CLAIMS:

1. A composition comprising:

(a) a vector comprising: (i) a plasmid that encodes at least one coronavirus antigen protein, and (ii) the at least one coronavirus antigen protein encoded by the plasmid;

(b) a vector comprising α-galactosylceramide (α-GalCer); and

(c) at least one pharmaceutically acceptable carrier,

wherein at least one of vector (a) and vector (b) is an intact, bacterially-derived minicell or killed bacterial cell.

2. The composition of claim 1, wherein vector (a) is a first intact, bacterially derived minicell or killed bacterial cell, and vector (b) is a second intact, bacterially derived minicell or killed bacterial cell.

3. The composition of claim 1, wherein vector (a) and vector (b) are the same intact, bacterially derived minicell or killed bacterial cell, comprising the α-GalCer and the plasmid that encodes the at least one coronavirus antigen protein, and the at least one coronavirus antigen protein encoded by the plasmid.

4. The composition of claim 1, wherein one of vector (a) and vector (b) is not an intact, bacterially derived minicell or killed bacterial cell and the other of vector (a) and vector (b) is an intact, bacterially derived minicell or killed bacterial cell.

5. The composition of any one of claims 1-4, wherein the coronavirus antigen comprises or characterizes a virus selected from the group consisting of an Alphacoronavirus; a Colacovirus such as Bat coronavirus CDPHE15; a Decacovirus such as Bat coronavirus HKU10 or Rhinolophus ferrumequinum alphacoronavirus HuB-2013; a Duvinacovirus such as Human coronavirus 229E; a Luchacovirus such as Lucheng Rn rat coronavirus; a Minacovirus such as a Ferret coronavirus or Mink coronavirus 1; a Minunacovirus such as Miniopterus bat coronavirus 1 or Miniopterus bat coronavirus HKU8; a Myotacovirus such as Myotis ricketti alphacoronavirus Sax-2011; a nyctacovirus such as Nyctalus velutinus alphacoronavirus SC-

2013; a Pedacovirus such as Porcine epidemic diarrhea virus or Scotophilus bat coronavirus 512; a Rhinacovirus such as Rhinolophus bat coronavirus HKU2; a Setracovirus such as Human coronavirus NL63 or NL63-related bat coronavirus strain BtKYNL63-9b; a Tegacovirus such as Alphacoronavirus 1; a Betacoronavirus; a Embecovirus such as Betacoronavirus 1, Human coronavirus OC43, China Rattus coronavirus HKU24, Human coronavirus HKU1 or Murine coronavirus; a Hibecovirus such as Bat Hp-betacoronavirus Zhejiang2013; a Merbecovirus such as Hedgehog coronavirus 1, Middle East respiratory syndrome-related coronavirus (MERS-CoV), Pipistrellus bat coronavirus HKU5 or Tylonycteris bat coronavirus HKU4; a Nobecovirus such as Rousettus bat coronavirus GCCDC1 or Rousettus bat coronavirus HKU9, a Sarbecovirus such as a Severe acute respiratory syndrome-related coronavirus, Severe acute respiratory syndrome coronavirus (SARS-CoV) or Severe acute respiratory syndrome coronavirus 2 (SARS-CoV-2, COVID-19); a Deltacoronavirus; an Andecovirus such as Wigeon coronavirus HKU20; a Buldecovirus such as Bulbul coronavirus HKU11, Porcine coronavirus HKU15, Munia coronavirus HKU13 or White-eye coronavirus HKU16; a Herdecovirus such as Night heron coronavirus HKU19; a Moordecovirus such as Common moorhen coronavirus HKU21; a Gammacoronavirus; a Cegacovirus such as Beluga whale coronavirus SW1; and an Igacovirus such as Avian coronavirus.

6. The composition of any one of claims 1-5, wherein the coronavirus antigen protein is encoded by a polynucleotide comprising a sequence of SARS-CoV-2.

7. The composition of any one of claims 1-5, wherein the coronavirus antigen protein comprises human coronavirus 229E, human coronavirus OC43, SARS-CoV, HCoV NL63, HKU1, MERS-CoV, or SARS-CoV-2.

8. The composition of claim 7, wherein the coronavirus antigen protein comprises SARS-CoV-2.

9. The composition of claim 8, wherein the plasmid encodes at least one of spike (S) protein, nucleocapsid (N) protein, membrane (M) protein, and envelope (E) protein of SARS-CoV-2.

