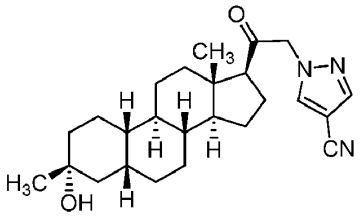
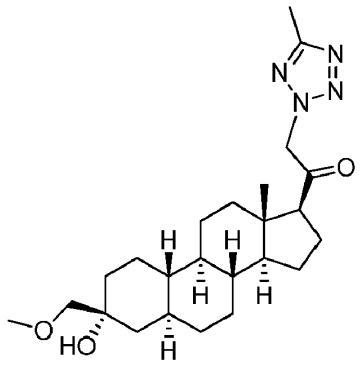
WHAT IS CLAIMED IS:

1. A method of treating a respiratory disease or condition, or a symptom of a respiratory disease or condition in a subject in a subject, comprising administering to said subject a therapeutically effective amount of a $GABA_A$ PAM, or a pharmaceutically acceptable salt or crystalline form thereof, wherein the $GABA_A$ PAM is selected from the group consisting of **Compound 1**



Compound 1

and **Compound 2**



Compound 2.

2. The method of claim 1, wherein the respiratory condition is respiratory distress.

3. The method of claim 1 or claim 2, wherein the respiratory condition is acute respiratory distress syndrome.

4. The method of any one of clams 1-3, wherein the subject exhibits a symptom of the respiratory condition, wherein the symptom is selected from the group consisting of airway hyper-responsiveness, inflammation of lung tissue, lung hypersensitivity, and inflammation-related pulmonary pain.

5. The method of claim 4, wherein the inflammation of lung tissue is bronchitis or bronchiectasis.

6. The method of claim 5, wherein the inflammation of lung tissue is pneumonia.

7. The method of claim 6, wherein the pneumonia is ventilator-associated pneumonia or hospital-acquired pneumonia.

8. The method of any one of claims 1-7, wherein the subject is undergoing or has undergone treatment for an infection, fibrosis, a fibrotic episode, chronic obstructive pulmonary disease, Sarcoidosis (or pulmonary sarcoidosis) or asthma/asthma-related inflammation.

9. The method of claim 8, wherein the subject is undergoing or has undergone treatment for an infection.

10. The method of claim 9, wherein the infection is a viral infection.

11. The method of claim 10, wherein the viral infection is an infection of a virus selected from the group consisting of a coronavirus, an influenza virus, human rhinovirus, a human parainfluenza virus, human metapneumovirus and a hantavirus.

12. The method of claim 11, wherein the virus is a coronavirus selected from the group consisting of SARS-CoV, SARS-CoV-2, and MERS-CoV.

13. The method of claim 12, wherein the coronavirus is SARS-CoV-2.

14. The method of any one of claims 1-13, wherein the subject has been or is being treated for a disease selected from SARS, COVID-19 or MERS.

15. The method of claim 14, wherein the disease is COVID-19.

16. The method of claim 9, wherein the infection is a bacterial infection.

17. The method of claim 16, wherein the bacterial infection is selected from the group consisting of *Streptococcus pneumoniae*, *Chlamydia pneumoniae, Staphylococcus aureus, Pseudomonas aeruginosa,* and *Haemophilus influenzae.*

18. The method of claim 17, wherein the *Staphylococcus aureus* is methicillin-resistant *Staphylococcus aureus*.

19. The method of claim 8, wherein the subject is undergoing or has undergone treatment for fibrosis or a fibrotic episode.

20. The method of claim 19, wherein the fibrosis is cystic fibrosis.

21. The method of any one of claims 1-20, further comprising administering to the subject one or more additional agents selected from a group consisting of a bronchial muscle/airway relaxant, an antiviral, oxygen, an antibody, and an antibacterial.

22. The method of claim 21, wherein the one or more additional agents are administered to the subject prior to, after, or concurrently with the $GABA_A$ PAM.

23. The method of any of claims 21-22, wherein the antiviral agent is selected from the group consisting of remdesivir, kaletra, lopinavir, and ritonavir.

