Thus, the instant disclosure relates to combinations of iadademstat, or a pharmaceutically acceptable salt or solvate thereof, with PD(L)1 inhibitors (as defined herein).

Accordingly, in one example, the present disclosure provides a combination comprising iadademstat, or a pharmaceutically acceptable salt or solvate thereof, and a PD(L)1 inhibitor.

The present disclosure further provides a combination comprising iadademstat, or a pharmaceutically acceptable salt or solvate thereof, and a PD(L)1 inhibitor for use in the treatment of cancer.

The present disclosure further provides a method for treating cancer in a patient (preferably a human) in need thereof, comprising administering to the patient a therapeutically effective amount of a combination comprising iadademstat, or a pharmaceutically acceptable salt or solvate thereof, and a PD(L)1 inhibitor.

The present disclosure further provides a method for treating cancer in a patient (preferably a human) in need thereof, comprising administering to the patient a therapeutically effective amount of iadademstat, or a pharmaceutically acceptable salt or solvate thereof, and a therapeutically effective amount of a PD(L)1 inhibitor.

In one example, the present disclosure further provides the use of iadademstat, or a pharmaceutically acceptable salt or solvate thereof, for the manufacture of a medicament for the treatment of cancer to be used in combination with a PD(L)1 inhibitor. In one aspect, the present disclosure provides use of iadademstat, or a pharmaceutically acceptable salt or solvate thereof, for the manufacture of a medicament for the treatment of cancer to be used in combination with a PD(L)1 inhibitor, wherein the PD(L)1 inhibitor is a PD-1 inhibitor or a PD-L1 inhibitor, wherein the cancer is melanoma or small cell lung cancer. In another aspect, the present disclosure provides use of a PD(L)1 inhibitor for the manufacture of a medicament for the treatment of cancer to be used in combination with iadademstat or a pharmaceutically acceptable salt or solvate thereof, wherein the PD(L)1 inhibitor is a PD-1 inhibitor or a PD-L1 inhibitor, wherein the cancer is melanoma or small cell lung cancer. In yet another aspect, the present disclosure provides use of a combination comprising iadademstat, or a pharmaceutically acceptable salt or solvate thereof, and a PD(L)1 inhibitor for the manufacture of a medicament for the treatment of cancer, wherein the PD(L)1 inhibitor is a PD-1 inhibitor or a PD-L1 inhibitor, wherein the cancer is melanoma or small cell lung cancer.

The present disclosure further provides the use of a combination comprising iadademstat, or a pharmaceutically acceptable salt or solvate thereof, and a PD(L)1 inhibitor for the treatment of cancer.

BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 shows the effect of treatment with a combination of iadademstat (referred to as “ORY-1001”) and a PD(L)1 inhibitor (triangles) in comparison with treatment with the PD(L)1 inhibitor alone (squares) on tumor volume in the mice B16F10 melanoma model, as explained in more detail in Example 1. Data is represented as mean± standard error of the mean (SEM); p=0.004.

Figure 2 shows the effect of treatment with a combination of iadademstat (“ORY-1001”) and a PD(L)1 inhibitor (triangles) in comparison with treatment with the PD(L)1 inhibitor alone (squares) on tumor weight in the same mice B16F10 melanoma model, as explained in more detail in Example 1. Data is represented as mean± standard error of the mean (SEM); p=0.001.

DETAILED DESCRIPTION OF THE INVENTION

As indicated above, the present invention is based on the discovery that the combination of iadademstat with PD(L)1 inhibitors exhibits outstanding anticancer activity, with superior anticancer efficacy as compared to treatment with the PD(L)1 inhibitor alone. The combined treatment with iadademstat and a PD(L)1 inhibitor causes a significant increase in the antitumor effect as compared to treatment with the PD(L)1 inhibitor alone, as illustrated in Example 1 and in Figures 1 and 2 using an *in vivo* murine melanoma model. Treatment with the combination produces statistically significant reductions in both the tumor volume and tumor weight compared

