招待講演 2

Dendritic cells as vectors and targets for therapy

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DCs can be utilized either as vectors or as targets for therapy. Patients with metastatic melanoma received CD 34-DC vaccine, that contains Langerhans cells and Interstitial DCs. DCs were pulsed with MART-1, tyrosinase, MAGE-3, gp 100 and Flu-MP peptides, and KLH. DCs induced an immune response to control antigens in 16/18 patients. An enhanced immune response to 1 or more melanoma antigens (MelAg) was seen in these 16 patients. The 2 patients failing to respond experienced rapid tumor progression. 6/7 patients with immunity to 2 or less MelAg had progressive disease 10 weeks after study entry, in contrast to tumor progression in only 1/10 patients with immunity to > 2 MelAg. The tumor immunity score correlated with clinical outcome.

Since tumor immunotherapy targets autologous antigens we can learn from systemic autoimmunity such as SLE. As opposed to normal monocytes, SLE monocytes induce proliferation of allogeneic CD 4 T cells. SLE sera induce monocyte differentiation towards DCs in IFN- α dependent mechanism. Spiking autologous serum with IFN- α reproduces DC differentiation. 50% of SLE patients have high serum levels of IFN- α , which could explain T/B lymphopenia. Yet, plasmacytoid DCs, a major IFN- α source, are 80% decreased. pDCs and IFN- α may play a role in SLE pathogenesis and therapy.