24. The method of any of claims 21-23, wherein the antibody is sarilumab or tocilizumab.

25. The method of any of claims 21-24, wherein the antibacterial is azithromycin.

26. The method of any one of claims 1-25, wherein the subject is being treated, or has been treated with an oxygen mask.

27. The method of any one of claims 1-26, wherein the subject is being treated, or has been treated with mechanical ventilation.

28. The method of claim 27, wherein the $GABA_A$ PAM is administered to a subject until the subject is no longer being treated with mechanical ventilation.

29. The method of any one of claims 1-28, wherein the subject has been or is being treated for a disease or condition selected from the group consisting of cystic fibrosis, asthma, smoke induced COPD, chronic bronchitis, rhinosinusitis, constipation, pancreatitis, pancreatic insufficiency, male infertility caused by congenital bilateral absence of the vas deferens (CBAVD), mild pulmonary disease, pulmonary sarcoidosis, idiopathic pancreatitis, allergic

bronchopulmonary aspergillosis (ABPA), liver disease, hereditary emphysema, hereditary hemochromatosis, coagulation-fibrinolysis deficiencies, such as protein C deficiency, Type 1 hereditary angioedema, lipid processing deficiencies, such as familial hypercholesterolemia, Type 1 chylomicronemia, abetalipoproteinemia, lysosomal storage diseases, such as I-cell disease/pseudo-Hurler, mucopolysaccharidoses, Sandhof/Tay-Sachs, Crigler-Najjar type II, polyendocrinopathy/hyperinsulemia, Diabetes mellitus, Laron dwarfism, myleoperoxidase deficiency, primary hypoparathyroidism, melanoma, glycanosis CDG type 1, congenital hyperthyroidism, osteogenesis imperfecta, hereditary hypofibrinogenemia, ACT deficiency, Diabetes insipidus (DI), neurophyseal DI, neprogenic DI, Charcot-Marie Tooth syndrome, Perlizaeus- Merzbacher disease, neurodegenerative diseases such as Alzheimer's disease, Parkinson's disease, amyotrophic lateral sclerosis, progressive supranuclear palsy, Pick's disease, several polyglutamine neurological disorders such as Huntington, spinocerebellar ataxia type I, spinal and bulbar muscular atrophy, dentatorubal pallidoluysian, and myotonic dystrophy, as well as spongiform encephalopathies, such as hereditary Creutzfeldt-Jakob disease (due to prion protein processing defect), Fabry disease, Straussler-Scheinker syndrome, COPD, dry-eye disease, and Sjogren's disease.

30. The method of any one of claims 1-29, wherein the $GABA_A$ PAM is administered via inhalation, intravenously, intramuscularly, subcutaneously, or orally.

31. The method of claim 30, wherein the $GABA_A$ PAM is administered orally.

32. The method of claim 30, wherein the $GABA_A$ PAM is administered intravenously.

33. The method of claim 32, wherein the $GABA_A$ PAM is administered by continuous intravenous infusion

34. The method of claim 33, wherein the $GABA_A$ PAM is administered at a rate of 90-160 μg/kg per hour for a therapeutically effective duration.

35. The method of claim 34, wherein the $GABA_A$ PAM is administered at a rate of 90-150 μg/kg/hour.

36. The method of claim 35, wherein the $GABA_A$ PAM is administered at a rate of 130-150 µg/kg/hour.

37. The method of claim 36, wherein the $GABA_A$ PAM is administered at a rate of 140-150 µg/kg/hour.

38. The method of claim 34, wherein the $GABA_A$ PAM is administered at a rate of about 150 µg/kg/hour.

39. The method of claim 34, wherein the $GABA_A$ PAM is administered at a rate of about 140 µg/kg/hour.

40. The method of claim 34, wherein the $GABA_A$ PAM is administered at a rate of about 120 µg/kg/hour.

41. The method of claim 34, wherein the $GABA_A$ PAM is administered at a rate of about 100 µg/kg/hour.

42. The method of claim 33, wherein the $GABA_A$ PAM is administered at a rate of 10-100 µg/kg/hour, for a therapeutically effective duration.

