

new leukemia cases. The median age of patients diagnosed with AML was 67 years. In the United States, AML accounts for approximately 1.2% of cancer deaths.

[0014] AML causes non-specific symptoms such as weight loss, fatigue, fever and night sweats. AML is diagnosed by blood tests, bone marrow tests, and laboratory tests to determine AML subtypes and to determine treatment decisions.

[0015] All references cited herein, including patent applications, patent publications, and scientific literature, are herein incorporated by reference in their entirety, as if each individual reference were specifically and individually indicated to be incorporated by reference.

SUMMARY

[0016] In one aspect, the present disclosure refers to use of a nonfucosylated anti-CD70 antibody and a CD47 antagonist in the manufacture of a medicament for combination therapy to treat a cancer in a subject, wherein the use results in a depletion of cancer cells in the subject, wherein the use does not result in a depletion of CD70+ T regulatory cells (CD70+ Tregs) in the subject, wherein the anti-CD70 antibody comprises a heavy chain variable region, a light chain variable region and an Fc domain, wherein the heavy chain variable region comprises: (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8; (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and wherein the light chain variable region comprises: (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11; (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, wherein the cancer is selected from the group consisting of myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML).

[0016a] In another aspect, the present disclosure refers to use of a nonfucosylated anti-CD70 antibody in the manufacture of a first medicament and use of a CD47 antagonist in the manufacture of a second medicament, wherein the first and second medicaments are to be used in combination therapy to treat a cancer in a subject, wherein the use results in a depletion of cancer cells in the subject, wherein the use does not result in a depletion of CD70+ T regulatory cells (CD70+ Tregs) in the subject, wherein the anti-CD70 antibody comprises a heavy chain

variable region, a light chain variable region and an Fc domain, wherein the heavy chain variable region comprises: (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8; (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and wherein the light chain variable region comprises: (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11; (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, wherein the cancer is selected from the group consisting of myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML).

[0016b] In another aspect, the present disclosure refers to use of a nonfucosylated anti-CD70 antibody in the manufacture of a medicament for use in combinatorial therapy for treating a cancer in a subject, wherein said medicament is to be administered in combination with a CD47 antagonist, wherein the use results in a depletion of cancer cells in the subject, wherein the use does not result in a depletion of CD70+ T regulatory cells (CD70+ Tregs) in the subject, wherein the anti-CD70 antibody comprises a heavy chain variable region, a light chain variable region and an Fc domain, wherein the heavy chain variable region comprises: (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8; (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and wherein the light chain variable region comprises: (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11; (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, wherein the cancer is selected from the group consisting of myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML).

[0016c] Provided herein is a method of treating a cancer in a subject, the method comprising administering to the subject a nonfucosylated anti-CD70 antibody and a CD47 antagonist, wherein the method results in a depletion of cancer cells in the subject, wherein the method does not result in a depletion of CD70+ T regulatory cells (CD70+ Tregs) in the subject, wherein the anti-CD70 antibody comprises a heavy chain variable region, a light chain variable region and an Fc domain, wherein the heavy chain variable region comprises:

- (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
- (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and

(iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and
wherein the light chain variable region comprises:
(i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
(ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and
(iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, wherein the
cancer is selected from the group consisting of myelodysplastic syndrome (MDS) and acute
myeloid leukemia (AML). In some examples, the anti-CD70 antibody comprises a heavy chain
variable region comprising an amino acid sequence at least 85% identical to the amino acid
sequence of SEQ ID NO:1 and a light chain variable region comprising an amino acid sequence
at least 85% identical to the amino acid sequence of SEQ ID NO:2. In some examples, the anti-
CD70 antibody comprises a heavy chain variable region comprising the amino acid

