CLAIMS

1. Use of a human neonatal Fc receptor (FcRn) antagonist in the manufacture of a medicament for treating Chronic Inflammatory Demyelinating Polyneuropathy (CIDP) in a subject in need thereof.

2. The use of claim 1, wherein the FcRn antagonist comprises two, three, or four FcRn binding regions.

3. The use of claim 1 or 2, wherein the FcRn antagonist comprises or consists of a variant Fc region or FcRn binding fragment thereof.

4. The use of claim 3, wherein the variant Fc region or FcRn binding fragment thereof binds to FcRn with a higher affinity at pH 6.0 and/or pH 7.4 as compared to a corresponding wild-type Fc region.

5. The use of any one of claims 3 or 4, wherein the variant Fc region comprises or consists of a first Fc domain and a second Fc domain which form a homodimer or heterodimer.

6. The use of claim 5, wherein the first Fc domain and/or the second Fc domain comprise amino acids Y, T, E, K, and F at EU positions 252, 254, 256, 433, and 434, respectively.

7. The use of claim 5 or 6, wherein the first Fc domain and/or second Fc domain comprise amino acids Y, T, E, K, F, and Y at EU positions 252, 254, 256, 433, 434, and 436, respectively.

8. The use of any one of claims 5-7, wherein the first Fc domain and/or the second Fc domain comprise an amino acid sequence independently selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, and SEQ ID NO: 4.

9. The use of any one of claims 5-8, wherein the first Fc domain and the second Fc domain comprise an amino acid sequence independently selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, and SEQ ID NO: 4.

10. The use of any one of claims 1-9, wherein the FcRn antagonist is efgartigimod.

11. The use of claim 1, wherein the FcRn antagonist is an anti-FcRn antibody.

12. The use of any one of claims 1-11, wherein the FcRn antagonist is administered to the subject at:

a) a fixed dose of 200 mg to 20,000 mg;

b) a dose of 2 mg/kg to 200 mg/kg;

c) a fixed dose of about 800 to about 1200 mg; or

d) a fixed dose of about 1000 mg.

13. The use of any one of claims 1-12, wherein the FcRn antagonist is administered subcutaneously.

14. The use of any one of claims 1-13, wherein the FcRn antagonist is administered to the subject once weekly, once every two weeks, once every three weeks, once every four weeks, once monthly, or once every six weeks.

15. The use of any one of claims 1-14, wherein the FcRn antagonist is administered in an induction phase followed by a maintenance phase, wherein the FcRn antagonist is administered subcutaneously once weekly at a fixed dose of about 1000 mg during the induction phase, and wherein the FcRn antagonist is administered subcutaneously once every two weeks at a fixed dose of about 1000 mg during the maintenance phase.

16. The use of any one of claims 1-14, wherein the FcRn antagonist is first administered subcutaneously at a fixed dose of about 1000 mg once weekly and is subsequently administered subcutaneously at a fixed dose of about 1000 mg once every two weeks based on clinical evaluation.

17. The use of claim 16, wherein once weekly subcutaneous administrations at a fixed dose of about 1000 mg are resumed upon worsening of symptoms.

18. The use of any one of claims 1-12, wherein the FcRn antagonist is administered intravenously.

19. The use of claim 18, wherein the FcRn antagonist is administered intravenously once weekly or once every two weeks.

20. The use of claim 18 or 19, wherein the FcRn antagonist is administered:

a) at a dose of from about 3 mg/kg to about 60 mg/kg;

b) at a dose of 5 mg/kg;

c) at a dose of 10 mg/kg; or

d) at a dose of 25 mg/kg.

21. The use of any one of claims 1-20, wherein the FcRn antagonist is administered:

a) for 61 weeks or less;

b) for 52 weeks or less;

c) for 48 weeks or less; or

d) for at least 12 weeks.

22. The use of any one of claims 1-17, wherein the FcRn antagonist is administered subcutaneously once weekly for at least 4 weeks.

23. The use of claim 22, wherein the FcRn antagonist is administered subcutaneously once weekly until the subject demonstrates evidence of clinical improvement (ECI).

24. The use of claim 22 or 23, wherein the FcRn antagonist is administered subcutaneously once weekly until the subject demonstrates ECI during two consecutive measurements.

25. The use of claim 23 or 24, wherein ECI is a clinical improvement in one or more of Inflammatory Rasch-built Overall Disability Scale (I-RODS), Mean Grip Strength, or Inflammatory Neuropathy Cause and Treatment (INCAT) score.

26. The use of claim 22, wherein the FcRn antagonist is administered subcutaneously once weekly until the subject demonstrates evidence of clinically meaningful deterioration (ECMD).

