What is claimed is:

1. Use of bryostatin-1 or a functional analog thereof in the manufacture of a medicament for use in combination therapy for treating cancer in a subject in need thereof, wherein the medicament is to be administered in combination with an immunotherapeutic agent, thereby treating the cancer.

2. Use of bryostatin-1 or a functional analog thereof in the manufacture of a medicament for use in combination therapy for initiating, enhancing, or prolonging an anti-tumor response in a subject in need thereof comprising administering to the subject bryostatin-1 or a functional analog thereof, wherein the medicament is to be administered in combination with an immunotherapeutic agent, thereby initiating, enhancing, or prolonging an anti-tumor response in the subject.

3. Use of bryostatin-1 or a functional analog thereof in the manufacture of a medicament for use in combination therapy for treating a cancer resistant to an immunotherapeutic agent in a subject, wherein the medicament is to be administered in combination with an immunotherapeutic agent, thereby treating the cancer.

4. The use of any one of claims 1-3, wherein the cancer is a hematologic cancer selected from the group consisting of a B-cell lymphoma, a T-cell malignancy, non-Hodgkin's lymphoma (NHL), mantle cell lymphoma (MCL), multiple myeloma (MM), acute myelogenous leukemia (AML), chronic myelogenous leukemia (CML), myelodysplastic syndrome, acute lymphoblastic leukemia (ALL), chronic lymphocytic leukemia (CLL) and hairy cell leukemia (HCL).

5. The use of any one of claims 1-3, wherein the immunotherapeutic agent is selected from the group consisting of a monoclonal antibody, a bispecific antibody, an antibody-drug conjugate (ADC), a chimeric antigen receptor (CAR)-T cell, a chimeric antigen receptor natural killer (CAR-NK) cell, an anti-tumor vaccine or a combination thereof.

6. The use of claim 5 wherein:

(a) the immunotherapeutic agent is an anti-CD22 antibody;

(b) the CAR-T cell or the CAR-NK cell targets CD22; or

(c) the ADC is inotuzumab ozogamicin.

7. The use of any one of claims 1-6, wherein the medicament is to be administered in combination with an agent selected from the group consisting of an antibody directed against a (TAA), a chemotherapeutic agent, an ADC, a vaccine, an immunomodulatory drug, an immune metabolism modifying drug, a targeted therapy, radiation, an anti-angiogenesis agent, CAR-T therapy, CAR-NK therapy, an agent that reduces immune-suppression or a combination thereof.

8. The use of any one of claims 1-7, wherein the immunotherapeutic agent is to be administered prior to, simultaneously with or following administration of the medicament.

9. The use of claim 1 or 3, wherein the immunotherapeutic agent binds to or targets a protein selected from the group consisting of CD19, CD20, CD22, CD33, CD37, CD38, CD123 and BCMA.

10. The use of any one of claims 1-3, wherein there is an increase in CD5, CD19, CD20, CD22, CD33, CD38, CD123 and/or BCMA expression following the medicament and the immunotherapeutic agent being administered.

11. The use of any one of claims 1-3, wherein the subject has CLL and there is an increase in CD19 and CD22 expression following the medicament and the immunotherapeutic agent being administered.

12. The use of claim 1, wherein the subject has multiple myeloma and there is an increase in CD38 and/or BCMA expression following the medicament and the immunotherapeutic agent being administered.

13. The use of claim 2, wherein the immunotherapeutic agent is selected from the group consisting of a monoclonal antibody, a bispecific antibody, an antibody-drug conjugate (ADC), a chimeric antigen receptor (CAR)-T cell, a chimeric antigen receptor natural killer (CAR-NK) cell, an anti-tumor vaccine or a combination thereof.

14. The use of claim 3, wherein the immunotherapeutic agent is selected from the group consisting of a monoclonal antibody, an antibody-drug conjugate, a chimeric antigen receptor (CAR)-T cell, an anti-tumor vaccine or a combination thereof.