## CLAIMS

**1.** Use of magrolimab in the manufacture of a medicament, for administration with azacitidine, for the treatment of a blood cancer or myelodysplastic syndrome (MDS) in a subject, wherein the subject has been determined to have at least one p53 mutation.

**2.** Use of azacitidine in the manufacture of a medicament, for administration with magrolimab, for the treatment of a blood cancer or myelodysplastic syndrome (MDS) in a subject, wherein the subject has been determined to have at least one p53 mutation.

**3.** Use of magrolimab and azacitidine in the manufacture of a medicament, for the combination therapy of a blood cancer or myelodysplastic syndrome (MDS) in a subject, wherein the subject has been determined to have at least one p53 mutation.

**4.** The use of any one of claims 1 to 3, wherein

a. the determination of the presence of at least one p53 mutation comprised a DNA assay, an RNA assay or a protein assay; and/or

b. the magrolimab is to be administered to the subject at a dose of greater than or equal to 10 mg of magrolimab per kg of body weight.

**5.** The use according to any one of claims 1 to 4, wherein the magrolimab and azacitidine are to be administered within a period of time to produce an additive or synergistic effect on depletion of cancer cells in the subject.

**6.** The use of any one of claims 1 to 5, wherein the blood cancer is acute myeloid leukemia (AML).

**7.** The use of any one of claims 1 to 6, wherein

a. the p53 mutation comprises a missense mutation, a nonsense mutation, a frameshift mutation, an intronic mutation, a truncating mutation, a mutation in the DNA binding domain, or a mutation in the tetramerization domain, optionally wherein the p53 mutation comprises a mutation in the DNA binding domain; and/or

b. the subject is relapsed or refractory to at least 1, 2, 3, 4, 5, 6, 7, 8, 9, 10 or greater than 10 prior lines of cancer therapy; and/or

c. the magrolimab is for intravenous administration; and/or

d. the azacitidine is for intravenous, subcutaneous, or oral administration.

**8.** The use of any one of claims 1 to 7, wherein

the magrolimab is to be administered to the subject in a first cycle comprising a priming dose of at least 1 mg of magrolimab per kg of body weight on days 1 and 4, followed by a dose of at least 15 mg of magrolimab per kg of body weight on day 8, and followed by a dose of at least 30 mg of magrolimab per kg of body weight on days 15 and 22.

**9.** The use according to claim 8 wherein the first cycle further comprises a loading dose of at least 30 mg of magrolimab per kg of body weight on day 11.

**10.** The use according to claim 8 or 9, wherein

i. the first cycle is 4 weeks in duration; and/or

ii. the azacitidine is to be administered to the subject at a dose of at least 75 $mg/m^2$ on each of days 1-7 of the first cycle; or

iii. the azacitidine is to be administered to the subject at a dose of at least 75 $mg/m^2$ on each of days 1-5 of the first cycle.

**11.** The use according to any one of claims 8-10 wherein

i. the magrolimab is to be administered to the subject in a second cycle comprising a dose of at least 30 mg of magrolimab per kg of body weight once every four weeks; or

ii. the magrolimab is to be administered to the subject in a second cycle comprising a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks; or

iii. the magrolimab is to be administered to the subject in a second cycle comprising a dose of at least 30 mg of magrolimab per kg of body weight once every week, optionally wherein the second cycle is 4 weeks in duration; or

iv. the magrolimab is to be administered to the subject in a second cycle comprising a dose of at least 30 mg of magrolimab per kg of body weight twice weekly, optionally wherein the second cycle is 4 weeks in duration; and/or

v. the magrolimab is to be administered to the subject in a third cycle comprising a dose of at least 30 mg of magrolimab per kg of body weight once every four weeks.

