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(54) Title: COMPOSITIONS AND METHODS FOR IDENTIFICATION OF ANTIGEN SPECIFIC T CELLS

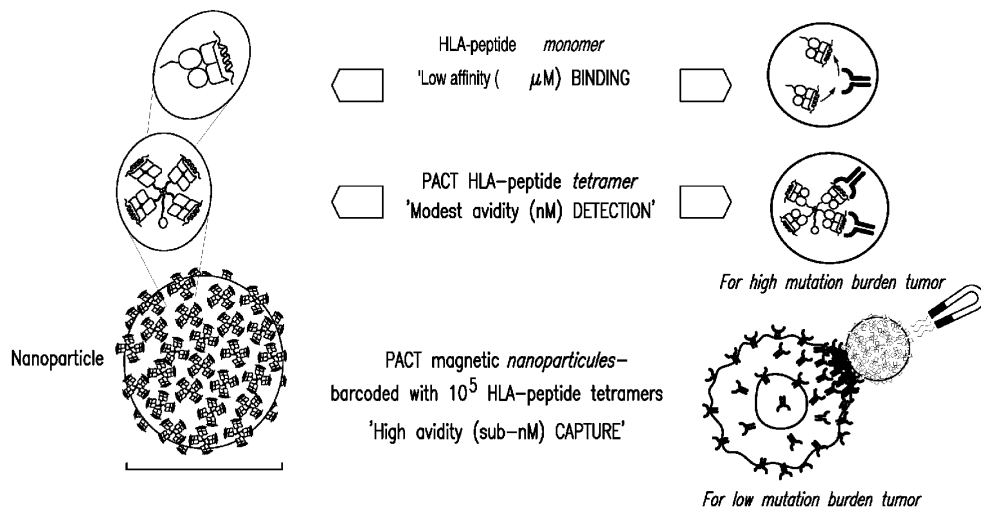


FIG. 62

(57) Abstract: Disclosed herein are antigenic peptide-MHC complexes, termed comPACT polypeptides and comPACT polynucleotides, and methods of producing such complexes. Also discloses herein are methods of producing libraries of comPACT polynucleotides and polypeptides, and their exemplary use in capturing cancer neoepitope-reactive T cells with high accuracy. Dual particle detection approaches for detection of neoantigen specific T cells with improved sensitivity and specificity are provided. Signal to noise ratio analysis of isolated T cells for detection of neoantigen-specific T cells with improved T cells is also provided.

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