**Background and aims** Iguratimod (IGT) is a small molecular immunomodulatory drug and has been approved for treating rheumatoid arthritis. In our previous work, IGT ameliorates lupus-like disease in MRL/lpr mice by inhibiting abnormal B cell differentiation. The aim of this study is to further investigate the effects of IGT on human B cells.

**Methods** We established a set of stimulations to induce naive human B cell into plasmablast (PB) in vitro. We also enrolled 7 patients with refractory lupus nephritis (LN) to assess the potential efficacy of IGT.

**Results** IGT significantly attenuates the generation of CD19+CD20-CD27hiCD38hi plasma cells upon both BCR-dependent and independent stimulations. IGT affects neither proliferation or apoptosis of B cell in vitro. In further investigation on B cell differentiation signalling pathways, we identifies that Blimp-1 and Xbp-1 can be remarkably impaired by IGT both in transcriptional and protein level; while Jak/STAT or NF-κB signalling are intact with IGT treatment. For explosive clinical study, seven patients with refractory LN were enrolled and administrated with IGT and steroids. ALL of these patients surprisingly show improved proteinuria after 8 week treatment. One patient quit the treatment because of anaemia. Four patients showed lipid profile deterioration which was adequately controlled with statin.

**Conclusions** IGT has a unique effect to arrest B cell terminal differentiation, which provides strong evidence that this drug could be a new candidate drug to treat B cell related autoimmune diseases such as lupus.

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**Successful treatment of refractory Lupus Nephritis with Secukinumab in a patient complicated with Psoriasis Vulgaris**


**Background and aims** We report the case of a 62-year-old woman. Psoriasis Vulgaris (Psoriasis) was diagnosed in X-31 year and also SLE with nephritis (WHO IIIa) in X-11. She was treated with high-dose methylprednisolone and cyclosporine A (CsA) to achieve remission. Methylprednisolone was reduced to 4 mg/day.

**Methods** Because of renal dysfunction, although CsA was discontinued in May X, psoriasis, renal dysfunction and proteinuria became further worse, she was admitted to hospital in July X. She was diagnosed with SLE flare with class IV-G(A+C)+V lupus nephritis (INS/RPS) and associated psoriasis. The SLEDAI score was 16 and psoriasis area and severity index (PASI) score was 16. Although high-dose corticosteroid (1 mg/kg/day) and a concomitant first dose of IV cyclophosphamide (IVCY) were started, anasarca was still observed and S-Cr was increased from 1.98 to 2.85 mg/dL. Because proportion of activated Th17 cells were increased in peripheral blood(PD), and the infiltration of many lymphocytes and IL-17-positive cells in renal interstitium, secukinumab, an antibody against IL-17A, was administered.