

WHAT IS CLAIMED IS:

1. Use of at least one PD-1 and/or PD-L1 antibody in the manufacture of a medicament for treating cancer in a patient, wherein the patient is to be administered with at least one dose of fractionated radiation therapy, wherein the medicament is to be administered on the same day as a dose of fractionated radiation therapy or up to and including 4 days later, and wherein the dose of fractionated radiation therapy is about 2 Gy or lower.
2. The use according to claim 1, wherein the total dose of fractionated radiation therapy is about 70 Gy or lower.
3. The use according to claim 2, wherein the total dose of fractionated radiation therapy is about 50 Gy or lower.
4. The use according to claim 1, wherein the fractionated radiation therapy comprises from 2 to 7 fractions.
5. The use according to claim 4, wherein the fractionated radiation therapy comprises 5 fractions.
6. The use according to claim 5, wherein the radiation therapy fractions are to be administered in sequential days.
7. The use according to claim 6, wherein the radiation therapy fractions are to be administered on day 1, day 2, day 3, day 4, and day 5.
8. The use according to claim 1, wherein the medicament is to be administered on day 1.
9. The use according to claim 1, wherein the medicament is to be administered on day 5.
10. The use according to claim 1, wherein the medicament is to be administered multiple times.
11. The use according to claim 10, wherein the medicament is to be administered 3 times a week.
12. The use according to claim 11, wherein the anti-PD-1 and/or PD-L1 antibody is MEDI4736.
13. The use according to claim 12, wherein the anti-PD-1 and/or anti-PD-L1 antibody is pembrolizumab, nivolumab, AMP-224, or MPDL3280A.
14. The use according to claim 1, wherein the cancer is melanoma, colorectal cancer, breast cancer, bladder cancer, head and neck cancer, liver cancer, lung cancer, ovarian cancer, pancreatic cancer or kidney cancer.
15. The use according to claim 1, wherein more than one treatment cycle is to be performed.

16. The use according to claim 15, wherein from 2-8 treatment cycles are to be performed.
17. The use according to claim 16, wherein the treatment cycles to be performed are weekly or every other week.