sequence of SEQ ID NO:1 and a light chain variable region comprising the amino acid sequence of SEQ ID NO:2. In some examples, the Fc domain of the anti-CD70 antibody is an antibody effector domain mediating one or more of antibody-dependent cellular cytotoxicity (ADCC), antibody-dependent cellular phagocytosis (ADCP), and complement-dependent cellular cytotoxicity (CDC). In some examples, the Fc domain of the anti-CD70 antibody is an antibody effector domain mediating ADCC. In some examples, the Fc domain of the anti-CD70 antibody is a human Fc domain. In some examples, the anti-CD70 antibody is a nonfucosylated form of vorsetuzumab. In some examples, the anti-CD70 antibody is conjugated to a therapeutic agent. In some examples, the therapeutic agent is a chemotherapeutic agent or an immunomodulatory agent. In some examples, the therapeutic agent is a chemotherapeutic agent. In some examples, the chemotherapeutic agent is monomethyl auristatin E (MMAE) or monomethyl auristatin F (MMAF). In some examples, the therapeutic agent is an immunomodulatory agent. In some examples, the method comprises administering a population of anti-CD70 antibodies, wherein each antibody in the population of anti-CD70 antibodies comprises a heavy chain variable region, a light chain variable region, and an Fc domain, wherein the heavy chain variable region comprises:

- (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
- (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and
- (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and

wherein the light chain variable region comprises:

- (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
- (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and
- (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, wherein at least

50% of the anti-CD70 antibodies in the population of the anti-CD70 antibodies lack core fucosylation. In some examples, at least 70% of the anti-CD70 antibodies in the population of the anti-CD70 antibodies lack core fucosylation. In some examples, at least 90% of the anti-CD70 antibodies in the population of the anti-CD70 antibodies lack core fucosylation. In some examples, the anti-CD70 antibody is administered at a dose of about 1-30 mg/kg of the subject's body weight. In some examples, the anti-CD70 antibody is administered at a dose of about 10-20 mg/kg of the subject's body weight. In some examples, the anti-CD70 antibody is administered at a dose of about 10 mg/kg of the subject's body weight. In some

examples, the anti-CD70 antibody is administered at a dose of about 15 mg/kg of the subject's body weight. In some examples, the anti-CD70 antibody is administered at a dose of about 20 mg/kg of the subject's body weight. In some examples, the anti-CD70 antibody is administered once about every 1-4 weeks. In some examples, the anti-CD70 antibody is administered once about every 2 weeks. In some examples, the CD47 antagonist inhibits the interaction between CD47 and SIRP α . In some examples, the CD47 antagonist increases phagocytosis of tumor cells. In some examples, the CD47 antagonist is selected from the group consisting of an antibody, or antigen-binding fragment thereof, that binds to CD47, and antibody or antigen-binding fragment thereof, that binds to SIRP α , and a fusion protein comprising SIRP α , or a fragment thereof, and an antibody, or fragment thereof. In some examples, the fusion protein comprising SIRP α , or a fragment thereof, and an antibody, or fragment thereof, comprises SIRP α , or the immunoglobulin V-like domain thereof, covalently linked to the Fc region of an antibody. In some examples, the CD47 antagonist is an IgG1 or IgG4 antibody. In some examples, the CD47 antagonist is selected from the group consisting of magrolimab, CC-90002, ALX148, RRx-001, TTI-622, TTI-621, and KWAR23. In some examples, the CD47 antagonist is magrolimab. In some examples, the CD47 antagonist is administered at a dose of 1-50 mg/kg of the subject's body weight. In some examples, the CD47 antagonist is administered at a dose of 1-30 mg/kg of the subject's body weight. In some examples, the CD47 antagonist is administered at a dose of 1 mg/kg of the subject's body weight. In some examples, the CD47 antagonist is administered at a dose of 15 mg/kg of the subject's body weight. In some examples, the CD47 antagonist is administered at a dose of 30 mg/kg of the subject's body weight. In some examples, the CD47 antagonist is administered at a sub-optimal dose. In some examples, the CD47 antagonist is administered once about every 1-4 weeks. In some examples, the CD47 antagonist is administered once about every week. In some examples, the CD47 antagonist is administered once about every 2 weeks. In some examples, the CD47 antagonist is initially administered on days 1, 4, 8, 11, 15, and 22 of a first four-week cycle. In some examples, the CD47 antagonist is administered on days 1, 8, 15, and 22 of a second four-week cycle. In some examples, the CD47 antagonist is administered on days 1 and 15 of a third four-week cycle. In some examples, the cancer is MDS. In some examples, the MDS is relapsed or refractory MDS. In some examples, the subject experienced treatment failure after prior hypomethylating agent