27. The use of claim 26, wherein the ECMD is:

a) one or more of an increase in adjusted INCAT (aINCAT) score of ≥1 points, a decrease in I-RODS of ≥4 points (using the centile metric), or a decrease in mean grip strength of ≥8 kPa in one hand using a handheld vigorimeter;

b) an increase in aINCAT score of ≥1 points;

c) an increase in aINCAT score of ≥1 points during two consecutive measurements;

d) an increase in aINCAT score of ≥1 points twice in two weeks; or

e) an increase in aINCAT score of ≥2 points.

28. The use of any one of claims 1-27, wherein the subject:

a) has been diagnosed with CIDP according to the EFNS/PNS 2010 diagnostic criteria;

b) has typical CIDP;

c) has a CIDP variant;

d) has distal CIDP;

e) has multifocal CIDP;

f) has focal CIDP;

g) has motor CIDP;

h) has sensory CIDP;

i) has progressive CIDP; or

j) has relapsing CIDP.

29. The use of any one of claims 1-28, wherein the subject:

a) has an aINCAT score, prior to administration of the FcRn antagonist, of 2 or more; or

b) has an aINCAT score, prior to administration of the FcRn antagonist, of 5 or more.

30. The use of any one of claims 1-29, wherein the subject has an I-RODS centile metric score, prior to administration of the FcRn antagonist, of 10 or more, optionally 20 or more, optionally 30 or more, optionally 40 or more, optionally 50 or more.

31. The use of any one of claims 1-30, wherein the subject is newly-diagnosed with CIDP and/or is treatment-naïve.

32. The use of any one of claims 1-30, wherein the subject has previously received treatment for CIDP.

33. The use of claim 32, wherein the subject has previously received steroid treatment and/or has previously received IVIg or SCIg treatment.

34. The use of any one of claims 1-33, wherein the subject has active disease despite treatment with corticosteroids or immunoglobulins.

35. The use of any one of claims 1-34, wherein the subject:

a) is a CIDP patient characterized by the presence of anti-NF155 antibodies;
b) is a CIDP patient characterized by the presence of anti-CNTN1 antibodies;
c) is a CIDP patient characterized by the presence of anti-Caspr1 antibodies;
d) is a CIDP patient characterized by the presence of anti-NF140/186 antibodies;
e) is a CIDP patient characterized by the presence of anti-GM-1 antibodies; and/or
f) is a CIDP patient characterized by the presence of anti-LM-1 antibodies.

36. The use of any one of claims 1-35, wherein control of disease activity, partial remission, or complete remission is achieved following administration of the FcRn antagonist.

37. The use of claim 36, wherein the control of disease activity, partial remission or complete remission is achieved within 12 weeks or less, optionally within 8 weeks or less, optionally within 6 weeks or less, optionally within 4 weeks or less, optionally within 3 weeks or less, of first receiving the FcRn antagonist.

38. The use of claim 36 or 37, wherein the control of disease activity, partial remission or complete remission is sustained in the subject for at least 2 months or for at least 6 months.

39. The use of claim 36, wherein, once the control of disease activity, partial remission or complete remission is achieved, continued administration of the FcRn antagonist prevents deterioration of symptoms.

40. The use of claim 39, wherein the absence of a deterioration in symptoms is measured using any one of the following: the INCAT score; the Medical Research Council (MRC) sum score; the I-RODS; the Mean Grip Strength test; or the Timed Up and Go (TUG) test.

41. The use of any one of claims 1-40, wherein the treatment prevents or delays relapse.

42. The use of claim 41, wherein the treatment prevents or delays relapse:

a) for at least 4 weeks, at least 6 weeks, at least 8 weeks, at least 10 weeks, at least 12 weeks, at least 16 weeks, or at least 20 weeks;

b) for the duration of treatment with the FcRn antagonist;

c) following cessation of treatment with the FcRn antagonist; or

d) following cessation of the treatment for at least 4 weeks, at least 6 weeks, at least 8 weeks, at least 10 weeks, at least 12 weeks, at least 16 weeks, or at least 20 weeks.

43. The use of any one of claims 1-42, wherein the treatment reduces the risk of relapse by at least 60%.

44. The use of any one of claims 1-43, wherein the subject shows an improvement in symptoms following administration of the FcRn antagonist, as measured using one or more of:

a) the INCAT score;

b) the aINCAT score;

c) the MRC sum score;

d) the I-RODS;

e) the Mean Grip Strength test; and/or

f) the TUG test.

45. The use of claim 44, wherein the subject shows:

a) a decrease in aINCAT score of 1 or more points or of 2 or more points;

b) an increase in I-RODS centile metric score of 4 or more points; and/or

c) an increase in mean grip strength of ≥8 kPa.

