Claims

1. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human.
2. The use of claim 1, wherein the antibody specifically binds an epitope of human IL-17F, the epitope comprising one or more residues selected from ARG47, ARG73, LEU75 and ILE86 of SEQ ID NO: 27.
3. The use of claim 1, wherein the antibody specifically binds an epitope of human IL-17A, the epitope comprising one or more residues selected from TYR44, ASN45, ARG46, TRP51, ASN52, HIS54 and ASP84 of SEQ ID NO: 28.
4. The use of claim 1, wherein the antibody binds to the same epitope on human IL-17A, human IL-17F, or IL-17 A/F heterodimer as a neutralising antibody that has a heavy chain comprising the sequence given in SEQ ID NO: 11 and a light chain comprising the sequence given in SEQ ID NO: 10.
5. The use of claim 1, wherein the antibody cross-blocks a neutralising antibody that has a heavy chain comprising the sequence given in SEQ ID NO: 11 and a light chain comprising the sequence given in SEQ ID NO: 10 and binds human IL-l 7A and human IL-l 7F.
6. The use of claim 1, wherein the antibody comprises a light chain variable domain and a heavy chain variable domain, wherein the variable domain of the light chain comprises the sequence given in SEQ ID NO:10.
7. The use of claim 1, wherein the antibody is bimekizumab.
8. The use of any one of claims 1 through 7, wherein the antibody is to be administered as a pharmaceutical composition.
9. The use of any one of claims 1 through 8, wherein the antibody is to be administered subcutaneously.
10. The use of any one of claims 1 through 8, wherein the antibody is to be administered intravenously.
11. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human, wherein the human has a diagnosis of adult-onset psoriatic arthritis.
12. The use of claim 11, wherein the human is at least 18 years of age.

13. The use of claim 11, wherein the human was diagnosed at least six months prior to administration of the antibody.

14. The use of claim 11, wherein the human was diagnosed based on the CASPAR criteria.

15. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human, wherein the human has active arthritis.

16. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human, wherein the human has active psoriatic lesions or a history of psoriatic lesions.

17. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human, wherein the human is an inadequate responder to at least one non-biologic disease-modifying antirheumatic drug ("DMARD") and/or one approved biologic DMARD.

18. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human concurrently treated with methotrexate.

19. Use of a therapeutically effective amount of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human.

20. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human patient, wherein the patient is to be administered with said antibody in an amount that is effective to provide an ACR20 response at week 8, an ACR50 response at week 8, or an ACR70 response at week 8 in a population of patients in need of treatment.

21. The use of claim 20, wherein the response provided is an ACR50 response at week 8, or an ACR70 response at week 8 in a population of patients in need of treatment.

22. The use of claim 20, wherein the response provided is an ACR70 response at week 8 in a population of patients in need of treatment.

23. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human, wherein the human is to be administered with said antibody in an amount that is effective to provide a

PASI50 response at week 8, a PASI75 response at week 8, or a PASI90 response at week 8.

24. The use of claim 23, wherein the response provided is a PASI75 response at week 8, or a PASI90 response at week 8 in a population of patients in need of treatment.

25. The use of claim 23, wherein the response provided is a PASI90 response at week 8 in a population of patients in need of treatment.

26. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for reducing psoriasis in a human.

27. The use of claim 26, wherein the psoriasis is plaque psoriasis.

28. The use of claim 26, wherein the reduction of plaque psoriasis is measured by PASI criteria.

29. The use of claim 26, wherein the antibody is to be administered in an amount that achieves at least a 75% or 90% change in lesion severity score (LSS) compared to pre-treatment at four, six, or eight weeks following administration of the antibody.

30. The use of claim 26, wherein the antibody is to be administered in an amount that achieves at least a 75% or 90% change in Psoriasis Area and Severity Index (PASI) compared to pre-treatment at four, six, or eight weeks following administration of the antibody.

31. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for reducing joint effects in a human.

32. The use of claim 31, wherein the reduction of joint effects is measured by ACR criteria.

33. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for reducing psoriasis and reducing joint effects in a human.

34. The use of claim 33, wherein the psoriasis is plaque psoriasis.

35. The use of claim 34, wherein the reduction of plaque psoriasis is measured by PASI criteria and the reduction of joint effects is measured by ACR criteria.

