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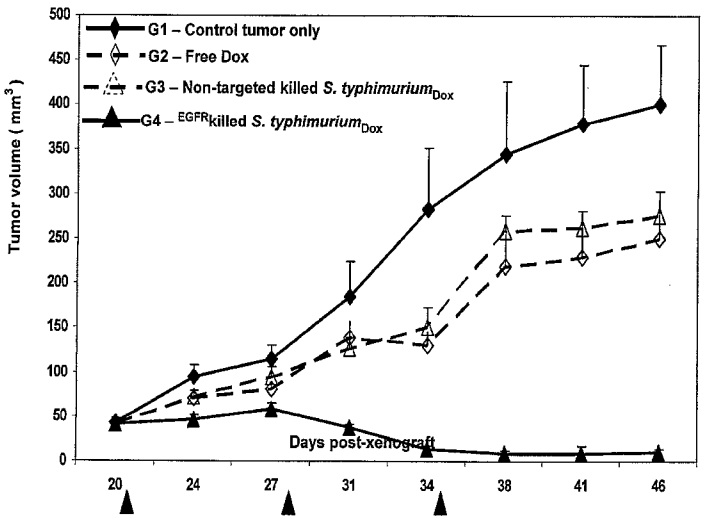
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(54) Title: TARGETED DELIVERY OF DRUGS, THERAPEUTIC NUCLEIC ACIDS AND FUNCTIONAL NUCLEIC ACIDS TO MAMMALIAN CELLS VIA INTACT KILLED BACTERIAL CELLS



(57) Abstract: A composition comprising intact killed bacterial cells that contain a therapeutic nucleic acid, a drug or a functional nucleic acid is useful for targeted delivery to mammalian cells. The targeted delivery optionally employs bispecific ligands, comprising a first arm that carries specificity for a killed bacterial cell surface structure and a second arm that carries specificity for a mammalian cell surface receptor, to target killed bacterial cells to specific mammalian cells and to cause endocytosis of the killed bacterial cells by the mammalian cells. Alternatively, the delivery method exploits the natural ability of phagocytic mammalian cells to engulf killed bacterial cells without the use of bispecific ligands.

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