(HMA) therapy for the MDS. In some examples, the cancer is AML. In some examples, the AML is relapsed or refractory AML. In some examples, the subject received 2 prior treatment regimens to treat the AML. In some examples, the subject received 3 prior treatment regimens to treat the AML. In some examples, at least about 0.1%, at least about 1%, at least about 2%, at least about 3%, at least about 4%, at least about 5%, at least about 6%, at least about 7%, at least about 8%, at least about 9%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, at least about 30%, at least about 35%, at least about 40%, at least about 45%, at least about 50%, at least about 60%, at least about 70%, or at least about 80% of the cancer cells express CD70. In some examples, at least about 0.1%, at least about 1%, at least about 2%, at least about 3%, at least about 4%, at least about 5%, at least about 6%, at least about 7%, at least about 8%, at least about 9%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, at least about 30%, at least about 35%, at least about 40%, at least about 45%, at least about 50%, at least about 60%, at least about 70%, or at least about 80% of the cancer cells express CD47. In some examples, administering the nonfucosylated anti-CD70 antibody and CD47 antagonist to the subject results in a depletion of cancer cells by at least about 5%, at least about 6%, at least about 7%, at least about 8%, at least about 9%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, at least about 30%, at least about 35%, at least about 40%, at least about 45%, at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, at least about 95%, or about 100% compared to the amount of cancer cells before administering the nonfucosylated anti-CD70 antibody and CD47 antagonist to the subject. In some examples, administering the nonfucosylated anti-CD70 antibody and CD47 antagonist to the subject results in a depletion of CD70+ Tregs of no more than about 20%, about 10%, about 9%, about 8%, about 7%, about 6%, about 5%, about 4%, about 3%, about 2%, about 1%, or about 0.1% compared to the amount of CD70+ Tregs before administering the afucosylated anti-CD70 antibody and CD47 antagonist to the subject. In some examples, one or more therapeutic effects in the subject is improved after administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist relative to a baseline. In some examples, the one or more therapeutic effects is selected from the group consisting of: objective response rate, duration of response, time to response, progression free survival and overall survival. In some examples, the objective response rate is at least about 20%, at least about 25%, at least about 30%, at least about 35%, at least about 40%, at least

about 45%, at least about 50%, at least about 60%, at least about 70%, or at least about 80%. In some examples, the subject exhibits progression-free survival of at least about 1 month, at least about 2 months, at least about 3 months, at least about 4 months, at least about 5 months, at least about 6 months, at least about 7 months, at least about 8 months, at least about 9 months, at least about 10 months, at least about 11 months, at least about 12 months, at least about eighteen months, at least about two years, at least about three years, at least about four years, or at least about five years after administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist. In some examples, the subject exhibits overall survival of at least about 1 month, at least about 2 months, at least about 3 months, at least about 4 months, at least about 5 months, at least about 6 months, at least about 7 months, at least about 8 months, at least about 9 months, at least about 10 months, at least about 11 months, at least about 12 months, at least about eighteen months, at least about two years, at least about three years, at least about four years, or at least about five years after administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist. In some examples, the duration of response to the anti-CD70 antibody and CD47 antagonist is at least about 1 month, at least about 2 months, at least about 3 months, at least about 4 months, at least about 5 months, at least about 6 months, at least about 7 months, at least about 8 months, at least about 9 months, at least about 10 months, at least about 11 months, at least about 12 months, at least about eighteen months, at least about two years, at least about three years, at least about four years, or at least about five years after administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist. In some examples, the route of administration for the anti-CD70 antibody is intravenous. In some examples, the route of administration for the CD47 antagonist is intravenous. In some examples, the subject is a human. In some examples, the method further comprises the administration of azacitidine. In some examples, the azacitidine is administered at a dose of 75 mg/m² of the subject's body surface area. In some examples, the azacitidine is administered on days 1 to 7 of a 4-week cycle. In some examples, the azacitidine is administered on days 1 to 5 and 8 to 9 of a 4-week cycle. In some examples, the method further comprises the administration of venetoclax. In some examples, the method further comprises the administration of fluoroquinolone.

