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Cyclophosphamide-modified murine peritoneal macrophages induce CD4$^+$ T contrasuppressor cells that protect contact sensitivity T effector cells from suppression

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ABSTRACT

Background: Cyclophosphamide (CY) is one of the most widely used alkylating agents in the treatment of various cancers and some autoimmune diseases. Numerous reports suggest that CY exerts immunoregulatory effects. Animal studies have shown CY affects contact sensitivity (CS) response by depleting CD4$^+$CD25$^+$ T regulatory cells and CD8$^+$ T suppressor (Ts) cells. In a mouse model of CS, we previously showed that *in vivo* treatment with CY shapes the immunogenic/immunoregulatory balance of peritoneal macrophages. The aim of the current study is to verify if macrophages from CY-treated mice are indeed able to induce immunoregulatory cells that could protect from suppression.