional factors in autoimmunity

353 COFFEE CONSUMPTION AND CLINICAL OUTCOMES IN COLOMBIAN PATIENTS WITH SYSTEMIC LUPUS ERYTHEMATOSUS
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10.1136/lupus-2017-000215.353

Background and aims This study was performed to analyse the influence of coffee consumption on clinical outcomes in Colombian patients with systemic lupus erythematosus (SLE).

Methods A cross-sectional analytical study was conducted in 731 Colombian patients with SLE in whom coffee consumption and its frequency was assessed. Differences in clinical outcomes (i.e., cardiovascular disease, age-at-onset, organ damage, polyautoimmunity, acute activity determined by SLEDAI, and clinical remission) were determined between drinkers and non-drinkers, as well as by frequency of consumption. Association was examined by chi-square and multivariate regression analyses.

Results Sociodemographic and clinical characteristics of the patients are shown in table 1. Out of a total of 731 patients, 70% were current coffee drinkers, 57% reported daily consumption, 10% weekly consumption and 3% monthly consumption. Coffee intake was found to be associated with SLE age at onset, cardiovascular disease and 6 months clinical remission (Table 2). According to the frequency of intake, daily consumption was associated to reduced risk of early age-at-onset and a positive association with 6 months clinical remission (OR: 0.45 95% CI 0.25–0.81 and OR: 1.55 95% CI 1.07–2.25, respectively). No differences were found for organ damage, polyautoimmunity and acute SLE activity.

Conclusions In Colombian SLE patients with coffee consumption, a reduced risk of early age-at-onset and cardiovascular disease was recognised. Also, a positive association with 6 month clinical remission was found. Due to the