

CLAIMS

1. A combination of a vaccine and a CD94/NKG2A binding antibody or a CD94/NKG2A binding part thereof for use in the treatment of cancer in a subject in need thereof, in which the vaccine comprises an immunogen for eliciting an immune response against an antigen or a nucleic acid molecule encoding said immunogen, and in which the CD94/NKG2A binding antibody or CD94/NKG2A binding part thereof reduces signaling of CD94/NKG2A in CD94/NKG2A expressing T cells or natural killer (NK) cells.
2. A combination according to Claim 1, in which the immunogen is a tumor-antigen.
3. A combination according to Claim 1 or 2, in which the immunogen is a tumor-specific antigen.
4. A combination according to Claim 1, 2 or 3, in which the CD94/NKG2A binding antibody or a CD94/NKG2A binding part thereof blocks binding of the CD94/NKG2A ligand HLA-E to CD94/NKG2A - expressing T-cells or natural killer (NK) cells.
5. A combination according to any preceding claim, in which the CD94/NKG2A antibody or a CD94/NKG2A binding part thereof is a human or humanized antibody or a CD94/NKG2A binding part thereof, preferably an antibody of subclass IgG4.
6. A combination according to any preceding claim, in which the CD94/NKG2A binding antibody is of the human IgG4 subclass or another IgG subclass that does not exhibit ADCC or CDCC.
7. A combination according to any preceding claim, in which the CD94/NKG2A binding antibody is a derivative of IgG1 with reduced ADCC and/or CDCC.
8. A combination according to any preceding claim, in which the CD94/NKG2A binding antibody or binding part thereof competes with antibody Z270 for binding to CD94/NKG2A.
9. A combination according to any preceding claim, in which the combination further comprises at least one antibody selected from a CTLA4-binding antibody, a PD-1 binding antibody; a PD-L1 binding antibody; a LAG-3 binding antibody; a VISTA antibody and a TIM3 binding antibody or selected from a CTLA4 binding, a PD-L1 binding, a LAG-3 binding, a VISTA binding, or a TIM3 binding part of said antibody.

10. A combination according to any preceding claim, in which the cancer is a solid cancer selected from ovarian carcinoma, head and neck carcinoma, melanoma, cervical carcinoma, pancreatic carcinoma, renal cell carcinoma, lung carcinoma, prostate carcinoma, virus induced carcinoma and colorectal carcinoma.
- 5 11. A combination according to any preceding claim, in which the subject is further provided with an immune cell transplant.
12. A pharmaceutical composition comprising a vaccine and a CD94/NKG2A binding antibody or a CD94/NKG2A binding part thereof, in which the vaccine comprises an immunogen for eliciting an immune response against an antigen or a nucleic acid molecule
10 encoding said immunogen, and in which the CD94/NKG2A binding antibody or portion thereof reduces signaling of CD94/NKG2A in CD94/NKG2A expressing T cells or natural killer (NK) cells.
13. A pharmaceutical composition according to Claim 12, in which the immunogen is a tumor-antigen.
- 15 14. Use of a CD94/NKG2A antibody or a CD94/NKG2A binding part thereof and an immunogen in the manufacture of a medicament for the treatment of cancer, in which the medicament comprises an immune cell containing cell product for transplantation, and in which the CD94/NKG2A binding antibody or CD94/NKG2A binding part thereof reduces signaling of CD94/NKG2A in CD94/NKG2A expressing T cells or natural killer (NK) cells.