COMBINATION THERAPY ~~COMBINATION-THERAPY ANTIBODY DRUG CONJUGATE WITH IMMUNE CELL INHIBITOR~~

CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This application claims the benefit of priority of US Provisional Application No. 63/111,045, filed November 8, 2020, US Provisional Application No. 63/172,411, filed April 8, 2021, and US Provisional Application No. 63/208,179, filed June 8, 2021, each of which is incorporated by reference herein in its entirety for any purpose.

FIELD

[0002] Provided herein are methods of treating cancer with an antibody that binds an immune cell engager in combination with an antibody-drug conjugate.

BACKGROUND

[0003] Immuno-oncology therapeutics and antibody-drug conjugates (ADCs) have been used to treat cancer in patients. Neither class of therapeutics has been able to treat the full complement of patients in targeted indications. This disclosure solves this and other problems.

BRIEF SUMMARY

[0004] Embodiment 1. A method of treating cancer, comprising administering to a subject with cancer (1) an antibody-drug conjugate (ADC) that comprises a first antibody that binds a tumor-associated antigen and a cytotoxic agent, wherein the cytotoxic agent is a tubulin disrupter; and (2) a second antibody that binds to an immune cell engager, wherein the second antibody comprises an Fc with enhanced binding to one or more activating FcγRs, wherein the activating FcγRs include one or more of FcγRIIIa, FcγRIIa, and/or FcγRI.

[0005] Embodiment 2. The method of embodiment 1, wherein the second antibody comprises an Fc with enhanced binding to at least FcγRIIIa.

[0006] Embodiment 3. The method of embodiment 1, wherein second antibody comprises an Fc with enhanced binding to at least FcγRIIIa and FcγRIIa.

[0007] Embodiment 4. The method of embodiment 1, wherein the second antibody comprises an Fc with enhanced binding to at least FcγRIIIa and FcγRI.

[0008] Embodiment 5. The method of embodiment 1, wherein the second antibody comprises an Fc with enhanced binding to FcγRIIIa, FcγRIIa, and FcγRI.

[0009] Embodiment 6. The method of any one of embodiments 1-5, wherein the Fc of the second antibody has reduced binding to one or more inhibitory FcγRs.