CLAIMS

1. An ATR inhibitor for use in the treatment of cancer, where the ATR inhibitor is to be administered to a patient who has previously received immunotherapy.

2. An ATR inhibitor for use as claimed in claim 1, where the ATR inhibitor is AZD6738.

3. An ATR inhibitor for use as claimed in claim 2, where the AZD6738 is to be administered on days 1 to 14 of a 28-day cycle.

4. An ATR inhibitor for use as claimed in claim 2 or claim 3, where the total daily dose of AZD6738 is between 30 mg and 500 mg.

5. An ATR inhibitor for use as claimed in any of claims 2 to 4, where the AZD6738 is to be administered twice daily in 240 mg doses.

6. An ATR inhibitor for use as claimed in any of the preceding claims, where the ATR inhibitor is to be administered in combination with a taxane.

7. An ATR inhibitor for use as claimed in claim 6, where the taxane is paclitaxel.

8. An ATR inhibitor for use as claimed in claim 6 or claim 7, where the taxane is to be administered on days 1, 8 and 15 of a 28-day cycle.

9. An ATR inhibitor for use as claimed in any of the preceding claims, where the cancer is selected from melanoma, gastric cancer, sarcoma, colon cancer, neuroendocrine cancer, hepatocellular cancer, non-small cell lung cancer and squamous head and neck cancer.

10. An ATR inhibitor for use as claimed in any of the preceding claims, where the cancer is selected from melanoma and gastric cancer.

11. An ATR inhibitor for use as claimed in claim 10, where the cancer is melanoma.

12. An ATR inhibitor for use as claimed in claim 11, where the cancer is cutaneous melanoma.

13. An ATR inhibitor for use as claimed in claim 11, where the cancer is acral melanoma.

14. An ATR inhibitor for use as claimed in claim 11, where the cancer is mucosal melanoma.

15. An ATR inhibitor for use as claimed in any of the preceding claims, where the cancer is ATM deficient.

16. An ATR inhibitor for use as claimed in any of the preceding claims, where the cancer is ARID1A deficient.

17. An ATR inhibitor for use as claimed in any of the preceding claims, where the immunotherapy comprises treatment with an immune checkpoint inhibitor.

18. An ATR inhibitor for use as claimed in claim 17, where the immune checkpoint inhibitor is selected from a PD-1 inhibitor, PD-L1 inhibitor and a CTLA-4 inhibitor.

19. An ATR inhibitor for use as claimed in claim 17, where the immune checkpoint inhibitor is selected from pembrolizumab, nivolumab, cemiplimab, spartalizumab, camrelizumab, sintilimab, tislelizumab, toripalimab, AMP-224, AMP-514, atezolizumab, avelumab, durvalumab, KN035, CK-301, AUNP12, CA-170, BMS-986189, ipilimumab or tremelimumab.

20. An ATR inhibitor for use according to any of the preceding claims, where the patient has primary resistance to immunotherapy.

21. An ATR inhibitor for use according to any of claims 1 to 19, where the patient has acquired resistance to immunotherapy.

22. An ATR inhibitor for use according to any of the preceding claims, where the treatment achieves an objective response rate greater than 30%.

23. An ATR inhibitor for use in the treatment of cancer as claimed in claim 1, where the ATR inhibitor is AZD6738 which is to be administered in combination with a taxane to a patient who has previously received therapy with an immune checkpoint inhibitor.

24. An ATR inhibitor for use in the treatment of cancer as claimed in claim 23, where the ATR inhibitor is AZD6738 which is to be administered in combination with paclitaxel to a melanoma patient who has previously received therapy with an immune checkpoint inhibitor selected from pembrolizumab, nivolumab, cemiplimab, spartalizumab, camrelizumab, sintilimab, tislelizumab, toripalimab, AMP-224, AMP-514, atezolizumab, avelumab, durvalumab, KN035, CK-301, AUNP12, CA-170, BMS-986189, ipilimumab or tremelimumab.

