WHAT IS CLAIMED IS:

1. Use of a non-steroidal anti-inflammatory drug (NSAID) and ketotifen in the manufacture of a medicament for the treatment and prevention of ~~A method of for treating or preventing~~ a beta coronavirus infection or associated disease in a subject in need ~~thereof comprising, administering a non-steroidal anti-inflammatory drug (NSAID) and ketotifen~~.

2. The ~~method~~use of claim 1, wherein the subject is a mammal.

3. The ~~method~~use of claim 2, wherein the subject is a human.

4. The ~~method~~use of any one of claims 1 to 3, wherein the beta coronavirus is SARS-CoV-2.

5. The ~~method~~use of claim 4, wherein the subject is negative for SARS-CoV-2 infection.

6. The ~~method~~use of claim 5, wherein the subject has come into close contact with one or more SARS-CoV-2 positive individuals.

7. The ~~method~~use of claim 6, wherein the subject is a health care worker or first responder.

8. The ~~method~~use of claim 4, wherein the subject has tested positive for SARS-CoV-2.

9. The ~~method~~use of claim 8, wherein the SARS-CoV-2 is alpha, beta, gamma, delta, or lambda variant.

10. The ~~method~~use of any one of claims 1 to 9, wherein the subject is over the age of 65; and/or is immunocompromised, optionally due to therapy with an immunosuppressant; and/or has a chronic health condition.

11. The ~~method~~use of claim 10, wherein the chronic health condition is selected from one or more of obesity; diabetes mellitus; AIDS; a chronic lung condition optionally selected from asthma, COPD, pulmonary fibrosis, cystic fibrosis, pulmonary hypertension, emphysema, and bronchitis; neutrophilia; history of myocardial infarction or stroke; coronary artery disease; congestive heart failure; cardiomyopathy; dementia or Alzheimer's disease; chronic kidney or liver disease; organ transplantation; and autoimmune disease.

12. The ~~method~~use of any one of claims 8 to 11, wherein the subject is asymptomatic for SARS-CoV-2 associated disease.

13. The ~~method~~use of any one of claims 8 to 11, wherein the subject is experiencing one or more symptoms of COVID-19.

14. The ~~method~~use of claim 13, wherein the symptoms include one or more of congestion, cough, fever, loss of taste, loss of smell, muscle pain, joint pain (myalgia), fatigue, sore throat, headache, myocarditis, coagulopathy, renal injury or failure, liver damage or failure, neurological impairment, hypoxia, pneumonia with or without hypoxia, acute respiratory syndrome, or multi-organ failure.

15. The ~~method~~use of claim 14, wherein the subject has symptoms of hypoxia and/or acute respiratory distress syndrome.

16. The ~~method~~use of claim 14, wherein the subject has chronic headache and/or fatigue.

17. The ~~method~~use of claim 14, wherein the subject has long COVID.

18. The ~~method~~use of any one of claims 1 to 17, wherein the NSAID and ketotifen are to be administered in separate compositions.

19. The ~~method~~use of any one of claims 1 to 17, wherein the NSAID and ketotifen are to be administered in ~~the~~a same composition.

20. The ~~method~~use of claim 18 or 19, wherein the composition is to be administered orally, intravenously, solution or powder aerosol for inhalation, intramuscularly, subcutaneously, transdermally, or intranasally.

21. The ~~method~~use of claim 20, wherein the composition is to be administered by a nebulizer.

22. The ~~method~~use of claim 20, wherein the composition is in the form of a tablet, a capsule, a lozenge or chewing gum.

23. The ~~method~~use of any one of claims 20 to 22, wherein the composition consists essentially of the NSAID and ketotifen as active pharmaceutical ingredients.

24. The ~~method~~use of claim 23, wherein the composition consists of the NSAID and ketotifen as active pharmaceutical ingredients.

25. The ~~method~~use of any one of claims 20 to 24, wherein the composition further comprises a pharmaceutical carrier, a pharmaceutical excipient, a sweetening agent, a flavoring agent, a taste masking ingredient, a diluent, alum, a stabilizer, a buffer, a coloring agent, a breath neutralizer, an emulsifying agent, a suspending agent, a nebulizing agent and combinations thereof.

26. The ~~method~~use of any one of claims 1 to 25, wherein the NSAID and ketotifen are to be administered before the onset of COVID symptoms.

27. The ~~method~~use of any one of claims 1 to 25, wherein the NSAID and ketotifen are to be administered after the onset of COVID symptoms.

28. The ~~method~~use of claim 27, wherein the NSAID and ketotifen are to be administered at the first appearance of a symptom of COVID-19, optionally during an early infection phase.

29. The ~~method~~use of any one of claims 1 to 25, wherein the NSAID and ketotifen are to be administered at the time of vaccination for beta coronavirus or SARS-CoV-2.

30. The ~~method~~use of any one of claims 1 to 29, wherein the NSAID and ketotifen are to be administered at least once daily.

31. The ~~method~~use of claim 30, wherein the NSAID and ketotifen are to be administered from about once daily to about three times daily.

