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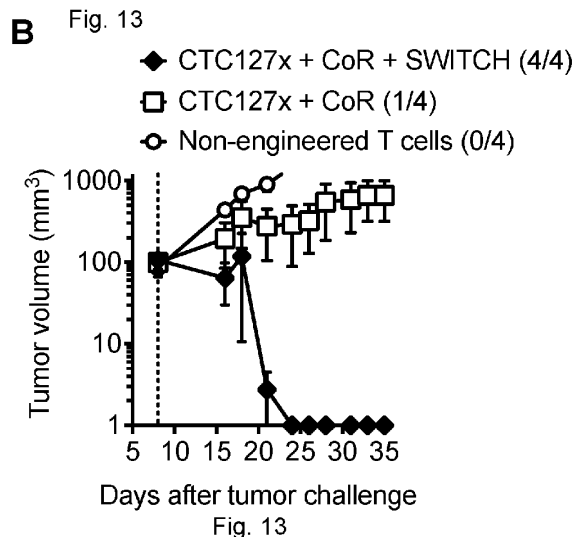
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(54) Title: A TGF β SWITCH RECEPTOR, A NUCLEIC ACID ENCODING IT, CELLS AND A PHARMACEUTICAL COMPOSITION COMPRISING THE SAME



(57) Abstract: The present invention relates to the field of adoptive immune cell therapy, in particular adoptive T cell therapy. The invention provides a switch receptor capable of efficiently converting the immunosuppressive signal of TGF β that is typically present in the hostile tumor environment of solid tumors into a co-stimulatory signal that improves T cell activation and that is safe to use in therapy. Also provided are nucleic acids encoding the switch receptor, cell expressing said receptor and pharmaceutical compositions comprising said cells, in particular, for treatment of cancer or an infectious disease, e.g., by adoptive T cell therapy of a solid tumor.

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