**12.** The use of any one of claims 1-11, wherein:

a. the magrolimab is to be administered to the subject in a third cycle comprising a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks; or

b. the magrolimab is to be administered to the subject in a third cycle comprising a dose of at least 30 mg of magrolimab per kg of body weight once every week; or

c. the magrolimab is to be administered to the subject in a third cycle comprising a dose of at least 30 mg of magrolimab per kg of body weight twice weekly.

**13.** The use of any one of claims 1-11 wherein:

a. the magrolimab is to be administered to the subject in a first cycle comprising a priming dose of at least 1 mg of magrolimab per kg of body weight on day 1, followed by a dose of at least 30 mg of magrolimab per kg of body weight on days 8, 15, and 22; and/or

b. the azacitidine is to be administered to the subject at a dose of at least 75 $mg/m^2$ on each of days 1-7 of the second cycle; or

c. the azacitidine is to be administered to the subject at a dose of at least 75 $mg/m^2$ on each of days 1-5 of the second cycle; or

d. the magrolimab is to be administered to the subject in a third cycle comprising a dose of at least 60 mg of magrolimab per kg of body weight once every four weeks; and/or

e. the third cycle is 4 weeks in duration; and/or

f. the azacitidine is to be administered to the subject at a dose of at least 75 $mg/m^2$ on each of days 1-7 of the third cycle; or

g. the azacitidine is to be administered to the subject at a dose of at least 75 $mg/m^2$ on each of days 1-5 of the third cycle.

**14.** The use of claim 13, wherein in (a), the magrolimab is to be administered to the subject in a second cycle comprising a dose of at least 60 mg of magrolimab per kg of body weight once every two weeks on day 1 and 15, wherein the second cycle is 4 weeks in duration.

**15.** The use of any one of claims 1 to 14, wherein

a. the subject is or has been determined to be refractory to azacitidine, decitabine, or cytarabine prior to administration of the magrolimab and the use results in a reversal of refractoriness to azacitidine, decitabine, or cytarabine; and/or

b. the magrolimab and azacitidine reduce the p53 mutational burden in the subject relative to the p53 mutational burden present in the subject prior to the administration and/or

c. the p53 mutational burden in the subject after at least one cycle of administration of the magrolimab and azacitidine is to be assessed; and/or

d. the magrolimab and azacitidine reduce the level of leukemia stem cells present in the bone marrow of the subject as compared to the level of leukemia stem cells present in the bone marrow of the subject before the administration.

**16.** The use according to claim 15, wherein at least an additional cycle of the magrolimab and azacitidine is to be administered if either or both the p53 mutational burden has decreased or the amount of leukemia stem cells has decreased.

**17.** The use of any one of claims 1 to 16, wherein:

a. the subject is a human subject, and the magrolimab and azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the second cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

ii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; or

iii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22 and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine is to be administered to the subject until the subject loses a clinical benefit;

and/or, wherein:

A. the subject is a human subject having a myelodysplastic syndrome (MDS), wherein the subject has at least one p53 mutation, and the magrolimab and azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the second cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

ii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every four weeks on day 1, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; or

iii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

iv. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22 and (2) administering a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

B. wherein the subject is a human subject having acute myeloid leukemia (AML), wherein the subject has at least one p53 mutation and the magrolimab and azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the second cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

ii. a third cycle of four weeks comprises (1) a dose of at least 30 mg of magrolimab per kg of body weight once every four weeks on day 1, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; or

iii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

iv. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22 and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

b. the subject is a human subject, and the magrolimab and azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 15 and 22, and (4) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of

body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the second cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed, optionally wherein a third cycle of four weeks comprises (1) a dose of at least 60 mg of magrolimab per kg of body weight once every four weeks on day 1, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; and/or

ii. a third cycle of four weeks comprising (1) administering a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) administering a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit;

and/or, wherein:

A. the subject is a human subject having a myelodysplastic syndrome (MDS), wherein the subject has at least one p53 mutation, and the magrolimab and azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15,

and 22, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the second cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

ii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every four weeks on day 1, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7; or

iii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

iv. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22 and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