46. The use of claim 44 or 45, wherein an improvement in symptoms is achieved within 12 weeks or less, optionally within 8 weeks or less, optionally within 6 weeks or less, optionally within 4 weeks or less, optionally within 3 weeks or less, of first receiving the FcRn antagonist.

47. The use of any one of claims 1-46, wherein the subject shows a reduction in a serum level of total IgG, an autoantibody, a cytokine/chemokine, or an immune complex following administration of the FcRn antagonist.

48. The use of claim 47, wherein the serum level of total IgG, the autoantibody, the cytokine/chemokine, or the immune complex is measured 4 weeks, 12 weeks, 24 weeks, or 48 weeks following administration of the FcRn antagonist.

49. The use of claim 47 or 48, wherein the subject shows a reduction in serum levels of one or more autoantibodies selected from the group consisting of: anti-GM1, anti-LM-1, anti-NF-155, anti-CNTN1, anti-Caspr-1 antibodies, and anti-myelinated nerve antibodies, following administration of the FcRn antagonist.

50. The use of any one of claims 1-49, wherein the subject:

a) does not show a decrease in the level of serum albumin following administration of the FcRn antagonist;

b) does not show an increase in serum cholesterol following administration of the FcRn antagonist;

c) demonstrates ECI following administration of the FcRn antagonist;

d) demonstrates ECI within 31-51 days of first receiving the FcRn antagonist; and/or

e) demonstrates ECI within 43 days of first receiving the FcRn antagonist.

51. The use of any one of claims 1-50, wherein the treatment further comprises administering to the subject an effective amount of one or more additional therapeutic agents.

52. The use of claim 51, wherein the additional therapeutic agent is a corticosteroid.

53. The use of any one of claims 1-52, wherein the use is used to assist in the diagnosis of CIDP.

54. Use of efgartigimod PH20 in the manufacture of a medicament for treating CIDP in subjects in a patient population, wherein the treatment comprises:

administering 1008 mg/11,200 units of efgartigimod PH20 once weekly, wherein the patient population demonstrates ECI in 66.5% of the subjects in the patient population following administration of the efgartigimod PH20.

55. The use of claim 54, wherein the patient population:

a) achieves the ECI within 31-51 days of first receiving the efgartigimod PH20;

b) achieves the ECI within 43 days of first receiving the efgartigimod PH20; and/or

c) comprises 322 subjects.

56. The use of claim 54 or 55, wherein anti-efgartigimod alfa antibodies are detected in 6% of the patient population following administration of the efgartigimod PH20 for up to 12 weeks.

57. The use of claim 56, wherein neutralizing anti-efgartigimod alfa antibodies are detected in 0.3% of the patient population following administration of the efgartigimod PH20 for up to 12 weeks.

58. The use of claim 54 or 55, wherein the subjects in the patient population remain relapse-free significantly longer than subjects who did not receive efgartigimod PH20.

59. The use of claim 54 or 55, wherein the subjects in the patient population experience a longer time to clinical deterioration, which is statistically significant compared to subjects who did not receive efgartigimod PH20, wherein the clinical deterioration is:

a) an increase of ≥ 1 point in aINCAT score;

b) an increase of ≥ 1 point in aINCAT score during two consecutive measurements; or

c) an increase of ≥ 2 points in aINCAT score.

60. The use of claim 59, wherein the longer time to clinical deterioration is demonstrated by a hazard ratio of 0.394.

61. The use of claim 54 or 55, wherein the subjects in the patient population treated with efgartigimod PH20 demonstrate a 61% risk reduction for deterioration in patients with CIDP.

62. Use of efgartigimod PH20 in the manufacture of a medicament for treating CIDP in a subject, wherein the treatment comprises:

administering 1008 mg/11,200 units of efgartigimod PH20 once weekly, wherein the subject demonstrates ECI following administration of the efgartigimod PH20.

63. The use of claim 62, wherein the subject:

a) achieves the ECI within 31-51 days of first receiving the efgartigimod PH20;

b) achieves the ECI within 43 days of first receiving the efgartigimod PH20;

c) remains relapse-free for at least 4 weeks, at least 6 weeks, at least 8 weeks, at least 10 weeks, at least 12 weeks, at least 16 weeks, or at least 20 weeks following administration of the efgartigimod PH20; and/or

d) demonstrates a reduced risk of showing ECMD.

64. The use of claim 63, wherein the ECMD is:

a) an increase in aINCAT score of ≥1 points;

b) an increase in aINCAT score of ≥1 points during two consecutive measurements;

c) an increase in aINCAT score of ≥1 points twice in two weeks; or

d) an increase in aINCAT score of ≥2 points.

65. Use of efgartigimod PH20 in the manufacture of a medicament for treating CIDP in subjects in a patient population, wherein the treatment comprises:

administering 1008 mg/11,200 units of efgartigimod PH20 once weekly, wherein mean percentage reduction from baseline in total IgG levels ranged between 66.8% and 71.6% in the patient population following administration of the efgartigimod PH20.

