

# AUTOIMMUNE

Bai, L., et al. (2017). "Effects of Mesenchymal Stem Cell-Derived Exosomes on Experimental Autoimmune Uveitis." *Sci Rep* 7(1): 4323.

We previously demonstrated that mesenchymal stem cells (MSCs) ameliorated experimental autoimmune uveoretinitis (EAU) in rats. Recently, MSC-derived exosomes (MSC-Exo) were thought to carry functions of MSCs. In this study, we tested the effect of local administration of human MSC-Exo on established EAU in the same species. Rats with EAU induced by immunization with interphotoreceptor retinol-binding protein 1177-1191 peptide were treated by periocular injections of increasing doses of MSC-Exo starting at the disease onset for 7 consecutive days. The *in vitro* effects of MSC-Exo on immune cell migration and responder T cell proliferation were examined by chemotactic assays and lymphocyte proliferation assays, respectively. We found that MSC-Exo greatly reduced the intensity of ongoing EAU as their parent cells by reducing the infiltration of T cell subsets, and other inflammatory cells, in the eyes. Furthermore, the chemoattractive effects of CCL2 and CCL21 on inflammatory cells were inhibited by MSC-Exo. However, no inhibitory effect of MSC-Exo on IRBP-specific T cell proliferation was observed. These results suggest that MSC-Exo effectively ameliorate EAU by inhibiting the migration of inflammatory cells, indicating a potential novel therapy of MSC-Exo for uveitis.

Bai, L., et al. (2018). "Author Correction: Effects of Mesenchymal Stem Cell-Derived Exosomes on Experimental Autoimmune Uveitis." *Sci Rep* 8(1): 9889.

A correction to this article has been published and is linked from the HTML and PDF versions of this paper. The error has not been fixed in the paper.