Perspective of TRAIL and PEGylated TRAIL

TNF-related apoptosis-inducing ligand (TRAIL) is a member of the TNF cytokine family capable of inducing apoptosis by its cognate receptors in cancer cells without apparent toxicity to normal cells. TRAIL has been considered as an anticance drug due to its unique ability to selectively induce DR-mediated apoptosis in transformed cells. To date, recombinant human TRAIL and antibodies directed against TRAIL-R1 or TRAIL-R2 have been tested clinically. However, these have been disappointing, showing a very limited bene t as an antitumor agent basically due to their poor agonistic activity of these agents. And in recent years, the physiological importance of TRAIL has expanded beyond being a tumoricidal molecule to one critical for a number of clinical settings - ranging from brosis and autoimmunity to cardiovascular anomalies. In an attempt to overcome the poor agonistic activity and also low stability and solubility of rTRAIL, we developed a delivery system by using PEGTd [(, .a (o o)1n(p)c)-3 (a)-4.9 (l si (d)0.s4..-)8 csi(419 (t)-(p)c)-3 (a)-4.9 t we d.d d b i (em)19 ()0.nr in vivo

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