36. Use of at least one dose of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis in a human.

37. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating rheumatoid arthritis in a human.

38. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating rheumatoid arthritis in a human, wherein the human has a diagnosis of adult-onset rheumatoid arthritis.

39. The use of claim 38, wherein the human is at least 18 years of age.

40. The use of claim 38, wherein the human was diagnosed at least six months prior to administration of the antibody.

41. The use of claim 38, wherein the human was classified based on the ACR/EULAR 2010 criteria.

42. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating rheumatoid arthritis in a human, wherein the human has active arthritis.

43. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating rheumatoid arthritis in a human, wherein the human is an inadequate responder to at least one non-biologic disease-modifying antirheumatic drug ("DMARD") and/or one approved biologic DMARD.

44. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating rheumatoid arthritis in a human concurrently treated with methotrexate.

45. Use of a therapeutically effective amount of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating rheumatoid arthritis in a human.

46. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating rheumatoid arthritis in a human patient, wherein the patient is to be administered with said antibody in an amount that is effective to provide an ACR20 response at week 8, an ACR50 response at week 8, or an ACR70 response at week 8 in a population of patients in need of treatment.

47. The use of claim 46, wherein the response provided is an ACR50 response at week 8, or an ACR70 response at week 8 in a population of patients in need of treatment.

48. The use of claim 46, wherein the response provided is an ACR70 response at week 8 in a population of patients in need of treatment.

49. Use of at least one dose of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating rheumatoid arthritis in a human.

50. The use of any one of claims 11-49, wherein the antibody specifically binds an epitope of human IL-17F, the epitope comprising one or more residues selected from ARG47, ARG73, LEU75 and ILE86 of SEQ ID NO: 27.

51. The use of claim 50, wherein the antibody specifically binds an epitope of human IL-17A, the epitope comprising one or more residues selected from TYR44, ASN45, ARG46, TRP51, ASN52, HIS54 and ASP84 of SEQ ID NO: 28.

52. The use of claim 50, wherein the antibody binds to the same epitope on human IL-17A, human IL-17F, or IL-17 A/F heterodimer as a neutralising antibody that has a heavy chain comprising the sequence given in SEQ ID NO: 11 and a light chain comprising the sequence given in SEQ ID NO: 10.

53. The use of claim 50, wherein the antibody cross-blocks a neutralising antibody that has a heavy chain comprising the sequence given in SEQ ID NO: 11 and a light chain comprising the sequence given in SEQ ID NO: 10 and binds human IL-l 7A and human IL-l 7F.

54. The use of claim 50, wherein the antibody comprises a light chain variable domain and a heavy chain variable domain, wherein the variable domain of the light chain comprises the sequence given in SEQ ID NO:10.

55. The use of any one of claims 11 through 54, wherein the antibody is bimekizumab.

56. The use of any one of claims 11 through 55, wherein the antibody is to be administered as a pharmaceutical composition.

57. The use of any one of claims 11 through 56, wherein the antibody is to be administered subcutaneously.

58. The use of any one of claims 11 through 56, wherein the antibody is to be administered intravenously.

59. The use of any one of claims 1 through 58, wherein a dose comprising between 40 and 640 mg of the antibody is to be administered.

60. The use of claim 59, wherein the dose is 40 mg of the antibody.

61. The use of claim 59, wherein the dose is 80 mg of the antibody.

62. The use of claim 59, wherein the dose is 160 mg of the antibody.

63. The use of claim 59, wherein the dose is 240 mg of the antibody.

64. The use of claim 59, wherein the dose is 320 mg of the antibody.

65. The use of claim 59, wherein the dose is 480 mg of the antibody.

66. The use of claim 59, wherein the dose is 560 mg of the antibody.

67. The use of claim 59, wherein the dose is 640 mg of the antibody.

68. The use of any one of claims 1-58, wherein between 80 and 720 mg of antibody is to be administered.

69. The use of claim 68, wherein between 160 and 640 mg of the antibody is to be administered.

70. The use of any one of claims 59 through 69, wherein multiple doses are to be administered, and the doses are to be administered at a three week interval.

