CLAIMS

1. A use of a compound that reduces the activity or expression of a Programmed Cell Death- 1 (PD-I) polypeptide in the manufacture of a medicament for the treatment of a symptom of a persistent viral infection in a subject, wherein the compound is an anti-PD-1 antibody, an anti-PD-L1 antibody, an anti-PD-1 RNAi, an anti-PD-L1 RNAi, an anti-PD-1 antisense RNA, an anti-PD-L1 antisense RNA, a dominant negative PD-1 protein, or a dominant negative PD-L1 protein.

2. The use of claim 1, wherein said persistent viral infection is an infection with a human immunodeficiency virus (HIV).

3. The use of claim 1, wherein said compound reduces the activity of a PD-1 ligand (PD-L1).

4. The use of claim 1, wherein said compound increases the cytotoxic T-cell activity in said subject.

5. The use of claim 4, wherein said cytotoxic T-cell activity is cytokine production, T cell proliferation, or infectious agent clearance.

6. The use of claim 1, wherein said persistent infection is an infection with a human T-lymphotrophic virus (HTLV), a herpes virus, an Epstein-Barr virus, or a human papilloma virus.

7. The use of claim 5, wherein said cytokine is IFNγ, TNFα, or IL-2.

8. The use of claim 1, wherein said anti-PD-1 antibody or an anti-PD-L1 antibody is a monoclonal antibody, a humanized antibody, a deimmunized antibody, or an Ig fusion protein.

9. The use of claim 1, further comprising administering to said subject a vaccine.

10. The use of claim 9, wherein said vaccine comprises an adjuvant or a prime booster shot.

11. The use of claim 1, further comprising administering to said subject a second compound.

12. The use of claim 11, wherein said second compound is an antiviral compound.

13. The use of claim 12, wherein said second compound is an anti-CTLA-4 antibody, an anti-BTLA antibody, an anti-CD28 antibody, an anti-ICOS antibody, an anti- ICOS- L antibody, an anti-B7-1 antibody, an anti-B7-2 antibody, an anti-B7-H3 antibody, or an anti-B7-H4 antibody.

14. The use of claim 1, wherein said subject is a human.

15. A use of an antigen-specific T cell that has been contacted with a compound that reduces the expression or activity of a PD-1 polypeptide in said cell, wherein said compound is is an anti-PD-1 antibody, an anti-PD-L1 antibody, an anti-PD-1 RNAi, an anti-PD-L1 RNAi, an anti-PD-1 antisense RNA, an anti-PD-L1 antisense RNA, a dominant negative PD-1 protein, or a dominant negative PD-L1 protein, in the manufacture of a medicament for the treatment of a symptom of a persistent infection with a virus.

16. The use of claim 15, wherein the subject is further administered an antigen from the virus.

CLAIMS

1. The use of a compound that reduces the activity or expression of a Programmed Cell Death- 1 (PD-I) polypeptide in the manufacture of a medicament for the treatment of a symptom of a persistent viral infection in a subject, wherein the compound is an anti-PD-1 antibody, an anti-PD-L1 antibody, an anti-PD-1 RNAi, an anti-PD-L1 RNAi, an anti-PD-1 antisense RNA, an anti-PD-L1 antisense RNA, a dominant negative PD-1 protein, or a dominant negative PD-L1 protein.

2. The use of claim 1, wherein said persistent viral infection is an infection with a human immunodeficiency virus (HIV).

3. The use of claim 1, wherein said compound reduces the activity of a PD-1 ligand (PD-L1).

4. The use of claim 1, wherein said compound increases the cytotoxic T-cell activity in said subject.

5. The use of claim 4, wherein said cytotoxic T-cell activity is cytokine production, T cell proliferation, or infectious agent clearance.

6. The use of claim 1, wherein said persistent infection is an infection with a human T-lymphotrophic virus (HTLV), a herpes virus, an Epstein-Barr virus, or a human papilloma virus.

7. The use of claim 5, wherein said cytokine is IFNγ, TNFα, or IL-2.

8. The use of claim 1, wherein said anti-PD-1 antibody or an anti-PD-L1 antibody is a monoclonal antibody, a humanized antibody, a deimmunized antibody, or an Ig fusion protein.

9. The use of claim 1, wherein a vaccine is also to be administered to said subject.

10. The use of claim 9, wherein said vaccine comprises an adjuvant or a prime booster shot.

11. The use of claim 1, wherein a second compound is also to be administered to said subject.

12. The use of claim 11, wherein said second compound is an antiviral compound.

13. The use of claim 12, wherein said second compound is an anti-CTLA-4 antibody, an anti-BTLA antibody, an anti-CD28 antibody, an anti-ICOS antibody, an anti- ICOS- L antibody, an anti-B7-1 antibody, an anti-B7-2 antibody, an anti-B7-H3 antibody, or an anti-B7-H4 antibody.

14. The use of claim 1, wherein said subject is a human.

15. The use of an antigen-specific T cell that has been contacted with a compound that reduces the expression or activity of a PD-1 polypeptide in said cell, wherein said compound is is an anti-PD-1 antibody, an anti-PD-L1 antibody, an anti-PD-1 RNAi, an anti-PD-L1 RNAi, an anti-PD-1 antisense RNA, an anti-PD-L1 antisense RNA, a dominant negative PD-1 protein, or a dominant negative PD-L1 protein, in the manufacture of a medicament for the treatment of a symptom of a persistent infection with a virus.

16. The use of claim 15, wherein the subject is further administered an antigen from the virus.