J Clin Cell Immunol 2014, 5:5
http://dx.doi.org/10.4172/2155-9899.S1.019

OMICS Group Conferences
Accelerating Scientific Discovery

3rd International Conference and Exhibition on
Clinical & Cellular Immunology
September 29-October 01, 2014 DoubleTree by Hilton Baltimore-BWI Airport, USA

CD21 positive B cell: A novel target for treatment of multiple sclerosis

Mojtaba Farjam
Fasa University of Medical Sciences, Iran

Etiologic-based therapy is an ideal pharmacological option to treat or prevent diseases. There is no known etiology for multiple sclerosis (MS); however, environmental risk factors have been suggested to predispose genetically susceptible people to be affected by the disease. One of these risk factors is infection with Epstein-Barr virus (EBV). Eradication of this virus has not been effective in modulation of MS, probably due to being inhabitant in the CD21 (EBV receptor) positive B cells. To eradicate this virus, targeting CD21 on these EBV-infected B cells is hypothesized here. A sequential study plan to test this hypothesis has been suggested too. This study might eventually suggest an effective immunopharmacological strategy to treat MS. Moreover, testing this strategy will help in better clarification of the role of EBV in MS disease triggering and predisposition.

Biography

Mojtaba Farjam graduated in medicine in 2001 and received a PhD in Pharmacology from Shiraz University of Medical Sciences, Iran. He studied neuroimmune pharmacology of multiple sclerosis as a Research Scholar in Thomas Jefferson Medical College PA, USA in 2012. Currently, he is the Scientific Executive of Fasa Cohort Study, Fasa, Iran and Assistant Professor of Medical Pharmacology in Fasa University of Medical Sciences.

mfarjam@sums.ac.ir

BMI1 and TWIST1 downregulated mRNA expression in skin cancer

Fatemeh Vand Rajabpour, Narges Sadeghipour, Reza Raoofian, Hamidreza Fathi, Pedram Noormohammadpour, Kambiz Kamyab Hesari and **Mina Tabrizi**
Tehran University of Medical Sciences, Iran

Bmi-1 is a proto-oncogene with a role in self-renewal. Twist1 can regulate Bmi-1 expression, and Twist1 also regulates Snai2 which has been proven to be essential for Twist1 function. These molecules play a role in aggressive behavior of cancerous cells. BMI1 expression could identify subtypes of Merkel cell carcinoma (MCC). However, BMI1, TWIST1 and SNAI2 expression levels in basal cell carcinomas (BCCs) has not been elucidated. It was hypothesized spectrum of skin cancers from BCC to Melanoma could be good model systems to shed some light on mechanisms that drive tumor metastasis. The aim of this study was to examine the mRNA expression level of BMI1, TWIST1, and SNAI2 in BCCs, SCCs and melanomas. Eighty fresh non-metastatic BCC tissue samples, eight SCC's, three melanomas and fifty fresh normal skin tissues were collected. As a pilot study, thirty-five fresh BCC tissue samples and seven fresh normal skin tissue samples were evaluated by real-time RT-PCR. BMI1 and TWIST1 demonstrated marked down-regulation ($p<0.00l$, $p=0.00l$ respectively), but SNAI2 showed no significant change ($p=0.12$). Previous literature has clearly demonstrated a positive association between BMI1 and TWIST1 expression and metastatic BCC, aggressive SCC and melanoma. This pilot study demonstrates Bmi-1 and Twist1 dichotomy of action in locally invasive BCC in contrast to aggressive skin cancers. Local invasion of BCC shows no correlation with Snai2 expression level. It would be interesting to compare these results with SCC and melanoma findings.

Biography

Fatemeh Vand Rajabpour is a PhD student of Medical Genetics at Tehran University of Medical Sciences (TUMS), Tehran, Iran. She completed her MSc jointly with Shahrekord University of Medical Sciences and the Medical Genetics Dept at TUMS. She has two review articles published on Basal Cell Carcinoma and miRNAs.

fatima_vrp@yahoo.com