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(54) Title: NEOANTIGEN VACCINE COMPOSITION FOR TREATMENT OF CANCER

(57) Abstract: The present invention provides a polypeptide comprising at least four different tumor- specific neo-antigens fused to, at least one T cell enhancer amino acid sequence, a nucleic acid sequence encoding such polypeptide, a vector comprising such nucleic acid sequence and a collection of vectors comprising such vectors. Further provided are compositions of matter comprising in admixture or separately a vaccine comprising the polypeptide, the nucleic acid sequence the vector or the collection of vectors of the invention and at least one modulator of a checkpoint molecule or another type of immunomodulator for use in treating cancer.