71. The use of any one of claims 59 through 69, wherein multiple doses are to be administered, and the doses are to be administered at a four week interval.

72. The use of any one of claims 1 through 59, wherein the human is to be administered with a loading dose of the neutralizing antibody followed by at least one maintenance dose of the antibody.

73. The use of claim 72, wherein the loading dose is between 80 and 560 mg and the at least one maintenance dose is between 40 and 320 mg.

74. The use of claim 72, wherein the loading dose is 80 mg and the at least one maintenance dose is 40 mg.

75. The use of claim 72, wherein the loading dose is 160 mg and the at least one maintenance dose is 80 mg.

76. The use of claim 72, wherein the loading dose is 240 mg and the at least one maintenance dose is 160 mg.

77. The use of claim 72, wherein the loading dose is 320 mg and the at least one maintenance dose is 160 mg.

78. The use of claim 72, wherein the loading dose is 560 mg and the at least one maintenance dose is 320 mg.

79. The use of claim 72, wherein the loading dose is 480 mg of the antibody.

80. The use of any one of claims 72 through 79, wherein the loading dose is to be administered followed by two maintenance doses.

81. The use of any one of claims 72 through 80, wherein the loading dose is to be administered followed by at least one maintenance dose at a three week interval.

82. The use of any one of claims 72 through 80, wherein the loading dose is to be administered followed by at least one maintenance dose at a four week interval.

83. The use of any one of claims 1-25, 36, or 50-58 in the manufacture of a medicament for treating psoriatic arthritis, wherein (a) 16 mg of antibody is to be administered every four weeks, (b) 160 mg of antibody is to be administered every four weeks, (b) 320 mg loading dose of antibody is to be administered followed by a maintenance dose of 160 mg of antibody every four weeks, or (d) 320 mg of antibody is to be administered every four weeks.

84. The use of any one of claims 26-30 and 33-35 in the manufacture of a medicament for treating psoriasis, wherein (a) 64 mg of antibody is to be administered every four weeks, (b) 160 mg of antibody is to be administered every four weeks or every 8 weeks, (c) 320 mg of antibody is to be administered every four weeks or every eight weeks, (d) 320 mg loading dose of antibody is to be administered followed by a maintenance dose of 160 mg of antibody every four weeks, or (e) 480 mg of antibody is to be administered every four weeks.

85. The use of any one of claims 59 through 84, wherein multiple doses are to be administered over a treatment period of at least 12 weeks.

86. The use of claim 85, wherein multiple doses are to be administered over a treatment period of at least 24 weeks.

87. The use of claim 85, wherein multiple doses are to be administered over a treatment period of at least 48 weeks.

88. The use of claim 85, wherein multiple doses are to be administered over a treatment period of at least 52 weeks.

89. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating psoriatic arthritis, psoriasis, rheumatoid arthritis or ankylosing spondylitis in a human, wherein the human is to be administered with a loading dose of said neutralizing antibody followed by at least one maintenance dose of the antibody.

90. The use of claim 89, wherein the antibody specifically binds an epitope of human IL-17F, the epitope comprising one or more residues selected from ARG47, ARG73, LEU75 and ILE86 of SEQ ID NO: 27.

91. The use of claim 89, wherein the antibody specifically binds an epitope of human IL-17A, the epitope comprising one or more residues selected from TYR44, ASN45, ARG46, TRP51, ASN52, HIS54 and ASP84 of SEQ ID NO: 28.

92. The use of claim 89, wherein the antibody binds to the same epitope on human IL-17A, human IL-17F, or IL-17 A/F heterodimer as a neutralising antibody that has a heavy chain comprising the sequence given in SEQ ID NO: 11 and a light chain comprising the sequence given in SEQ ID NO: 10.

93. The use of claim 89, wherein the antibody cross-blocks a neutralising antibody that has a heavy chain comprising the sequence given in SEQ ID NO: 11 and a light chain comprising the sequence given in SEQ ID NO: 10 and binds human IL-l 7A and human IL-l 7F.

94. The use of claim 89, wherein the antibody comprises a light chain variable domain and a heavy chain variable domain, wherein the variable domain of the light chain comprises the sequence given in SEQ ID NO:10.