[0017] Also provided herein is a pharmaceutical composition for the treatment of cancer, the composition comprising a nonfucosylated anti-CD70 antibody, wherein the anti-CD70 antibody

comprises a heavy chain variable region, a light chain variable region, and an Fc domain, wherein the heavy chain variable region comprises:

- (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
- (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and
- (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and

wherein the light chain variable region comprises:

- (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
- (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and
- (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, and at least one

pharmaceutically compatible ingredient, wherein the pharmaceutical composition is for use in combination with a CD47 antagonist, wherein the composition is for use in the method of any of the examples herein.

[0018] In yet another aspect, the present disclosure refers to a kit comprising a nonfucosylated anti-CD70 antibody and a CD47 antagonist as a combined pharmaceutical formulation for use in treating a cancer in a subject, wherein the anti-CD70 antibody comprises a heavy chain variable region, a light chain variable region, and an Fc domain, wherein the heavy chain variable region comprises: i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8; (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and wherein the light chain variable region comprises: (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11; (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, and instructions for using the anti-CD70 antibodies in the use as disclosed herein. Also provided herein is a kit comprising a nonfucosylated anti-CD70 antibody and a CD47 antagonist, wherein the anti-CD70 antibody comprises a heavy chain variable region, a light chain variable region, and an Fc domain, wherein the heavy chain variable region comprises:

- (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
- (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and
- (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and

wherein the light chain variable region comprises:

- (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
- (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and
- (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, and instructions for using the anti-CD70 antibodies in the method of any of the examples herein.

[0019] It is to be understood that one, some, or all of the properties of the various examples described herein may be combined to form other examples of the present disclosure. These and other examples of the disclosure will become apparent to one of skill in the art. These and other examples of the disclosure are further described by the detailed description that follows.

CLAIMS

What is claimed is:

1. Use of a nonfucosylated anti-CD70 antibody and a CD47 antagonist in the manufacture of a medicament for combination therapy to treat a cancer in a subject, wherein the use results in a depletion of cancer cells in the subject, wherein the use does not result in a depletion of CD70+ T regulatory cells (CD70+ Tregs) in the subject, wherein the anti-CD70 antibody comprises a heavy chain variable region, a light chain variable region and an Fc domain, wherein the heavy chain variable region comprises:

- (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
- (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and
- (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and

wherein the light chain variable region comprises:

- (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
- (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and
- (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13,

wherein the cancer is selected from the group consisting of myelodysplastic syndrome (MDS) and acute myeloid leukemia (AML).

2. Use of a nonfucosylated anti-CD70 antibody in the manufacture of a first medicament and use of a CD47 antagonist in the manufacture of a second medicament, wherein the first and second medicaments are to be used in combination therapy to treat a cancer in a subject, wherein the use results in a depletion of cancer cells in the subject, wherein the use does not result in a depletion of CD70+ T regulatory cells (CD70+ Tregs) in the subject, wherein the anti-CD70 antibody comprises a heavy chain variable region, a light chain variable region and an Fc domain, wherein the heavy chain variable region comprises:

- (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
- (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and
- (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and

wherein the light chain variable region comprises:

(i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
(ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and
(iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13,
wherein the cancer is selected from the group consisting of myelodysplastic syndrome (MDS)
and acute myeloid leukemia (AML).

3. Use of a nonfucosylated anti-CD70 antibody in the manufacture of a medicament for use
in combinatorial therapy for treating a cancer in a subject, wherein said medicament is to be
administered in combination with a CD47 antagonist, wherein the use results in a depletion of
cancer cells in the subject, wherein the use does not result in a depletion of CD70+ T regulatory
cells (CD70+ Tregs) in the subject, wherein the anti-CD70 antibody comprises a heavy chain
variable region, a light chain variable region and an Fc domain, wherein the heavy chain variable
region comprises:

(i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
(ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and
(iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and
wherein the light chain variable region comprises:

(i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
(ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and
(iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13,
wherein the cancer is selected from the group consisting of myelodysplastic syndrome (MDS)
and acute myeloid leukemia (AML).