B. wherein the subject is a human subject having acute myeloid leukemia (AML), wherein the subject has at least one p53 mutation and the magrolimab and azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of

body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the second cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

ii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every four weeks on day 1, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; or

iii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

iv. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22 and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

c. the subject is a human subject, and magrolimab and the azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1, (2) a dose of at

least 30 mg of magrolimab per kg of body weight on Days 8, 15, and 22, and (3) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 60 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, and/or wherein:

A. the subject is a human subject having a myelodysplastic syndrome (MDS), wherein the subject has at least one p53 mutation, and the magrolimab and azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the second cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

ii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every four weeks on day 1, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7; or

iii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally

the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

iv. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22 and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

B. wherein the subject is a human subject having acute myeloid leukemia (AML), wherein the subject has at least one p53 mutation and magrolimab and the azacitidine are to be administered to the subject for at least two distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7; and the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the second cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

ii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every four weeks on day 1, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of days 1-7; or

iii. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/m$^2$ of azacitidine on each of

days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

iv. a third cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22 and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, further optionally wherein the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

d. the subject is a human subject, and the magrolimab and azacitidine are to be administered to the subject for at least three distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; and the third cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, and 15, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, optionally wherein:

i. the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

ii. a fourth cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of

days 1-7, optionally wherein the fourth cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit; or

e. the subject is a human subject, and the magrolimab and azacitidine are to be administered to the subject for at least three distinct cycles of four weeks each, the first cycle comprising (1) a priming dose of magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of magrolimab per kg of body weight on days 15 and 22, and (4) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; the second cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7; and the third cycle comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every week on days 1, and 15, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, optionally wherein:

    i. the third cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; and/or

    ii. a fourth cycle of four weeks comprising (1) a dose of at least 30 mg of magrolimab per kg of body weight once every two weeks on days 1 and 15, and (2) a dose of at least 75 mg/$m^2$ of azacitidine on each of days 1-7, optionally wherein the fourth cycle is to be repeated as one or more additional cycles without limit or until a clinical benefit is reduced or lost or no longer observed; optionally the magrolimab and azacitidine are to be administered to the subject until the subject loses a clinical benefit.

**18.** Use of magrolimab in the manufacture of a medicament for administration with azacitidine, for the treatment of a blood cancer or myelodysplastic syndrome (MDS) in a subject, wherein prior to administration of the medicament, the T cell infiltration level in the

bone marrow in the subject has been determined, and wherein the subject has been determined to have at least one p53 mutation.

**19.** Use of azacitidine in the manufacture of a medicament for administration with a magrolimab, for the treatment of a blood cancer or myelodysplastic syndrome (MDS) in a subject, wherein prior to administration of the medicament, the T cell infiltration level in the bone marrow in the subject has been determined, and wherein the subject has been determined to have at least one p53 mutation.

**20.** Use of magrolimab and azacitidine in the manufacture of a medicament for the combination therapy of a blood cancer or myelodysplastic syndrome (MDS) in a subject, wherein prior to administration of the medicament, the T cell infiltration level in the bone marrow in the subject has been determined, and wherein the subject has been determined to have at least one p53 mutation.

**21.** The use of any one of claims 18-20, wherein the treatment comprises at least two distinct cycles of four weeks each, wherein the first cycle comprises (1) a priming dose of the magrolimab in the range of 1 mg to 10 mg of magrolimab per kg of body weight on Day 1 and 4, (2) a dose of at least 15 mg of the magrolimab per kg of body weight on day 8, (3) a dose of at least 30 mg of the magrolimab per kg of body weight on days 11, 15, and 22, and (4) a dose of at least 75 mg/$m^2$ of the azacitidine on each of days 1-7; and the second cycle comprises (1) a dose of at least 30 mg of the magrolimab per kg of body weight once every week on days 1, 8, 15, and 22, and (2) a dose of at least 75 mg/$m^2$ of the azacitidine on each of days 1-7.