66. The use of claim 65, wherein the mean percentage reduction from baseline in total IgG levels:

a) ranged between 66.8% and 71.6% in the patient population following 4 weekly administrations of the efgartigimod PH20; and/or

b) was sustained from week 4 throughout the treatment period.

67. The use of claim 65 or 66, wherein the patient population comprises 322 subjects.

68. Use of efgartigimod PH20 in the manufacture of a medicament for treating CIDP in a subject, wherein the treatment comprises:

administering 1008 mg/11,200 units of efgartigimod PH20 once weekly, wherein the subject shows a reduction in serum level of total IgG of between 66.8% and 71.6% following administration of the efgartigimod PH20 compared to a baseline value prior to administration of the efgartigimod PH20.

69. The use of claim 68, wherein the subject shows a reduction in serum level of total IgG of between 66.8% and 71.6% following 4 weekly administrations of the efgartigimod PH20.

70. The use of claim 68 or 69, wherein the reduction in serum level of total IgG is sustained until once weekly administration of the efgartigimod PH20 is discontinued.

71. Use of efgartigimod PH20 in the manufacture of a medicament for treating CIDP in subjects in a patient population, wherein the treatment comprises:

administering 1008 mg/11,200 units of efgartigimod PH20 once weekly, wherein the subjects in the patient population experience a longer time to clinical deterioration, which is statistically significant compared to subjects who did not receive efgartigimod PH20, wherein the clinical deterioration is an increase of ≥ 1 point in aINCAT score.

72. The use of claim 71, wherein the longer time to clinical deterioration is demonstrated by a hazard ratio of 0.394.

73. The use of claim 71 or 72, wherein the patient population comprises 221 subjects.

74. Use of efgartigimod PH20 in the manufacture of a medicament for treating CIDP in a subject in need thereof, the treatment comprising subcutaneously administering to the subject a clinically proven safe and a clinically proven effective amount of efgartigimod PH20 once weekly.

75. The use of claim 74, wherein the clinically proven safe and clinically proven effective amount of efgartigimod PH20:

a) is administered subcutaneously over approximately 30 to 90 seconds; and/or

b) is 1008 mg/11,200 units.

76. The use of claim 74 or 75, wherein the subject demonstrates evidence of improvement following administration of the efgartigimod PH20.

77. The use of claim 76, wherein the subject demonstrates evidence of improvement during two consecutive measurements.

78. The use of claim 76 or 77, wherein the evidence of improvement is selected from aINCAT improvement ≥1 point, I-RODS improvement ≥4 points, or mean grip strength improvement ≥ 8 kPa.

79. The use of any one of claims 74-78, wherein the subject experiences a longer time to clinical deterioration following administration of the efgartigimod PH20 as compared to a subject that does not receive efgartigimod PH20.

80. The use of claim 79, wherein the clinical deterioration is:

a) an increase in aINCAT score of ≥1 points;

b) an increase in aINCAT score of ≥1 points during two consecutive measurements;

c) an increase in aINCAT score of ≥1 points twice in two weeks; or

d) an increase in aINCAT score of ≥2 points.

81. Use of efgartigimod PH20 in the manufacture of a medicament for treating CIDP in subjects in a patient population, the treatment comprising subcutaneously administering a clinically proven safe and a clinically proven effective amount of efgartigimod PH20 once weekly.

82. The use of claim 81, wherein the clinically proven safe and clinically proven effective amount of efgartigimod PH20:

a) is administered subcutaneously over approximately 30 to 90 seconds; and/or

b) is 1008 mg/11,200 units.

83. The use of claim 81 or 82, wherein the patient population demonstrates evidence of improvement during two consecutive measurements in 69% of the subjects in the patient population following administration of the efgartigimod PH20.

84. The use of claim 83, wherein the evidence of improvement is selected from aINCAT improvement ≥1 point, I-RODS improvement ≥4 points, or mean grip strength improvement ≥ 8 kPa.

85. The use of any one of claims 81-84, wherein the subjects in the patient population experience a longer time to clinical deterioration compared to subjects who did not receive efgartigimod PH20, wherein the clinical deterioration is an increase of ≥ 1 point in aINCAT score.

86. The use of claim 85, wherein the clinical deterioration is an increase in aINCAT score of ≥1 points during two consecutive measurements or an increase in aINCAT score of ≥2 points.

87. The use of claim 85 or 86, wherein the longer time to clinical deterioration is demonstrated by a hazard ratio of 0.394.

88. The use of any one of claims 85-87, wherein the patient population comprises 221 subjects.

89. The use of any one of claims 1-88, wherein the subject is an adult human.