4. The use of any one of claims 1 to 3, wherein the anti-CD70 antibody comprises a heavy chain
variable region comprising an amino acid sequence at least 85% identical to the amino acid
sequence of SEQ ID NO:1 and a light chain variable region comprising an amino acid sequence
at least 85% identical to the amino acid sequence of SEQ ID NO:2.

5. The use of any one of claims 1 to 3, wherein the anti-CD70 antibody comprises a heavy chain
variable region comprising the amino acid sequence of SEQ ID NO:1 and a light chain variable
region comprising the amino acid sequence of SEQ ID NO:2.

6. The use of any one of claims 1-5, wherein the Fc domain of the anti-CD70 antibody is an antibody effector domain mediating one or more of antibody-dependent cellular cytotoxicity (ADCC), antibody-dependent cellular phagocytosis (ADCP), and complement-dependent cellular cytotoxicity (CDC).
7. The use of any one of claims 1-5, wherein the Fc domain of the anti-CD70 antibody is an antibody effector domain mediating ADCC.
8. The use of any one of claims 1-7, wherein the Fc domain of the anti-CD70 antibody is a human Fc domain.
9. The use of any one of claims 1-8, wherein the anti-CD70 antibody is a nonfucosylated form of vorsetuzumab.
10. The use of any one of claims 1-9, wherein the anti-CD70 antibody is conjugated to a therapeutic agent.
11. The use of claim 10, wherein the therapeutic agent is a chemotherapeutic agent or an immunomodulatory agent.
12. The use of claim 10, wherein the therapeutic agent is a chemotherapeutic agent.
13. The use of claim 12, wherein the chemotherapeutic agent is monomethyl auristatin E (MMAE) or monomethyl auristatin F (MMAF).
14. The use of claim 10, wherein the therapeutic agent is an immunomodulatory agent.
15. The use of any one of claims 1-14, wherein the use comprises administration of a population of anti-CD70 antibodies, wherein each antibody in the population of anti-CD70 antibodies

comprises a heavy chain variable region, a light chain variable region, and an Fc domain, wherein the heavy chain variable region comprises:

- (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
- (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and
- (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and

wherein the light chain variable region comprises:

- (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
- (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and
- (iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, wherein at least 50% of the anti-CD70 antibodies in the population of the anti-CD70 antibodies lack core fucosylation.

16. The use of claim 15, wherein at least 70% of the anti-CD70 antibodies in the population of the anti-CD70 antibodies lack core fucosylation.

17. The use of claim 15, wherein at least 90% of the anti-CD70 antibodies in the population of the anti-CD70 antibodies lack core fucosylation.

18. The use of any one of claims 1-17, wherein the anti-CD70 antibody is to be administered at a dose of 1-30 mg/kg of the subject's body weight.

19. The use of claim 18, wherein the anti-CD70 antibody is to be administered at a dose of 10-20 mg/kg of the subject's body weight.

20. The use of claim 18, wherein the anti-CD70 antibody is to be administered at a dose of about 10 mg/kg of the subject's body weight.

21. The use of claim 18, wherein the anti-CD70 antibody is to be administered at a dose of about 15 mg/kg of the subject's body weight.

22. The use of claim 18, wherein the anti-CD70 antibody is to be administered at a dose of about 20 mg/kg of the subject's body weight.
23. The use of any one of claims 1-22, wherein the anti-CD70 antibody is to be administered once every 1-4 weeks.
24. The use of claim 23, wherein the anti-CD70 antibody is to be administered once about every 2 weeks.
25. The use of any one of claims 1-24, wherein the CD47 antagonist inhibits the interaction between CD47 and SIRP α .
26. The use of any one of claims 1-25, wherein the CD47 antagonist increases phagocytosis of tumor cells.
27. The use of any one of claims 1-26, wherein the CD47 antagonist is selected from the group consisting of an antibody, or antigen-binding fragment thereof, that binds to CD47, and antibody or antigen-binding fragment thereof, that binds to SIRP α , and a fusion protein comprising SIRP α , or a fragment thereof, and an antibody, or fragment thereof.
28. The use of claim 27, wherein the fusion protein comprising SIRP α , or a fragment thereof, and an antibody, or fragment thereof, comprises SIRP α , or the immunoglobulin V-like domain thereof, covalently linked to the Fc region of an antibody.
29. The use of claim 26, wherein the CD47 antagonist is an IgG1 or IgG4 antibody.
30. The use of claim 27, wherein the CD47 antagonist is selected from the group consisting of magrolimab, CC-90002, ALX148, RRx-001, TTI-622, TTI-621, and KWAR23.
31. The use of claim 30, wherein the CD47 antagonist is magrolimab.