43. The method of claim 42, wherein the $GABA_A$ PAM is administered at a rate of 30-80 µg/kg/hour.

44. The method of claim 43, wherein the $GABA_A$ PAM is administered at a rate of 35-70 µg/kg/hour.

45. The method of claim 42, wherein the $GABA_A$ PAM is administered at a rate of 70 µg/kg/hour.

46. The method of claim 42, wherein the $GABA_A$ PAM is administered at a rate of 35 µg/kg/hour.

47. The method of claim 42, wherein the $GABA_A$ PAM is administered at a rate of 60-80 µg/kg/hour.

48. The method of any one of claims 34-47, wherein the therapeutically effective duration is at least 24 hours.

49. The method of claim 48, wherein the therapeutically effective duration is at least 48 hours.

50. The method of claim 49, wherein the therapeutically effective duration is at least 60 hours.

51. The method of claim 50, wherein the therapeutically effective duration is at least 3 days.

52. The method of claim 51, wherein the therapeutically effective duration is at least 4 days.

53. The method of claim 52, wherein the therapeutically effective duration is at least 5 days.

54. The method of claim 53, wherein the therapeutically effective duration is at least 6 days.

55. The method of claim 34, wherein the $GABA_A$ PAM is administered at a rate of 150 μg/kg/h for about 140 hours.

56. The method of claim 58, further comprising the steps of:

a. decreasing the administration rate to about 120 μg/kg/h for one hour;

b. further decreasing the administration rate to about 90 μg/kg/h for one hour;

c. further decreasing the administration rate to about 60 μg/kg/h for one hour; and

d. further decreasing the administration rate to about 30 μg/kg/h for one hour.

57. The method of claim 42, wherein the $GABA_A$ PAM is administered at a rate of 70 μg/kg/h for about 58 hours.

58. The method of claim 57, further comprising decreasing the rate of administration of the $GABA_A$ PAM to about 35 μg/kg/h for about 2 hours.

59. The method of any one of claims 1-58, wherein treating a respiratory disease or condition in a subject comprises ameliorating one or more symptoms of the respiratory disease or condition.

60. The method of claim 59, comprising ameliorating one or more symptoms of acute respiratory distress syndrome in a subject.

61. The method of claim 59, comprising ameliorating one or more symptoms of COVID-19 in a subject.

62. The method of any of claims 59-61, wherein the symptom is selected from the group consisting of airway hyper-responsiveness, inflammation of lung tissue, lung hypersensitivity, and inflammation-related pulmonary pain.

63. The method of any one of claims 1-62, wherein the $GABA_A$ PAM is administered to the subject in an amount sufficient to increase oxygen saturation in the blood of the subject.

64. The method of claim 63, wherein the oxygen saturation in the blood of the subject is measured using pulse oximetry.

65. The method of any one of claims 1-64, wherein the subject is also experiencing a cytokine storm (also known as cytokine release syndrome).

66. The method of claim 65, wherein the patient has an inflammation resulting from cytokine release syndrome.

67. The method of claim 66, wherein the inflammation is a lung inflammation.

68. The method of any one of claims 65-67, wherein the patient has acute respiratory distress syndrome.

69. The method of any one of claims 1-68, wherein the patient is intubated.

70. The method of any one of claims 1-69, wherein the patient is under 70 years of age.

71. The method of any one of claims 1-69, wherein the patient is 70 years of age or older.

72. The method of any one of claims 1-71, wherein the $GABA_A$ PAM is Compound 1, wherein the Compound 1 is a free base.

73. The method of any one of claims 1-71, wherein the $GABA_A$ PAM is a pharmaceutically acceptable salt of Compound 1.

74. The method of any one of claims 1-71, wherein the $GABA_A$ PAM is Compound 2, wherein the Compound 2 is a free base.

75. The method of any one of claims 1-71, wherein the $GABA_A$ PAM is a pharmaceutically acceptable salt of Compound 2.