

## **Stem Cells for Systemic Lupus Erythematosus (SLE)**

By J.A. Shehadi, MD

**Systemic lupus erythematosus (SLE)** is a polymorphic, multisystemic autoimmune disease that causes multiorgan damage in which cellular communication occurs through the involvement of autoantibodies directed against autoantigen production.

There has been a lot of interest in mesenchymal stem cells to manage SLE due to stem cells protective and immunomodulatory abilities. Mesenchymal stem cells can be obtained from bone marrow, adipose tissue, and umbilical cord tissue. They are recognized as a promising tool. Zhou et al, in 2020 published a comprehensive review of the medical literature on the clinical efficacy and safety of mesenchymal stem cells for SLE and reviewed 386 scientific publications. Of these publications, there were 4 randomized controlled studies. The results of two particular studies which used intravenous infusions of umbilical cord derived mesenchymal stem cells showed lower proteinuria, than the control groups at 3 months, and 6 months. Stem cell treated patients also displayed a lower SLE disease activity index (SLEDAI) and less adverse events (Yang, 2014) (Tang, 2016). Mesenchymal stem cells derived from umbilical cord blood also helped **lupus nephritis** (Tang, 2016). Here at Cedar stem Cell institute, we are honored to treat and study patients with SLE using this new and exciting treatment.

### **References:**

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