95. The use of any one of claims 89 through 94, wherein the antibody is bimekizumab.

96. The use of any one of claims 89 through 95, wherein the antibody is to be administered as a pharmaceutical composition.

97. The use of any one of claims 89 through 96, wherein the antibody is to be administered subcutaneously.

98. The use of any one of claims 89 through 96, wherein the antibody is to be administered intravenously.

99. The use of any one of claims 89 through 98, wherein the loading dose is between 80 and 560 mg and the at least one maintenance dose is between 40 and 320 mg.

100. The use of claim 99, wherein the loading dose is 80 mg and the at least one maintenance dose is 40 mg.

101. The use of claim 99, wherein the loading dose is 160 mg and the at least one maintenance dose is 80 mg.

102. The use of claim 99, wherein the loading dose is 240 mg and the at least one maintenance dose is 160 mg.

103. The use of claim 99, wherein the loading dose is 320 mg and the at least one maintenance dose is 160 mg.

104. The use of claim 99, wherein the loading dose is 560 mg and the at least one maintenance dose is 320 mg.

105. The use of claim 99, wherein the loading dose is 480 mg.

106. The use of any one of claims 99 through 105, wherein the loading dose is to be administered followed by two maintenance doses.

107. The use of any one of claims 99 through 105, wherein the loading dose is to be administered followed by at least one maintenance dose at a three week interval.

108. The use of any one of claims 99 through 105, wherein the loading dose is to be administered followed by at least one maintenance dose at a four week interval.

109. The use of any one of claims 99 through 105, wherein the doses are to be administered over a treatment period of at least 12 weeks.

110. The use of claim 109, wherein the doses are to be administered over a treatment period of at least 24 weeks.

111. The use of claim 109, wherein the doses are to be administered over a treatment period of at least 48 weeks.

112. The use of claim 109, wherein the doses are to be administered over a treatment period of at least 52 weeks.

113. Use of a neutralizing antibody which binds human IL-17A and human IL-17F in the manufacture of a medicament for treating ankylosing spondylitis in a human.

114. The use of claim 113, wherein the antibody specifically binds an epitope of human IL-17F, the epitope comprising one or more residues selected from ARG47, ARG73, LEU75 and ILE86 of SEQ ID NO: 27.

115. The use of claim 113, wherein the antibody specifically binds an epitope of human IL-17A, the epitope comprising one or more residues selected from TYR44, ASN45, ARG46, TRP51, ASN52, HIS54 and ASP84 of SEQ ID NO: 28.

116. The use of claim 113, wherein the antibody binds to the same epitope on human IL-17A, human IL-17F, or IL-17 A/F heterodimer as a neutralising antibody that has a heavy chain

comprising the sequence given in SEQ ID NO: 11 and a light chain comprising the sequence given in SEQ ID NO: 10.

117. The use of claim 113, wherein the antibody cross-blocks a neutralising antibody that has a heavy chain comprising the sequence given in SEQ ID NO: 11 and a light chain comprising the sequence given in SEQ ID NO: 10 and binds human IL-l 7A and human IL-l 7F.

118. The use of claim 113, wherein the antibody comprises a light chain variable domain and a heavy chain variable domain, wherein the variable domain of the light chain comprises the sequence given in SEQ ID NO:10.

119. The use of claim 113, wherein the antibody is bimekizumab.

120. The use of any one of claims 113 through 119, wherein the antibody is to be administered as a pharmaceutical composition.

121. The use of any one of claims 113 through 120, wherein the antibody is to be administered subcutaneously.

122. The use of any one of claims 113 through 120, wherein the antibody is to be administered intravenously.

123. The use of any one of claims 113-122 in the manufacture of a medicament for treating ankylosing spondylitis, wherein (a) 16 mg of antibody is to be administered every four weeks, (b) 160 mg of antibody is to be administered every four weeks, (b) 320 mg loading dose of antibody is to be administered followed by a maintenance dose of 160 mg of antibody every four weeks, or (d) 320 mg of antibody is to be administered every four weeks.

124. The use of any one of claims 1 through 123 wherein the antibody has an affinity of 100pM or less for IL-17A and 100pM or less for IL-17F as determined by surface plasmon resonance.