What is Claimed:

1. Use of anti-CD30 antibody drug conjugate therapy in the manufacture of a medicament for treating a subject that has exhibited Grade 2 or greater peripheral neuropathy after starting treatment with anti-CD30 antibody drug conjugate therapy at a dose of 1.2 mg/kg or more, wherein the anti-CD30 antibody drug conjugate therapy is to be administered at a dose of 0.9 mg/kg.

2. The use of claim 1 wherein when the subject exhibits Grade 3 neuropathy, the administration of anti-CD30 antibody drug conjugate therapy is withheld until peripheral neuropathy decreases to Grade 2 or less and then 0.9 mg/kg anti-CD30 antibody drug conjugate therapy is to be administered.

3. The use of claim 1 or 2 wherein the subject exhibited Grade 2 or 3 peripheral neuropathy after starting anti-CD30 antibody drug conjugate therapy at a dose of 1.8 mg/kg.

4. The use of claim 1 or 2 wherein the subject exhibited Grade 2 or 3 peripheral neuropathy after starting with anti-CD30 antibody drug conjugate therapy at a dose of 1.2 mg/kg, optionally in combination with a chemotherapy consisting essentially of doxorubicin, vinblastine, and dacarbazine (AVD).

5. The use of claim 1 or 2 wherein the dose of anti-CD30 antibody drug conjugate is increased to 1.8 mg/kg or 1.2 mg/kg after the Grade 2 or Grade 3 peripheral neuropathy improves to Grade 1 or less, wherein if the dose is increased to 1.2 mg/kg, the administration optionally is in combination with a chemotherapy consisting essentially of doxorubicin, vinblastine, and dacarbazine (AVD).

6. The use of claim 1 or 2, wherein the anti-CD30 antibody drug conjugate is to be administered at 1.2 mg/kg, further comprising that a chemotherapy consisting essentially of doxorubicin, vinblastine, and dacarbazine (AVD) is to be administered as a combination therapy to the subject.

7. The use of claim 6 wherein the combination therapy is to be administered every two weeks.

8. The use of claim 7 wherein the combination therapy is to be administered on days 1 and 15 of a 28 day cycle.

9. The use of claim 7 or 8 wherein the combination therapy is to be administered for no more than six cycles.

10. The use of claim 7 or 8 wherein the combination therapy is to be administered for four to six cycles.

11. The use of any one of claims 1-10 wherein the therapy is to be administered until a PET scan determines there is no tumor or progression of tumor.

12. The use of any one of claims 1-11 wherein the treatment reduces paresthesia, hypoesthesia, polyneuropathy, muscular weakness, and demyelinating polyneuropathy.

13. The use of any one of claims 1-12 wherein the neuropathy is peripheral motor neuropathy or peripheral sensory neuropathy.

14. The use of any one of claims 1-13 wherein the dose of anti-CD30 antibody drug conjugate is delayed by one week if peripheral neuropathy appears, and therapy is to be continued when the neuropathy is resolved or determined to be Grade 1 or less.

15. Use of an anti-CD30 antibody drug conjugate in combination with a granulopoiesis stimulating factor in the manufacture of a combination therapy for treating a hematologic cancer in a subject, wherein the use comprises that a therapy comprising the anti-CD30 antibody drug conjugate is to be administered prophylactically in combination with a granulopoiesis stimulating factor, wherein the granulopoiesis stimulating factor is to be administered beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

16. The use of claim 15 wherein the granulopoiesis stimulating factor is to be administered from 1 day to 7 days after beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

17. The use of claim 16 wherein the granulopoiesis stimulating factor is to be administered from 2 days to 5 days after beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

18. The use of any one of claims 15 to 17 wherein the granulopoiesis stimulating factor is to be administered from 1 day to 7 days after a second or subsequent, administration of anti-CD30 antibody drug conjugate.

19. The use of any one of claims 15 to 17 wherein the granulopoiesis stimulating factor is to be administered from 2 days to 5 days after the a second or subsequent administration of anti-CD30 antibody drug conjugate.

20. The use of any one of claims 15 to 19 wherein, the granulopoiesis stimulating factor is to be administered about 24 hours to about 36 hours after each administration of anti-CD30 antibody drug conjugate.

21. The use of any one of claims 15 to 20 wherein, the granulopoiesis stimulating factor is to be administered 24 hours to 36 hours after each administration of anti-CD30 antibody drug conjugate

22. The use of any one of claims 15 to 21 wherein the granulopoiesis stimulating factor is to be administered to a subject that has not received anti-CD30 antibody drug conjugate therapy previously.

