What is claimed is

1. A peptide comprising an amino acid sequence selected from the group consisting of~~:~~

- ~~SEQ ID NO: 1~~, wherein said peptide has an overall length of up to 30 amino acids, ~~to SEQ ID NO: 102,~~
- ~~and a variant sequence thereof which maintains capacity to bind to MHC molecule(s) and/or induce T cells cross-reacting with said variant peptide,~~

or a pharmaceutically acceptable salt thereof.

2. The peptide or the salt thereof according to claim 1, wherein

- said peptide has the ability to bind to an MHC class I molecule, and/or
- wherein said peptide, when bound to said MHC, is capable of being recognized by CD4 and/or CD8 T cells.

~~3. The peptide or variant thereof according to any one of claims 1 to 2, wherein said peptide or variant thereof has an overall length of from 8 to 30 amino acids.~~

4~~3~~. The peptide or ~~variant~~ the salt thereof according to any one of claims 1 to ~~3~~2, wherein said peptide includes non-peptide bonds.

5~~4~~. The peptide or ~~variant~~ the salt thereof according to any one of claims 1 to 4~~3~~, wherein said peptide is part of a fusion protein.

6~~5~~. An antibody, or a functional fragment thereof, that specifically recognizes, or binds to, the peptide ~~or variant thereof~~ according to any of claims 1 to 5~~4~~, or to the peptide ~~or variant thereof~~ according to any of claims 1 to ~~5~~ 4 when bound to an MHC molecule.

7~~6~~. A T cell receptor, or a functional fragment thereof, that is reactive with, or binds to, an MHC ligand, wherein said ligand is the peptide ~~or variant thereof~~ according to any of

claims 1 to ~~5~~4, or the peptide ~~or variant thereof~~ according to any of claims 1 to ~~5~~ 4 when bound to an MHC molecule.

~~8~~7. A nucleic acid, encoding for a peptide ~~or variant thereof~~ according to any one of claims 1 to 5, an antibody or fragment thereof according to claim ~~6~~5, a T cell receptor or fragment thereof according to claim ~~7~~6.

~~9~~8. A recombinant host cell comprising the peptide ~~or variant thereof~~ according to any one of claims 1 to ~~5~~4, the antibody or fragment thereof according to claim ~~6~~5, the T cell receptor or fragment thereof according to claim ~~7~~ 6 or the nucleic acid or the expression vector according to claim ~~8~~7.

~~10~~9. An *in vitro* method for producing activated T lymphocytes, the method comprising contacting *in vitro* T cells with antigen loaded human class I or II MHC molecules expressed on the surface of a suitable antigen-presenting cell or an artificial construct mimicking an antigen-presenting cell for a period of time sufficient to activate said T cells in an antigen specific manner, wherein said antigen is a peptide ~~or variant thereof~~ according to any one of claims 1 to ~~5~~4.

~~11~~10. An activated T lymphocyte, produced by the method according to claim ~~11~~9, that selectively recognizes a cell which presents a peptide ~~or variant thereof~~ according to any one of claims 1 to ~~5~~4.

~~12~~11. A pharmaceutical composition comprising at least one active ingredient selected from the group consisting of

- the peptide ~~or variant thereof~~ according to any one of claims 1 to ~~5~~4,
- a pharmaceutically acceptably salt of the peptide according to any one of claim 1 to 4,
- the antibody or fragment thereof according to claim ~~6~~5,
- the T cell receptor or fragment thereof according to claim ~~7~~6,

- the nucleic acid or the expression vector according to claim ~~8~~7,
- the host cell according to claim ~~9~~8,
- or the activated T lymphocyte according to claim ~~10~~9,

and a pharmaceutically acceptable carrier.

12. The pharmaceutical composition according to claim 11, wherein (i) the pharmaceutical composition further comprises an adjuvant, and/or (ii) wherein the pharmaceutical composition is a vaccine or a cellular therapeutic agent.

13. The pharmaceutical composition according to claim 12, wherein the adjuvant is an interleukin, including IL-2, IL-12 or a combination thereof.