CLAIMS

1. Use of iadademstat, or a pharmaceutically acceptable salt or solvate thereof, for the manufacture of a medicament for the treatment of cancer to be used in combination with a PD(L)1 inhibitor, wherein the PD(L)1 inhibitor is a PD-1 inhibitor or a PD-L1 inhibitor, wherein the cancer is melanoma or small cell lung cancer.
2. Use of a PD(L)1 inhibitor for the manufacture of a medicament for the treatment of cancer to be used in combination with iadademstat or a pharmaceutically acceptable salt or solvate thereof, wherein the PD(L)1 inhibitor is a PD-1 inhibitor or a PD-L1 inhibitor, wherein the cancer is melanoma or small cell lung cancer.
3. Use of a combination comprising iadademstat, or a pharmaceutically acceptable salt or solvate thereof, and a PD(L)1 inhibitor for the manufacture of a medicament for the treatment of cancer, wherein the PD(L)1 inhibitor is a PD-1 inhibitor or a PD-L1 inhibitor, wherein the cancer is melanoma or small cell lung cancer.
4. The use according to any one of claims 1 to 3, wherein the PD(L)1 inhibitor is selected from the group consisting of Pembrolizumab, Nivolumab, Cemiplimab, Camrelizumab, Tislelizumab, Sintilimab, Toripalimab, Spartalizumab, AGEN-2034, AK-103, AK-104, AK-105, AK-112, AK-123, AM-0001, AMP-224, AT16201, BCD-100, BH-2950, BH-2996h, BI-754091, BMS-1001, BMS-1166, CS-1003, CX-188, ENUM-244C8, GLS-010, hAb21, HLX-10, IKT-202, JNJ-63723283, JTX-4014, KN0-46, MEDI-0680, MGA-012, MGD-013, PF-06801591, PRS-332, RO7121661, STI-A1110, TSR-042, XmAb-20717, Atezolizumab, Avelumab, Durvalumab, AK-106, APL-502, AVA-004, BGB-A333, BH-2996h, BMS-936559, CA-170, CA-327, CBA-0710, CK-301, CS-1001, CX-072, FAZ-053, FS-118, GR1405, HLX-20, IKT-201, JS-003, KD033, KN-035, KY-1003, LY3300054, M-7824, MCLA-145, MSB-2311, and SHR-1316.
5. The use according to any of claims 1 to 4, wherein the PD(L)1 inhibitor is selected from the group consisting of Pembrolizumab, Nivolumab, Cemiplimab, Atezolizumab, Avelumab and Durvalumab.
6. The use according to any one of claims 1 to 3, wherein the PD(L)1 inhibitor is a PD-1 inhibitor.
7. The use according to claim 6, wherein the PD-1 inhibitor is selected from the group consisting of Pembrolizumab, Nivolumab, Cemiplimab, Camrelizumab, Tislelizumab, Sintilimab, Toripalimab, Spartalizumab, AGEN-2034, AK-103, AK-104, AK-105, AK-112, AK-123, AM-0001, AMP-224, AT16201, BCD-100, BH-2950, BH-2996h, BI-754091, BMS-1001, BMS-1166, CS-1003, CX-188, ENUM-244C8, GLS-010, hAb21, HLX-10, IKT-202, JNJ-63723283, JTX-4014, KN0-46, MEDI-0680, MGA-012, MGD-013, PF-06801591, PRS-332, RO7121661, STI-A1110, TSR-042, and XmAb-20717.
8. The use according to claim 6 or 7, wherein the PD-1 inhibitor is selected from the group consisting of Pembrolizumab, Nivolumab and Cemiplimab.
9. The use according to any one of claims 1 to 3, wherein the PD(L)1 inhibitor is a PD-L1 inhibitor.

10. The use according to claim 9, wherein the PD-L1 inhibitor is selected from the group consisting of Atezolizumab, Avelumab, Durvalumab, AK-106, APL-502, AVA-004, BGB-A333, BH-2996h, BMS-936559, CA-170, CA-327, CBA-0710, CK-301, CS-1001, CX-072, FAZ-053, FS-118, GR1405, HLX-20, IKT-201, JS-003, KD033, KN-035, KY-1003, LY3300054, M-7824, MCLA-145, MSB-2311, and SHR-1316.
11. The use according to claim 9 or 10, wherein the PD-L1 inhibitor is selected from the group consisting of Atezolizumab, Avelumab and Durvalumab.
12. The use according to any one of claims 1 to 11, wherein the cancer is melanoma.
13. The use according to any one of claims 1 to 11, wherein the cancer is small cell lung cancer.
14. The use according to any one of claims 1 to 13, wherein the cancer is refractory, non-responsive or relapsed to PD(L)1 inhibitor therapy.
15. The use according to any one of claims 1 to 14, wherein iadademstat or a pharmaceutically acceptable salt or solvate thereof is iadademstat di-hydrochloride.
16. The use according to any one of claims 1 to 15, wherein iadademstat or the pharmaceutically acceptable salt or solvate thereof is administered orally.
17. The use according to any one of claims 1 to 16, wherein iadademstat or the pharmaceutically acceptable salt or solvate thereof and the PD(L)1 inhibitor are administered using separate formulations.
18. The use according to any one of claims 1 to 17, wherein iadademstat or the pharmaceutically acceptable salt or solvate thereof and the PD(L)1 inhibitor are administered as a simultaneous regimen.
19. The use according to any one of claims 1 to 17, wherein iadademstat or the pharmaceutically acceptable salt or solvate thereof and the PD(L)1 inhibitor are administered as a sequential regimen.