Claims:

1. Use of an anticancer vaccine and one or more checkpoint inhibitors in the manufacture of a medicament for treating a subject having cancer, wherein the anticancer vaccine and one or more checkpoint inhibitors are to be administered to the subject; the anticancer vaccine comprises:

    i) a polynucleotide comprising a nucleotide sequence encoding a targeting unit that targets antigen-presenting cells, a multimerization unit, such as a dimerization unit, and an antigenic unit comprising one or more cancer antigens or parts thereof; or

    ii) a polypeptide encoded by the polynucleotide as defined in (i); or

    iii) a multimeric protein, such as a dimeric protein, consisting of multiple polypeptides as defined in (ii), such as of two polypeptides.

2. The use according to claim 1, wherein the anticancer vaccine is an individualized anticancer vaccine, preferably

    wherein the antigenic unit comprises one or more neoantigens or parts thereof, such as one or more neoepitopes, further preferably

    wherein the antigenic unit comprises several neoepitopes which are separated from each other by linkers.

3. The use according to any of claims 1 to 2, wherein the antigenic unit comprises one or more patient-present shared cancer antigens or parts thereof, such as epitopes, e.g. several epitopes.

4. The use according to claim 1, wherein the anticancer vaccine is a non-individualized anticancer vaccine, preferably

wherein the antigenic unit comprises one or more shared cancer antigens or parts thereof, such as epitopes, such as several epitopes.

5. The use according to any of claims 1 to 4, wherein the one or more checkpoint inhibitor is selected from the group consisting of anti-PD-L1 antibody, an anti-TIGIT antibody, and an anti-CTLA-4-antibody.

6. The use according to claim 5, wherein the checkpoint inhibitor is an anti-CTLA-4-antibody.

7. The use according to claim 5, wherein the checkpoint inhibitor is an anti-PD-L1 antibody or an anti-TIGIT antibody or wherein the checkpoint inhibitors are an anti-PD-L1 antibody and an anti-TIGIT antibody.

8. The use according to any of claims 1 to 7, wherein the targeting unit is or comprises a moiety that interacts with surface molecules on the antigen-presenting cells, such as a surface molecule selected from the group consisting of HLA, CD14, CD40, CLEC9A, chemokine receptors, such as CCR1, CCR3, CCR4, CCR5, CCR6, CCR7, CCR8 or XCR1 and Toll-like receptors such as TLR-2, TLR-4 or TLR-5, preferably

9. The use according to claim 8, wherein the targeting unit comprises or consists of soluble CD40 ligand, CCL4 and its isoforms, CCL5, CCL19, CCL20, CCL21, macrophage inflammatory protein alpha including its isoforms, such as mouse CCL3, human CCL3, human CCL3L1, human CCL3L2 and human CCL3L3, XCL1, XCL2, flagellin, anti-HLA-DP, anti-HLA-DR, anti-pan HLA class II anti-CD40, anti-TLR-2, anti-TLR-4, anti-TLR-5 or anti-CLEC9A.

10. The use according to any of claims 1 to 9, wherein the multimerization unit is a dimerization unit, such as a dimerization unit comprising a hinge region and an immunoglobulin domain, e.g. an immunoglobulin constant domain or a dimerization unit comprising the dHLX protein.

11. The use according to any of claims 1 to 10, wherein the anticancer vaccine further comprises a unit liker that connects the antigenic unit to the multimerization unit, such as dimerization unit, and wherein the unit linker is a non-immunogenic linker and/or flexible or rigid linker.

12. The use according to any of claims 1 to 11, wherein the anticancer vaccine is a polynucleotide, such as an RNA or DNA, e.g. an RNA or DNA comprised in a vector, preferably

wherein the polynucleotide further comprises a nucleotide sequence encoding a signal peptide.

13. The use according to claim 12, wherein the anticancer vaccine comprises a DNA polynucleotide encoding a human MIP-1α signal peptide, a human MIP-1α targeting unit, a dimerization unit which comprises a hinge exon h1, a hinge exon h4, a dimerization unit linker and a CH3 domain of human IgG3, a unit linker and an antigenic unit comprising one or more neoepitopes.

14. The use according to claim 13, wherein the checkpoint inhibitor is an anti-PD-L1 antibody or an anti-TIGIT antibody or an anti-CTLA4 antibody or wherein the checkpoint inhibitors are an anti-PD-L1 antibody and an anti-TIGIT antibody.

15. The use according to any of claims 1 to 14, wherein the anticancer vaccine further comprises a pharmaceutically acceptable carrier or diluent and wherein the one or more checkpoint inhibitor is comprised in a composition suitable for injection, such as infusion injection.

16. The use according to any of claims 1 to 15, wherein the one or more checkpoint inhibitors are to be administered concurrently with the anticancer vaccine or prior to the first administration of the anticancer vaccine or wherein the

anticancer vaccine is to be administered prior to the administration of the one or more checkpoint inhibitors.

17. The use according to any of claims 1 to 16, wherein the cancer is a solid cancer or a liquid cancer, such as a cancer selected from the group consisting of breast cancer, ovarian cancer, colon cancer, prostate cancer, bone cancer, colorectal cancer, gastric cancer, lymphoma, malignant melanoma, liver cancer, small cell lung cancer, non-small cell lung cancer, pancreatic cancer, thyroid cancers, kidney cancer, cancer of the bile duct, brain cancer, cervical cancer, bladder cancer, esophageal cancer, Hodgkin's disease and adrenocortical cancer.

18. A kit comprising

a) an anticancer vaccine comprised in one or more first containers, wherein the anticancer vaccine comprises

i) a polynucleotide comprising a nucleotide sequence encoding a targeting unit that targets antigen-presenting cells, a multimerization unit, such as a dimerization unit, and an antigenic unit comprising one or more cancer antigens or parts thereof; or

ii) a polypeptide encoded by the polynucleotide as defined in (i); or

iii) a multimeric protein, such as a dimeric protein, consisting of multiple polypeptides as defined in (ii), such as of two polypeptides; and

b) one or more checkpoint inhibitors comprised in one or more second containers.

19. The kit according to claim 18, wherein the one or more checkpoint inhibitor is selected from the group consisting of an anti-PD-L1 antibody, an anti-TIGIT antibody, and an anti-CTLA-4-antibody.

20. The kit according to any of claims 18 to 19, wherein the anticancer vaccine further comprises a pharmaceutically acceptable carrier or diluent and wherein the one or more checkpoint inhibitor is comprised in a composition suitable for injection, such as infusion injection, preferably wherein said kit further comprises instructions for use, such as instructions for the reconstitution of a dose of (a) and (b), and/or instructions for determining a suitable dose of (a) and (b) and/or instructions for the administration of (a) and (b), and/or instructions for the frequency and schedule of administering (a) and (b).