~~13~~14. A method for producing the peptide ~~or variant thereof~~ according to any of claims 1 to ~~5~~4, the antibody or fragment thereof according to claim ~~6~~5, or the T cell receptor or fragment thereof according to claim ~~7~~6, the method comprising culturing the host cell according to claim ~~9~~8, and isolating the peptide ~~or variant thereof~~, the antibody or fragment thereof or the T cell receptor or fragment thereof from said host cell and/or its culture medium.

~~14~~15. The peptide or ~~variant~~ the salt thereof according to any one of claims 1 to ~~5~~4, the antibody or fragment thereof according to claim ~~6~~5, the T cell receptor or fragment thereof according to claim ~~7~~6, the nucleic acid or the expression vector according to claim ~~8~~7, the host cell according to claim ~~9~~8, or the activated T lymphocyte according to claim ~~11~~ 10 for use in medicine, or for use in the manufacture of a medicine.

~~15. A method of killing target cells in a patient, which target cells present a polypeptide comprising an amino acid sequence given in any one of claims 1 to 5, the method comprising administering to the patient an effective number of activated T lymphocytes according to claim 11.~~

~~16~~16. Use of ~~A~~an activated T lymphocyte according to claim ~~11~~ 10 for
~~a) use in the killing of target cells in a patient, which target cells present a polypeptide comprising an amino acid sequence given in any one of claims 1 to 5, or~~
~~b) for use~~ in the manufacture of a medicament for the killing of target cells in a patient, which target cells present a polypeptide comprising an amino acid sequence given in any one of claims 1 to 4~~of such target cells~~.

~~17. A method of treating a patient~~

- ~~being diagnosed for,~~
- ~~suffering from or~~
- ~~being at risk of developing~~

~~cancer, the method comprising administering to the patient an effective amoint of the peptide or variant thereof according to any one of claims 1 to 5, the antibody or fragment thereof according to claim 6, the T cell receptor or fragment thereof according to claim 7, the nucleic acid or the expression vector according to claim 8, the host cell according to claim 9, or the activated T lymphocyte according to claim 11.~~

~~18~~17. The peptide or ~~variant~~ the salt thereof according to any one of claims 1 to ~~5~~4, the antibody or fragment thereof according to claim ~~6~~5, the T-cell receptor or fragment thereof according to claim ~~7~~6, the nucleic acid or the expression vector according to claim ~~8,~~7 the host cell according to claim ~~9~~8, or the activated T lymphocyte according to claim ~~11~~ 10 for use the treatment of a patient

- being diagnosed for,
- suffering from or
- being at risk of developing

cancer, or for use in the manufacture of a medicament for the treatment of such patient.

~~19~~18. The ~~method according to claim 17 or the~~ peptide, antibody, T cell receptor, nucleic acid, host cell or activated T lymphocyte for use according to claim ~~18~~17, wherein said cancer is selected from the group consisting of acute myeloid leukemia, breast cancer, cholangiocellular carcinoma, chronic lymphocytic leukemia, colorectal cancer, gallbladder cancer, glioblastoma, gastric cancer, gastro-esophageal junction cancer, hepatocellular carcinoma, head and neck squamous cell carcinoma, melanoma, non-Hodgkin lymphoma, non-small cell lung cancer, ovarian cancer, esophageal cancer, pancreatic cancer, prostate cancer, renal cell carcinoma, small cell lung cancer, urinary bladder carcinoma, and uterine endometrial cancer.

~~20~~19. A kit comprising:
(a) a container comprising a pharmaceutical composition containing the pharmaceutical composition of any one of claims ~~12~~ 11 to 13 in solution or in lyophilized form;
(b) optionally, a second container containing a diluent or reconstituting solution for the lyophilized formulation;
(c) optionally, at least one more peptide selected from the group consisting of SEQ ID NO: 1 to SEQ ID NO: 102.

~~21~~20. The kit according to claim ~~20~~19, further comprising one or more of a buffer, a diluent, a filter, a needle, ~~or~~ a syringe, or an adjuvant.