~~25. A method of treating cancer in a human or animal patient in need of such treatment, comprising administering an ATR inhibitor to a patient who has previously received immunotherapy.~~

~~26.~~25. ~~The u~~Use of an ATR inhibitor in the manufacture of a medicament for the treatment of cancer, where the medicament is to be administered to a patient who has previously received immunotherapy.

~~27.~~26. A pharmaceutical composition comprising an ATR inhibitor and a pharmaceutically acceptable excipient for use in the treatment of cancer, where the pharmaceutical composition is to be administered to a patient who has previously received immunotherapy.

27. A kit comprising a pharmaceutical composition comprising an ATR inhibitor and at least one pharmaceutically acceptable excipient and instructions for the use of the

pharmaceutical composition in the treatment of cancer, where the ATR inhibitor is to be administered to a patient who has previously received immunotherapy.

28. The use in claim 25, where the ATR inhibitor is AZD6738.

29. The use in claim 28, where the AZD6738 is to be administered on days 1 to 14 of a 28-day cycle.

30. The use in claim 28 or claim 29, where the total daily dose of AZD6738 is between 30 mg and 500 mg.

31. The use in any of claims 28 to 30, where the AZD6738 is to be administered twice daily in 240 mg doses.

32. The use in any of claims 25, 28 to 31, where the ATR inhibitor is to be administered in combination with a taxane.

33. The use in claim 32, where the taxane is paclitaxel.

34. The use in claim 32 or claim 33, where the taxane is to be administered on days 1, 8 and 15 of a 28-day cycle.

35. The use in any of claims 25, 28-34, where the cancer is selected from melanoma, cutaneous melanoma, acral melanoma, mucosal melanoma, gastric cancer, sarcoma, colon cancer, neuroendocrine cancer, hepatocellular cancer, non-small cell lung cancer and squamous head and neck cancer.

36. The use in any of claims 25, 28-35, where the cancer is ATM deficient.

37. The use in any of claims 25, 28-36, where the cancer is ARID1A deficient.

38. The use in any of claims 25, 28-37, where the immunotherapy comprises treatment with an immune checkpoint inhibitor.

39. The use in claim 38, where the immune checkpoint inhibitor is selected from a PD-1 inhibitor, PD-L1 inhibitor and a CTLA-4 inhibitor.

40. The use in claim 38, where the immune checkpoint inhibitor is selected from pembrolizumab, nivolumab, cemiplimab, spartalizumab, camrelizumab, sintilimab, tislelizumab, toripalimab, AMP-224, AMP-514, atezolizumab, avelumab, durvalumab, KN035, CK-301, AUNP12, CA-170, BMS-986189, ipilimumab or tremelimumab.

41. The use in any of claims 25, 28-40, where the patient has primary resistance to immunotherapy.

42. The use according to any of claims 25, 28 to 40, where the patient has acquired resistance to immunotherapy.

43. The use according to any of claims 25, 28-42, where the treatment achieves an objective response rate greater than 30%.

44. The use in claim 25, where the ATR inhibitor is AZD6738 which is to be administered in combination with a taxane to a patient who has previously received therapy with an immune checkpoint inhibitor.

45. The use in claim 44, where the ATR inhibitor is AZD6738 which is to be administered in combination with paclitaxel to a melanoma patient who has previously received therapy with an immune checkpoint inhibitor selected from pembrolizumab, nivolumab, cemiplimab, spartalizumab, camrelizumab, sintilimab, tislelizumab, toripalimab, AMP-224, AMP-514, atezolizumab, avelumab, durvalumab, KN035, CK-301, AUNP12, CA-170, BMS-986189, ipilimumab or tremelimumab.

46. Use of a pharmaceutical composition comprising an ATR inhibitor and a pharmaceutically acceptable excipient in the manufacture of a medicament for the treatment of cancer, wherein the pharmaceutical composition is to be administered to a patient who has previously received immunotherapy.

47. Use of a kit comprising a pharmaceutical composition comprising an ATR inhibitor and at least one pharmaceutically acceptable excipient and instructions in the manufacture of a medicament for the treatment of cancer, wherein the ATR inhibitor is to be administered to a patient who has previously received immunotherapy.