# conferenceseries.com

# 9<sup>th</sup> Molecular Immunology & Immunogenetics Congress

March 08-09, 2018 | London, UK

## Altered expressed miR-920 in peripheral blood mononuclear cells of patient with acute gouty arthritis

Shiju Chen, Yangchun Chen and Guixiu Shi The First Affiliated Hospital of Xiamen University, China

The acute gouty arthritis (GA) is one most painful acute inflammation induced by monosodium urate (MSU) deposition. The pathogenesis of inflammation remains unclear. Activation of MyD88/ NF-kB signal pathway is involved in acute GA, giving rise to the increase of cytokines including TNF-, IL-1, and IL-6. MicroRNAs(miRNAs), severing as post-transcriptional regulation, is reported to participate in many inflammatory diseases including acute GA. Previous study demonstrated miR-920 down-regulated in the peripheral white blood cells of GA which negative regulated target IL-1ß. This may be the role of miR-920 in regulating the production of proinflammatory cytokines in the pathogenesis of GA. To further explore the function of miR-920 in acute GA, we detected miR-920 by qRT-PCR in the peripheral blood mononuclear cells (PBMCs) of 9 acute gouty arthritis patients and 9 healthy controls. However, overexpression of miR-920 was found in PBMCs and MyD88 was predicated as another target gene by bioinformatics. After transfecting the miR-920 mimics or negative control mimics into human monocytic THP-1 cell line, expression of MyD88 decreased. This may hint an opposite role of miR-920 in acute gouty arthritis.



Figure | mill920 overexpression in PBMCs of acute gouty arthritis and decreases expression of MyD88

### **Recent Publications**

- 1. Chen S, Liu Y, Shi G (2014) Anti-CD20 antibody in primary Sjogren's syndrome management. Curr Pharm Biotechnol. 15(6): 535-541.
- 2. Zhou M, Ma J, Chen S, Chen X, Yu X (2013) Pulsed electromagnetic field stimulates osteoprotegerin and reduces RANKL expression in ovariectomized rats. Rheumatology International. 33(5): 1135-1141.
- 3. Zhou M, Ma J, Chen, S (2013) MicroRNA-17-92 cluster regulates osteoblast proliferation and differentiation. Endocrine. 45(2): 302-310.
- 4. Liu Y, Chen S, Sun Y, Lin Q, Liao X et al. (2016) Clinical characteristics of immune thrombocytopenia associated with autoimmune disease: a retrospective study. Medicine (Baltimore) 95(50): e5565.
- 5. Liu Y, Liao X, Wang Y, Chen S, Sun Y, Lin Q, Shi G (2017) Autoantibody to MDM2: A potential serological marker of primary Sjogren's syndrome. Oncotarget. 8(9): 14306-14313.

#### **Biography**

Shiju Chen has her experience in diagnosis and treatment of rheumatoid diseases and clinical research. She has been engaged in busy clinical work for a long time and keeps a great passion and interest in dealing with patents and their diseases. She has some experience in osteoporosis and osteoarthritis disease in basic and clinical research including Wnt/beta - catenin signaling pathway and mi-RNA regulation function in the osteoblast. Now the main research focus on microRNAs and exosome in inflammatory arthritis.

csj850815@126.co