Type 17 immunity promotes the exhaustion of CD8+ T cells in cancer

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In Brief
Conventional CD4+ T cells and Treg cells suppress the differentiation of IL-17-producing CD8+ T cells (Tc17 cells) and IFN-γ-producing Tc1 cells in the tumor microenvironment, respectively. Type 17 cells increase the frequency of PD-1+Tim-3+ TCF1+TOX+ ‘terminally exhausted’ T cells (Tlex) but decrease that of PD-1+Tim-3+ TCF1+TOX+ ‘progenitor exhausted’ T cells (Tpex). Blockade of RORyt or IL-17 pathway represses the terminal exhaustion of Tc1 cells and delays tumor progression.