23. The use of any one of claims 15 to 22 wherein the subject has not experienced treatment-emergent grade 3-4 neutropenia after anti-CD30 antibody drug conjugate administration.

24. Use of a granulopoiesis stimulating factor in the manufacture of a medicament for reducing the incidence of neutropenia in a subject receiving treatment with a therapy comprising an anti-CD30 antibody drug conjugate, wherein the use comprises that the granulopoiesis stimulating factor is to be administered beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

25. The use of claim 24 wherein the neutropenia is febrile neutropenia, and the subject is 60 years old or older.

26. The use of any one of claims 15 to 25 wherein the granulopoiesis stimulating factor is a granulocyte-colony stimulating factor (GCSF).

27. The use of claim 26 wherein the GCSF is a long-acting GCSF or a non long-acting GCSF.

28. The use of claim 26 or 27 wherein the GCSF is long-acting GCSF, and is to be administered 1 day or 2 days after beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

29. The use of claim 28 wherein the G-CSF is to be administered about 24 hours to about 36 hours after each administration of anti-CD30 antibody drug conjugate.

30. The use of claim 28 or 29 wherein the G-CSF is to be administered 24 hours to 36 hours after each administration of anti-CD30 antibody drug conjugate.

31. The use of claim 26 or 27 wherein the GCSF is not long acting, and is to be administered 1, 2, 3, 4, 5, 6 or 7 days after beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

32. The use of any one of claims 15 to 31 wherein the anti-CD30 antibody drug conjugate is to be administered every 3 weeks.

33. The use of any one of claims 15 to 31 wherein the anti-CD30 antibody drug conjugate is to be administered every 2 weeks.

34. The use of claim 33 wherein the anti-CD30 antibody drug conjugate is to be administered on day 1 and day 15 of a 28-day cycle.

35. The use of any one of claims 15 to 34 wherein the anti-CD30 antibody drug conjugate is administered for no more than six cycles.

36. The use of any one of claims 15 to 35 wherein the anti-CD30 antibody drug conjugate is to be administered for four to six cycles.

37. The use of any one of claims 15 to 36 further comprising that a chemotherapy consisting essentially of doxorubicin, vinblastine, and dacarbazine (AVD) is to be administered as a combination therapy.

38. The use of any one of claims 1 to 37 wherein the anti-CD30 antibody of the anti-CD30 antibody drug conjugate comprises

i) a heavy chain CDR1 set out in SEQ ID NO: 4, a heavy chain CDR2 set out in SEQ ID NO: 6, a heavy chain CDR3 set out in SEQ ID NO: 8; and

ii) a light chain CDR1 set out in SEQ ID NO: 12, a light chain CDR2 set out in SEQ ID NO: 14, and a light chain CDR13 set out in SEQ ID NO: 16.

39. The method of any one of claims 1 to 38 wherein the anti-CD30 antibody of the anti-CD30 antibody drug conjugate comprises

i) an amino acid sequence at least 85% identical to a heavy chain variable region set out in SEQ ID NO: 2 and

ii) an amino acid sequence at least 85% identical to a light chain variable region set out in SEQ ID NO: 10.

40. The use of any one of claims 1 to 39 wherein the anti-CD30 antibody of the anti-CD30 antibody drug conjugate is a monoclonal anti-CD30 antibody.

41. The use of any one of claims 1 to 39 wherein the anti-CD30 antibody of the anti-CD30 antibody drug conjugate is a chimeric AC10 antibody.

42. The use of any one of claims 1 to 41 wherein the antibody drug conjugate comprises monomethyl auristatin E and a protease-cleavable linker.

43. The use of claim 42 wherein the protease cleavable linker is comprises a thiolreactive spacer and a dipeptide.

44. The use of claim 42 or 43, wherein the protease cleavable linker consists of a thiolreactive maleimidocaproyl spacer, a valine–citrulline dipeptide, and a p-amino-benzyloxycarbonyl spacer.

45. The use of any one of claims 1 to 44 wherein the anti-CD30 antibody drug conjugate is brentuximab vedotin.

46. The use of claim 45 wherein the anti-CD30 antibody drug conjugate is brentuximab vedotin and is to be administered at 1.2 mg/kg, doxorubicin is to be administered at 25 mg/m^2, vinblastine is to be administered at 6 mg/m^2, and dacarbazine is to be administered at 375 mg/m^2.

