Claims

1. Use of an inhibitor of the interaction between the PD-1 receptor and its ligand PD-L1 in the manufacture of a medicament for the treatment of cancer in a subject.

2. The use according to Claim 1, wherein the cancer is lung cancer, bladder cancer, squamous cell carcinoma of the head and neck, renal cell carcinoma, gastric cancer, Merkel cell carcinoma, gastric / gastroesophageal junction cancer, breast cancer, colorectal cancer, castration-resistant prostate cancer, melanoma, ovarian cancer, adrenocortical carcinoma, mesothelioma, esophageal squamous cell carcinoma (ESCC), thymoma, adrenocortical carcinoma or urothelial carcinoma.

3. The use according to any one of Claim 1 or Claim 2, wherein the subject is human, the PD-1 receptor is human PD-1 receptor, and PD-L1 is human PD-L1.

4. The use according any one of Claims 1-3, wherein the inhibitor binds to PD-L1.

5. The use according to any one of Claims 1-4, wherein the cancer is identified as a PD-L1 positive cancer.

6. The use according to Claim 4 or Claim 5, wherein the inhibitor is an anti-PD-L1 antibody.

7. The use according to Claim 6, wherein the anti-PD-L1 antibody comprises in its heavy chain the three complementarity determining regions (CDR's) according to SEQ ID NO's 1, 2 and 3, and in its light chain the three complementarity determining regions (CDRs) according to SEQ ID NOs: 4, 5 and 6.

8. The use according to Claim 6 or Claim 7, wherein the anti-PD-L1 antibody is Avelumab, having the heavy chain sequences according to SEQ ID NOs: 7 or 8 and the light chain sequence according to SEQ ID NO:9.

9. The use according to Claim 6, 7 or 8, wherein the anti-PD-L1 antibody is to be administered at a dose of 10 mg/kg body weight every other week.

10. The use according to any one of Claims 6-9, wherein the anti-PD-L1 antibody is to be administered as an intravenous infusion.

11. The use according to Claim 10, wherein the anti-PD-L1 antibody is to be administered as a one hour intravenous infusion.

12. The use according to any one of Claims 1 -11, wherein the medicament results in an objective response, preferably a complete response or a partial response.

13. The use according to any one of Claims 1-12, wherein the subject has previously received chemotherapy.

14. The use according to claim 13, wherein the chemotherapy comprises a platinum containing chemotherapeutic agent.

15. The use according to claim 14, wherein the chemotherapy is platinum-containing doublet chemotherapy.

16. The use according to any one of Claims 2-15, wherein in the cancer is non-small cell lung cancer.

17. The use according to Claim 16, wherein the non-small cell lung cancer has progressed after chemotherapy.

18. The use according to Claim 16 or Claim 17, wherein the cancer is locally advanced unresectable, metastatic, or recurrent non-small cell lung cancer.

19. The use according to any one of Claims 2-15, wherein the cancer is Merkel cell carcinoma.

20. The use according to Claim 19, wherein the Merkel cell carcinoma is metastatic.

21. The use according to Claim 19 or Claim 20, wherein the Merkel carcinoma has progressed after chemotherapy.

22. The use according to any one of Claims 2-15, wherein the cancer is mesothelioma.

23. The use according to Claim 22, wherein the mesothelioma is advanced and unresectable.

24. The use according to any one of Claims 2-15, wherein the cancer is ovarian cancer.

25. The use according to Claim 24, wherein the ovarian cancer is heavily pretreated, recurrent or refractory.

26. The use according to any one of Claims 2-15, wherein the cancer is gastric or gastroesophageal junction cancer.

27. The use according to Claim 26, wherein the gastric or gastroesophageal junction cancer has progressed after chemotherapy.

28. The use according to any one of Claims 2-15, wherein the cancer is urothelial carcinoma.

29. The use according to Claim 28, wherein the urothelial carcinoma is locally advanced or metastatic.

30. The use according to any one of Claims 2-15, wherein the cancer is breast cancer.

31. The use according to Claim 30, wherein the breast cancer is locally advanced or metastatic.

32. The use according to Claim 30 or 31, wherein the subject has previously received chemotherapy.

33. The use according to Claim 32, wherein the chemotherapy comprised the use of taxane and/or anthracycline.

34. The use according to Claim 26 or Claim 27, wherein the cancer treatment is a third-line treatment of unresectable, recurrent, or metastatic gastric or gastroesophageal junction adenocarcinoma.

35. The use of Claim 29, wherein the locally advanced or metastatic urothelial cancer has not progressed during or following completion of first line chemotherapy.

36. The use according to any one of Claims 2-15, wherein the cancer is adrenocortical carcinoma.

37. The use according to Claim 36, wherein the adrenocortical carcinoma is metastatic.

38. The use according to Claim 37, wherein the metastatic adrenocortical carcinoma has progressed after platinum-based chemotherapy.