32. The ~~method~~use of claim 30 or 31, wherein the NSAID and ketotifen are to be administered for at least one week.

33. The ~~method~~use of claim 32, wherein the NSAID and ketotifen are to be administered for at least two weeks.

34. The ~~method~~use of claim 33, wherein the NSAID and ketotifen are to be administered for at least three weeks, or about one month.

35. The ~~method~~use of any one of claims 1 to 34, wherein the NSAID is selected from indomethacin, naproxen, aspirin, ibuprofen, diclofenac, diflunisal, etodolac, ketoprofen, ketorolac, meloxicam, nabumetone, oxaprozin, piroxicam, salsalate, sulindac, and tolmetin, or combinations thereof.

36. The ~~method~~use of claim 35, wherein the NSAID is indomethacin.

37. The ~~method~~use of claim 36, wherein a daily dose of indomethacin is about 20 mg to about 300 mg, about 40 mg to about 200 mg, or about 75 mg to about 150 mg.

38. The ~~method~~use of claim 35, wherein the NSAID is naproxen.

39. The ~~method~~use of claim 38, wherein a daily dose of naproxen is about 100 mg to about 1600 mg, about 200 mg to about 1400 mg, about 400 mg to about 1200 mg, about 600 mg to about 1000 mg, or about 700 mg to about 900 mg.

40. The ~~method~~use of any one of claims 35 to 39, wherein a daily dose of ketotifen is about 1 mg to about 10 mg.

41. The ~~method~~use of claim 40, wherein a daily dose of ketotifen is about 1 mg to about 6 mg.

42. The ~~method~~use of claim 41, wherein a daily dose of ketotifen is about 2 mg to about 5 mg.

43. The ~~method~~use of claim 42, wherein a daily dose ketotifen about 3 mg to about 4 mg.

44. The ~~method~~use of any one of claims 35 to 43, wherein the NSAID and the ketotifen are combined in a unit dose.

45. The ~~method~~use of claim 44, wherein the NSAID is indomethacin, the amount of indomethacin in the unit dose is about 50 mg, the amount of ketotifen is about 1 mg, and the unit dose is to be administered two or three times per day.

46. The ~~method~~use of any one of claims 1 to 45, wherein the ~~method~~use reduces viral load in the subject, and/or prevents or reduces symptoms of disease.

47. A pharmaceutical composition for use in preventing or treating a beta-coronavirus infection or associated disease, the pharmaceutical composition comprising a non-steroidal anti-inflammatory drug (NSAID) and ketotifen.

48. The~~A~~ pharmaceutical composition of claim 47, wherein the composition is formulated for oral, intravenous, aerosol, intramuscular, subcutaneous, transdermal, or intranasal administration.

49. The pharmaceutical composition of claim 48, wherein the composition is formulated for administration by a nebulizer.

50. The pharmaceutical composition of claim 49, wherein the composition is in the form of a tablet, a capsule, a lozenge or chewing gum.

51. The pharmaceutical composition of any one of claims 47 to 50, wherein the composition consists essentially of the NSAID and ketotifen as active pharmaceutical ingredients.

52. The pharmaceutical composition of claim 51, wherein the composition consists of the NSAID and ketotifen as active pharmaceutical ingredients.

53. The pharmaceutical composition of any one of claims 48 to 52, wherein the composition further comprises a pharmaceutical carrier, a pharmaceutical excipient, a sweetening agent, a flavoring agent, a taste masking ingredient, a diluent, alum, a stabilizer, a buffer, a coloring agent, a breath neutralizer, an emulsifying agent, a suspending agent, a nebulizing agent and combinations thereof.

54. The pharmaceutical composition of any one of claims 48 to 53, wherein the NSAID is selected from indomethacin, naproxen, aspirin, ibuprofen, diclofenac, diflunisal, etodolac, ketoprofen, ketorolac, meloxicam, nabumetone, oxaprozin, piroxicam, salsalate, sulindac, and tolmetin, or combinations thereof.

55. The pharmaceutical composition of claim 54, wherein the NSAID is indomethacin.

56. The pharmaceutical composition 55, wherein a daily dose of indomethacin is about 20 mg to about 300 mg, about 40 mg to about 200 mg, or about 75 mg to about 150 mg.

57. The pharmaceutical composition of claim 54, wherein the NSAID is naproxen.

58. The pharmaceutical composition of claim 57, wherein a daily dose of naproxen is about 100 mg to about 1600 mg, about 200 mg to about 1400 mg, about 400 mg to about 1200 mg, about 600 mg to about 1000 mg, or about 700 mg to about 900 mg.

59. The pharmaceutical composition of any one of claims 54 to 58, wherein a daily dose of ketotifen is about 1 mg to about 10 mg.

60. The pharmaceutical composition of claim 59, wherein a daily dose of ketotifen is about 1 mg to about 6 mg.

61. The pharmaceutical composition of claim 60, wherein a daily dose of ketotifen is about 2 mg to about 5 mg.

62. The pharmaceutical composition of claim 61, wherein a daily dose ketotifen about 3 mg to about 4 mg.