47. The use of any one of claims 15 to 46 wherein the granulopoiesis stimulating factor is to be administered in a dose range from 5 to 10 mcg/kg/day, or 300 to 600 mcg/day, or 6 mg/dose.

48. The use of any one of claims 15 to 47 wherein the granulopoiesis stimulating factor is to be administered to a subject that has not received anti-CD30 antibody drug conjugate therapy previously.

49. The use of any one of claims 15 to 48 wherein the subject has not experienced treatment-emergent grade 3-4 neutropenia after anti-CD30 antibody drug conjugate administration.

50. The use of any one of claims 15 to 49 wherein the granulopoiesis stimulating factor is to be given intravenously or subcutaneously.

51. The use of any one of claims 15 to 50 wherein the granulopoiesis stimulating factor is to be given in a single dose or multiple doses.

52. The use of any one of claims 1-51 wherein the subject has a hematologic cancer.

53. The use of claim 52 wherein the hematologic cancer selected from the group consisting of classical Hodgkin Lymphoma, non-Hodgkin Lymphoma, cutaneous T-cell lymphoma (CTCL), and anaplastic large cell lymphoma (ALCL).

54. The use of claim 53 wherein the hematologic cancer is classical Hodgkin Lymphoma.

55. The use of claim 53 wherein the hematologic cancer is a stage III or IV classical Hodgkin Lymphoma.

56. The use of any one of claims 53 to 55 wherein the hematologic cancer of the subject has not been treated.

57. Use of a granulopoiesis stimulating factor in the manufacture of a medicament for decreasing the incidence of infection in a subject receiving a therapy comprising an anti-CD30 antibody drug conjugate, wherein the use comprises that the granulopoiesis stimulating factor is to be administered to the subject in an amount effective to reduce infections, wherein the granulopoiesis stimulating factor is to be administered beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

58. The use of claim 57 wherein the granulopoiesis stimulating factor is to be administered from 1 day to 7 days after beginning with cycle 1 of the administration of the anti-CD30 antibody drug conjugate.

59. The use of claim 57 wherein the granulopoiesis stimulating factor is to be administered from 2 days to 5 days after beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

60. The use of any one of claims 57 to 59 wherein the granulopoiesis stimulating factor is to be administered from 1 day to 7 days after a second or subsequent, administration of anti-CD30 antibody drug conjugate.

61. The use of any one of claims 57 to 59 wherein the granulopoiesis stimulating factor is to be administered from 2 days to 5 days after the a second or subsequent administration of anti-CD30 antibody drug conjugate.

62. The use of any one of claims 57 to 61 wherein, the granulopoiesis stimulating factor is to be administered about 24 hours to about 36 hours after each administration of anti-CD30 antibody drug conjugate.

63. The use of any one of claims 57 to 62 wherein, the granulopoiesis stimulating factor is to be administered 24 hours to 36 hours after each administration of anti-CD30 antibody drug conjugate.

64. The use of any one of claims 57 to 63 wherein the granulopoiesis stimulating factor is to be administered to a subject that has not received anti-CD30 antibody drug conjugate therapy previously.

65. The use of any one of claims 57 to 63 wherein the subject has not experienced treatment-emergent grade 3-4 neutropenia after anti-CD30 antibody drug conjugate administration.

66. The use of any one of claims 57 to 65 wherein the granulopoiesis stimulating factor is a granulocyte-colony stimulating factor GCSF.

67. The use of claim 66 wherein the GCSF is a long-acting GCSF or a non long-acting GCSF.

68. The use of claim 66 or 67 wherein the GCSF is long-acting, and is to be administered 1 day or 2 days after beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

69. The use of claim 68 wherein, the G-CSF is to be administered about 24 hours to about 36 hours after each administration of anti-CD30 antibody drug conjugate.

70. The use of claim 68 or 69 wherein, the G-CSF is to be administered 24 hours to 36 hours after each administration of anti-CD30 antibody drug conjugate.

71. The use of claim 66 or 67 wherein the GCSF is not long acting, and is to be administered 1, 2, 3, 4 or up to 7 days after beginning with cycle 1 of the administration of anti-CD30 antibody drug conjugate.

72. The use of any one of claims 57 to 71 wherein the anti-CD30 antibody drug conjugate is to be administered every 3 weeks.

73. The use of any one of claims 57 to 71 wherein the anti-CD30 antibody drug conjugate is to be administered every 2 weeks.

