Claims

1. A combination comprising an oncolytic adenovirus, a CDK4/6 inhibitor and at least one further agent selected from the group consisting of nutlin or a derivative of nutlin, a bromodomain inhibitor and a PARP inhibitor.

2. The combination of claim 1, wherein the combination further comprises nutlin or a derivative of nutlin.

3. The combination of any one of claims 1 and 2, wherein the combination further comprises a bromodomain inhibitor.

4. The combination of any one of claims 1 to 3, wherein the combination further comprises a PARP inhibitor.

5. Use of a combination of any one of claims 1 to 4 in the manufacture of a medicament for the treatment of a tumor or cancer.

6. Use of an oncolytic adenovirus in the manufacture of a medicament for the treatment of a tumor or cancer, wherein the medicament is to be administered with a CDK4/6 inhibitor and at least one further agent selected from the group consisting of nutlin or a derivative of nutlin, a bromodomain inhibitor and a PARP inhibitor.

7. Use of a CDK4/6 inhibitor in the manufacture of a medicament for the treatment of a tumor or cancer, wherein the medicament is to be administered with an oncolytic adenovirus and at least one further agent selected from the group consisting of nutlin or a derivative of nutlin, a bromodomain inhibitor and a PARP inhibitor.

8. Use of a nutlin or a derivative of nutlin in the manufacture of a medicament for the treatment of a tumor or a cancer, wherein the medicament is to be administered with an oncolytic adenovirus and a CDK4/6 inhibitor.

9. Use of a PARP inhibitor in the manufacture of a medicament for the treatment of a tumor or a cancer, wherein the medicament is to be administered with an oncolytic adenovirus and a CDK4/6 inhibitor.

10. Use of a bromodomain inhibitor in the manufacture of a medicament for the treatment of a tumor or a cancer, wherein the medicament is to be administered with an oncolytic adenovirus and a CDK4/6 inhibitor.

11. The combination of any one of claims 1 to 4, and the use of any one of claims 5 to 10, wherein the adenovirus is lacking expression of E1A13S.

12. The combination of any one of claims 1 to 4 and 11, and the use of any one of claims 5 to 11, wherein the adenovirus is selected from the group comprising XVir-N-31, dl520, AdΔ24, AdΔ24-RGD, dl922-947, E1Ad/01/07, dl1119/1131, CB 016, VCN-01, E1Adl1107, E1Adl1101, ORCA-010, and Enadenotucirev.

13. The combination of any one of claims 1 to 4 and 11 to 12, and the use of any one of claims 5 to 12, wherein the adenovirus is XVir-N-31.

14. The combination of any one of claims 1 to 4 and 11 to 13, and use of any one of claims 5 to 13, wherein the CDK4/6 inhibitor is a CDK4/6 inhibitor arresting cells in the G1 phase and inhibiting E2F1.

15. The combination of any one of claims 1 to 4 and and 11 to 14, and the use of any one of claims 5 to 14, wherein the CDK4/6 inhibitor is selected from the group comprising palbociclib which is also referred to as PD 0332991, abemaciclib which is also referred to as LY-2835219, ribociclib which is also referred to as LEE011, Trilaciclib which is also referred to as G1T28, and Dinaciclib.

16. The use of any one of claims 5 to 15, wherein the tumor or cancer is Rb-negative, is expressing Rb or is Rb-positive.

17. The use of any one of claims 5 to 16, wherein the cells of the tumor cells have a resistance to or are insensitive to one or several pharmaceutically active agents and/or radiation.

18. The use of any one of claims 5 to 17, wherein the tumor or cancer contains YB-1 in the cell nucleus independent of the cell cycle.

19. The use of any one of claims 5 to 18, wherein the tumor or cancer is selected from the group comprising bladder cancer, breast cancer, metastatic breast cancer (mBC), melanoma, glioma, pancreatic cancer, hepatocellular carcinoma, lung adenocarcinoma, sarcoma, ovarian cancer, renal cancer, prostate cancer, and leukemia.