10. The composition of claim 9, wherein the plasmid encodes the spike (S) protein, nucleocapsid (N) protein, membrane (M) protein, and the envelope (E) protein.

11. The composition of any one of claims 1-10, wherein the α-GalCer is a synthetic α-GalCer analog selected from the group consisting of 6′-deoxy-6′-acetamide α-GalCer (PBS57), napthylurea α-GalCer (NU-α-GC), NC-α-GalCer, 4ClPhC-α-GalCer, PyrC-α-GalCer, α-carba-GalCer, carba-α-D-galactose α-GalCer analog (RCAI-56), 1-deoxy-neo-inositol α-GalCer analog (RCAI-59), 1-O-methylated α-GalCer analog (RCAI-92), and HS44 aminocyclitol ceramide.

12. The composition of any one of claims 1-11, wherein the composition is formulated for oral administration, injection, nasal administration, pulmonary administration, or topical administration.

13. Use of the composition according to any one of claims 1-12 in the manufacture of a medicament for treating and/or vaccinating against a coronavirus infection, wherein the composition is to be administered to a subject in need.

14. The use according to claim 13, wherein the subject:

(a) is suffering from or at risk of developing lymphopenia; and/or

(b) is deemed at risk for severe illness and/or serious complications from the viral infection; and/or

(c) is about age 50 or older, about age 55 or older, about age 60 or older, or about age 65 or older; and/or

(d) suffers from one or more pre-existing conditions selected from the group consisting of diabetes, asthma, a respiratory disorder, high blood pressure, and heart disease; and/or

(e) is immunocompromised; and/or

(f) is immunocompromised due to AIDS, cancer, a cancer treatment, hepatitis, an auto-immune disease, steroid receiving, immunosenescence, or any combination thereof.

15. The use according to any one of claims 13-14, wherein the composition to be administered:

(a) increases the chance of survival following exposure to a coronavirus; and/or

(b) reduces the risk of transmission of coronavirus.

16. The use according to claim 15, wherein:

(a) the chance of survival is increased by about 10%, about 20%, about 30%, about 40%, about 50%, about 60%, about 70%, about 80%, about 90%, or about 100%, as measured using any clinically recognized technique; and/or

(b) the reduction in risk of transmission is by about 10%, about 20%, about 30%, about 40%, about 50%, about 60%, about 70%, about 80%, about 90%, or about 100%, as measured using any clinically recognized technique.

17. The use according to any one of claims 13-16, wherein the composition is to be administered via any pharmaceutically acceptable methods.

18. The use according to any one of claims 13-17, wherein the subject is exposed to or is anticipated to be exposed to an individual who is contagious for a coronavirus.

19. The use according to claim 18, wherein the individual who is contagious for a coronavirus has one or more symptoms selected from the group consisting of fever, cough, shortness of breath, diarrhea, sneezing, runny nose, and sore throat.

20. The use according to any one of claims 13-19, wherein the subject is a healthcare worker, aged 60 years or older, frequent traveler, military personnel, caregiver, or a subject with a preexisting condition that results in increased risk of mortality with infection.

21. The use according to any one of claims 13-20, wherein the subject is to be further administered with one or more antiviral drugs.

22. The use according to claim 21, wherein the one or more antiviral drugs are selected from the group consisting of chloroquine, darunavir, galidesivir, interferon beta, lopinavir, ritonavir, remdesivir, and triazavirin.

23. The use according to any one of claims 13-22, wherein the α-GalCer induces a Th1 cytokine response in the subject, and optionally wherein the cytokine comprises IFNγ.

24. The use according to any one of claims 13-23, wherein:

(a) a first minicell comprising the α-GalCer and a second minicell comprising the plasmid encoding the at least one coronavirus antigen protein are to be administered to the subject simultaneously; and/or

(b) a first minicell comprising the α-GalCer and a second minicell comprising the plasmid encoding the at least one coronavirus antigen protein are to be administered to the subject sequentially; and/or

(c) a first minicell comprising the α-GalCer and second minicells comprising the plasmid encoding the at least one coronavirus antigen protein are to be administered to the subject repeatedly; and/or

(d) a first minicell comprising the α-GalCer and second minicells comprising the plasmid encoding the at least one coronavirus antigen protein are to be administered to the subject at least once a week, twice a week, three times per week, or four times per week.

25. Use of a composition according to any one of claims 1-12 in the manufacture of a medicament for treating and/or vaccinating against a coronavirus infection.