74. The use of claim 73 wherein the anti-CD30 antibody drug conjugate is to be administered on day 1 and day 15 of a 28-day cycle.

75. The use of claim 73 or 74 wherein the anti-CD30 antibody drug conjugate is to be administered for no more than six cycles.

76. The use of any one of claims 73 to 75 wherein the anti-CD30 antibody drug conjugate is to be administered for four to six cycles.

77. The use of any one of claims 73 to 76 further comprising that a chemotherapy consisting essentially of doxorubicin, vinblastine, and dacarbazine (AVD) is to be administered as a combination therapy.

78. The use of any one of claims 57 to 77 wherein the anti-CD30 antibody of the anti-CD30 antibody drug conjugate comprises

i) a heavy chain CDR1 set out in SEQ ID NO: 4, a heavy chain CDR2 set out in SEQ ID NO: 6, a heavy chain CDR3 set out in SEQ ID NO: 8; and

ii) a light chain CDR1 set out in SEQ ID NO: 12, a light chain CDR2 set out in SEQ ID NO: 14, and a light chain CDR13 set out in SEQ ID NO: 16.

79. The use of any one of claims 57 to 78 wherein the anti-CD30 antibody of the anti-CD30 antibody drug conjugate comprises

i) an amino acid sequence at least 85% identical to a heavy chain variable region set out in SEQ ID NO: 2 and

ii) an amino acid sequence at least 85% identical to a light chain variable region set out in SEQ ID NO: 10.

80. The use of any one of claims 57 to 79 wherein the anti-CD30 antibody of the anti-CD30 antibody drug conjugate is a monoclonal anti-CD30 antibody.

81. The use of any one of claims 57 to 79 wherein the anti-CD30 antibody of the anti-CD30 antibody drug conjugate is a chimeric AC10 antibody.

82. The use of any one of claims 57 to 81 wherein the antibody drug conjugate comprises monomethyl auristatin E and a protease-cleavable linker.

83. The use of claim 82 wherein the protease cleavable linker comprises a thiolreactive spacer and a dipeptide.

84. The use of claim 82 or 83, wherein the protease cleavable linker consists of a thiolreactive maleimidocaproyl spacer, a valine–citrulline dipeptide, and a p-amino-benzyloxycarbonyl spacer.

85. The use of any one of claims 57 to 84 wherein the anti-CD30 antibody drug conjugate is brentuximab vedotin.

86. The use of claim 85 wherein the anti-CD30 antibody drug conjugate is brentuximab vedotin and is to be administered at 1.2 mg/kg, doxorubicin is to be administered at 25 mg/m^2, vinblastine is to be administered at 6 mg/m^2, and dacarbazine is to be administered at 375 mg/m^2.

87. The use of any one of claims 57 to 86 wherein the granulopoiesis stimulating factor is to be administered in a dose range from 5 to 10 mcg/kg/day, or 300 to 600 mcg/day, or 6 mg/dose.

88. The use of any one of claims 57 to 87 wherein the granulopoiesis stimulating factor is to be given intravenously or subcutaneously.

89. The use of any one of claims 57 to 88 wherein the granulopoiesis stimulating factor is to be given in a single dose or multiple doses.

90. The use of any one of claims 1 to 89 wherein the subject has a hematologic cancer.

91. The use of claim 90 wherein the hematologic cancer is selected from the group consisting of classical Hodgkin Lymphoma, non-Hodgkin Lymphoma, cutaneous T-cell lymphoma (CTCL), and anaplastic large cell lymphoma (ALCL).

92. The use of claim 91 wherein the hematologic cancer is classical Hodgkin Lymphoma.

93. The use of claim 92 wherein the hematologic cancer is a stage III or IV classical Hodgkin Lymphoma.

94. The use of any one of claims 90 to 93 wherein the hematologic cancer of the subject has not been treated.

95. The use of claim 91, wherein the anaplastic large cell lymphoma (ALCL) is a systemic anaplastic large cell lymphoma (sALCL).

96. The use of claim 91, wherein the cutaneous T-cell lymphoma (CTCL) is a mycosis fungoides (MF).

97. The use of claim 96, wherein the mycosis fungoides (MF) is a CD30-positive mycosis fungoides (MF).

98. The use of claim 91, wherein the cutaneous T-cell lymphoma (CTCL) is a primary cutaneous anaplastic large cell lymphoma (pcALCL).

99. The use of claim 98, wherein the subject has received prior systemic therapy.

100. The use of any one of claims 1 to 99 wherein the subject is an adult patient.