32. The use of any one of claims 1-30, wherein the CD47 antagonist is to be administered at a dose of 1-50 mg/kg of the subject's body weight.
33. The use of claim 32, wherein the CD47 antagonist is to be administered at a dose of 1-30 mg/kg of the subject's body weight.
34. The use of claim 33, wherein the CD47 antagonist is to be administered at a dose of 1 mg/kg of the subject's body weight.
35. The use of claim 33, wherein the CD47 antagonist is to be administered at a dose of 15 mg/kg of the subject's body weight.
36. The use of claim 33, wherein the CD47 antagonist is to be administered at a dose of 30 mg/kg of the subject's body weight.
37. The use of any one of claims 1-31, wherein the CD47 antagonist is to be administered at a sub-optimal dose.
38. The use of any one of claims 1-37, wherein the CD47 antagonist is to be administered once every 1-4 weeks.
39. The use of claim 38, wherein the CD47 antagonist is to be administered once about every week.
40. The use of claim 38, wherein the CD47 antagonist is to be administered once about every 2 weeks.
41. The use of any one of claims 1-37, wherein the CD47 antagonist is initially to be administered on days 1, 4, 8, 11, 15, and 22 of a first four-week cycle.

42. The use of claim 41, wherein the CD47 antagonist is to be administered on days 1, 8, 15, and 22 of a second four-week cycle.
43. The use of claim 42, wherein the CD47 antagonist is to be administered on days 1 and 15 of a third four-week cycle.
44. The use of any one of claims 1-43, wherein the cancer is MDS.
45. The use of claim 44, wherein the MDS is relapsed or refractory MDS.
46. The use of claim 45, wherein the subject experienced treatment failure after prior hypomethylating agent (HMA) therapy for the MDS.
47. The use of any one of claims 1-43, wherein the cancer is AML.
48. The use of claim 47, wherein the AML is relapsed or refractory AML.
49. The use of claim 48, wherein the subject received 2 prior treatment regimens to treat the AML.
50. The use of claim 48, wherein the subject received 3 prior treatment regimens to treat the AML.
51. The use of any one of claims 1-50, wherein at least about 0.1%, at least about 1%, at least about 2%, at least about 3%, at least about 4%, at least about 5%, at least about 6%, at least about 7%, at least about 8%, at least about 9%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, at least about 30%, at least about 35%, at least about 40%, at least about 45%, at least about 50%, at least about 60%, at least about 70%, or at least about 80% of the cancer cells express CD70.

52. The use of any one of claims 1-51, wherein at least about 0.1%, at least about 1%, at least about 2%, at least about 3%, at least about 4%, at least about 5%, at least about 6%, at least about 7%, at least about 8%, at least about 9%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, at least about 30%, at least about 35%, at least about 40%, at least about 45%, at least about 50%, at least about 60%, at least about 70%, or at least about 80% of the cancer cells express CD47.

53. The use of any one of claims 1-52, wherein administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist to the subject results in a depletion of cancer cells by at least about 5%, at least about 6%, at least about 7%, at least about 8%, at least about 9%, at least about 10%, at least about 15%, at least about 20%, at least about 25%, at least about 30%, at least about 35%, at least about 40%, at least about 45%, at least about 50%, at least about 60%, at least about 70%, at least about 80%, at least about 90%, at least about 95%, or about 100% compared to the amount of cancer cells before administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist to the subject.

