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Vaccination of fusion cells of dendritic cells and MCA-102 fibrosarcoma prevents tumor growth *in vivo*

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Dendritic cells (DC) are potent antigen presenting cells that are uniquely effective in generating primary immune responses. DC that are manipulated to present tumor antigens induce antitumor immunity in animal models and preclinical human studies. A myriad of strategies have been developed to effectively load tumor antigen onto DC. The DC-tumor fusion presents a spectrum of tumor-associated antigens to helper and cytotoxic T-cell populations in the context of DC-mediated costimulatory signals. Inthis study, the fusion cells (FC) were generated with MCA-102 fibrosarcoma cells and murine DC. FC coexpressed the DC-derived MHC class II and costimulatory molecules. The FC also retained the functional properties of DC and stimulated syngeneic T cell proliferation and interferon-gamma (IFN-γ). Significantly, the results show that syngeneic T cells are primed by the FC to induce MHC class I-dependent lysis of MCA-102 fibrosarcoma. These findings demonstrate that fusions of tumor and DC activate T cell responses against syngeneic tumors.