54. The use of any one of claims 1-53, wherein administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist to the subject results in a depletion of CD70+ Tregs of no more than about 20%, about 10%, about 9%, about 8%, about 7%, about 6%, about 5%, about 4%, about 3%, about 2%, about 1%, or about 0.1% compared to the amount of CD70+ Tregs before administration of the afucosylated anti-CD70 antibody and CD47 antagonist to the subject.

55. The use of any one of claims 1-54, wherein one or more therapeutic effects in the subject is improved after administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist relative to a baseline.

56. The use of claim 55, wherein the one or more therapeutic effects is selected from the group consisting of: objective response rate, duration of response, time to response, progression free survival and overall survival.

57. The use of any one of claims 1-56, wherein the objective response rate is at least about 20%, at least about 25%, at least about 30%, at least about 35%, at least about 40%, at least about 45%, at least about 50%, at least about 60%, at least about 70%, or at least about 80%.

58. The use of any one of claims 1-57, wherein the subject exhibits progression-free survival of at least about 1 month, at least about 2 months, at least about 3 months, at least about 4 months, at least about 5 months, at least about 6 months, at least about 7 months, at least about 8 months, at least about 9 months, at least about 10 months, at least about 11 months, at least about 12 months, at least about eighteen months, at least about two years, at least about three years, at least about four years, or at least about five years after administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist.

59. The use of any one of claims 1-58, wherein the subject exhibits overall survival of at least about 1 month, at least about 2 months, at least about 3 months, at least about 4 months, at least about 5 months, at least about 6 months, at least about 7 months, at least about 8 months, at least about 9 months, at least about 10 months, at least about 11 months, at least about 12 months, at least about eighteen months, at least about two years, at least about three years, at least about four years, or at least about five years after administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist.

60. The use of any one of claims 1-59, wherein the duration of response to the anti-CD70 antibody and CD47 antagonist is at least about 1 month, at least about 2 months, at least about 3 months, at least about 4 months, at least about 5 months, at least about 6 months, at least about 7 months, at least about 8 months, at least about 9 months, at least about 10 months, at least about 11 months, at least about 12 months, at least about eighteen months, at least about two years, at least about three years, at least about four years, or at least about five years after administration of the nonfucosylated anti-CD70 antibody and CD47 antagonist.

61. The use of any one of claims 1-60, wherein the route of administration for the anti-CD70 antibody is intravenous.

62. The use of any one of claims 1-61, wherein the route of administration for the CD47 antagonist is intravenous.
63. The use of any one of claims 1-62, wherein the subject is a human.
64. The use of any one of claims 1-63, further comprising the administration of azacitidine.
65. The use of claim 64, wherein the azacitidine is to be administered at a dose of 75 mg/m² of the subject's body surface area.
66. The use of claim 64 or 65, wherein the azacitidine is to be administered on days 1 to 7 of a 4-week cycle.
67. The use of claim 64 or 65, wherein the azacitidine is to be administered on days 1 to 5 and 8 to 9 of a 4-week cycle.
68. The use of any one of claims 1-67, further comprising the administration of venetoclax.
69. The use of any one of claims 1-68, further comprising the administration of fluoroquinolone.
70. A kit comprising a nonfucosylated anti-CD70 antibody and a CD47 antagonist as a combined pharmaceutical formulation for use in treating a cancer in a subject, wherein the anti-CD70 antibody comprises a heavy chain variable region, a light chain variable region, and an Fc domain, wherein the heavy chain variable region comprises:
- (i) a CDR-H1 comprising the amino acid sequence of SEQ ID NO:8;
 - (ii) a CDR-H2 comprising the amino acid sequence of SEQ ID NO:9; and
 - (iii) a CDR-H3 comprising the amino acid sequence of SEQ ID NO:10; and
- wherein the light chain variable region comprises:
- (i) a CDR-L1 comprising the amino acid sequence of SEQ ID NO:11;
 - (ii) a CDR-L2 comprising the amino acid sequence of SEQ ID NO:12; and

(iii) a CDR-L3 comprising the amino acid sequence of SEQ ID NO:13, and instructions for using the anti-CD70 antibodies in the use of any one of claims 1-69.