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(54) Title: COMPOSITION AND METHODS FOR THE PREVENTION AND TREATMENT OF COVID-19 AND RESPIRATORY ILLNESSES

(57) Abstract: A composition of matter, and use of the composition, for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are selected from the group comprising of hydroxychloroquine, zinc, vitamin C and povidone-iodine characterized in that the two or more substances are in a form selected from the group comprising of liquid, powder, and aerosol.

COMPOSITION AND METHODS FOR THE PREVENTION AND TREATMENT OF COVID-19 AND RESPIRATORY ILLNESSES

TECHNICAL FIELD

[0001] The present disclosure relates to the field of general medicine, respiratory medicine, intensive care, and infectious diseases. In particular, the present disclosure relates to a composition of matter and to a method for the prevention of coronavirus disease 2019 (COVID-19) and respiratory tract infections arising from pathogens including viruses, bacteria, fungi, and parasites.

BACKGROUND

[0002] The novel coronavirus SARS-CoV-2 was recognised to cause the coronavirus disease 2019 (COVID-19). SARS-CoV-2 and COVID-19 have recently spread rapidly across the globe. Tens of millions of people have been diagnosed with COVID-19, resulting in a staggering number of deaths. Existing data suggests that COVID-19 has a mortality rate of approximately 1–2%, with a higher mortality rate among individuals with pre-existing comorbidities and in healthcare systems with suboptimal access to ventilatory support. Accumulating data suggests that the incubation period of SARS-CoV-2 is approximately 5–7 days, and a significant proportion of patients may remain asymptomatic or mildly symptomatic during the illness. Although COVID-19 causes a mild and mostly self-limiting illness, severe pneumonia has been reported in about 5% of patients during the inflammation phase of the disease, thus leading to patients requiring supplemental oxygen and endotracheal ventilation. Data from post-mortem studies indicate extensive alveolar damage, fibrosis, and consolidation in lung tissues of COVID-19 patients.

[0003] Existing containment measures against SARS-CoV-2 centre around mask wearing, hand hygiene and physical distancing, which require a collective effort of an entire community to remain effective. Although the availability of an effective vaccine is highly anticipated, uncertainties surrounding their efficacy, safety, and accessibility limit their appeal to those who are presently at risk of COVID-19. It is also unclear how soon host immunity could be triggered following vaccination and whether vaccination results in a lifelong immunity. For individuals

living in an environment that confers a high-risk of developing COVID-19 (e.g., healthcare workers, quarantined individuals, household contacts, individuals living in a closed environment with an active cluster), there is a need for a preventive solution that could lower the incidence of COVID-19. This solution should be simple and safe to administer, and efficacious in interrupting replication of SARS-CoV-2.

[0004] Furthermore, there is presently no proven pharmacologic drug that has been shown to reduce the risk of COVID-19 transmission. Although studies have tested the efficacy of different drugs against COVID-19, none has been conclusively shown to reduce the spread of the disease. Hydroxychloroquine, an antiparasitic drug, has been shown to reduce affinity of SARS-CoV-2 to the angiotensin-converting-enzyme 2 receptors in vitro. Hydroxychloroquine inhibits SARS-CoV-2 infection of Vero cells by elevating endosomal pH. The antiseptic povidone-iodine has rapid virucidal effects against SARS-CoV-2, while zinc inhibits replication of at least six coronaviruses (including SARS-CoV and others that cause common cold). Despite a lack in preclinical evidence against coronaviruses, vitamin C is a widely used remedy during the COVID-19 pandemic.

[0005] A prior study on the efficacy of administration of hydroxychloroquine, povidone-iodine, zinc/vitamin C and vitamin C carried out in high-risk individuals living in a closed quarantine setting showed positive results. In this study, each participant received only one treatment. Hydroxychloroquine, zinc/vitamin C and vitamin C were administered through the oral route while povidone-iodine was administered by throat spray to the oropharynx. Response to these different treatments was varied with positive effects observed, the positive effects varying according to the type of treatment and compliance to study medication. The frequency of SARS-CoV-2 infection was significantly lower in participants receiving hydroxychloroquine, povidone-iodine and zinc/vitamin combination as compared to participants receiving only vitamin C. In addition, participants who received prophylaxis intervention reported fewer respiratory symptoms and participants with SARS-CoV-2 infection had fewer symptoms compared with those who received only vitamin C. This study, however, did not evaluate whether the efficacy of these medications would improve when used in combination and when administered directly to the oropharyngeal and respiratory routes.

[0006] Finally, previous studies mostly administered pharmaceutical agents through the oral route; no studies have examined the feasibility of administering pharmaceutical agents through the oropharyngeal and tracheobronchial routes. AU 2020/100641 discloses oral administration

of vitamin C and zinc in addition to azithromycin and aspirin. AU 2020/100400 discloses the combination of lifestyle changes with oral administration of vitamin supplements and prescription medicines to reduce the risk of viral infections. The vitamin supplements administered include nicotinamide, resveratrol, vitamin D3, while the prescription medicine administered was doxycycline and metformin. Finally, US 2020/179367 discloses the administration of isomyosmine for the treatment of coronavirus infection. A disadvantage of administration through the oral route is the first-pass effect and the delayed onset of action while the key advantage of administering drugs through the oropharyngeal and tracheobronchial routes lies in its potentially rapid onset of action at the main mode of entry for respiratory pathogens.

SUMMARY

[0007] Briefly stated, the present disclosure provides a composition of matter and a method for preventing respiratory tract infections arising from pathogens including viruses, bacteria, fungi, and parasites. This includes the SARS-CoV-2 virus and COVID-19, the disease caused by the SARS-CoV-2 virus. An aspect of an embodiment of the disclosure relates to the administration of a combination of two or more pharmaceutical drugs or active ingredients by inhalation for a multipronged and multitargeted approach against the spread of COVID-19 in the respiratory system. The two or more drugs or active ingredients may be administered through the oropharyngeal and tracheobronchial routes. The two or more drugs or active ingredients may be provided in liquid or powder forms. Administration through the nasal, oropharyngeal and tracheobronchial routes can be through direct contact, aerosolization or nebulisation methods to the nasal, nasopharynx, oropharynx, and tracheobronchial spaces.

[0008] There is provided according to some embodiments of the disclosure, a composition of matter for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are selected from the group comprising of hydroxychloroquine, zinc, vitamin C and povidone-iodine characterized in that the two or more substances are in a form selected from the group comprising of liquid, powder, and aerosol. Optionally, the two or more substances may be delivered through the nasal tract, oropharyngeal tract, or the respiratory tract.

[0009] According to some embodiments, the two or more substances selected may be hydroxychloroquine and povidone-iodine. Optionally, the therapeutic amount per day of hydroxychloroquine may be selected from the group comprising of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, and 600–800 mg; and the therapeutic amount per day of povidone-iodine may be selected from the group comprising of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, and 500–600 μg.

[0010] According to some embodiments, the two or more substances selected may be hydroxychloroquine and zinc. Optionally, the therapeutic amount per day of hydroxychloroquine may be selected from the group comprising of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, and 600–800 mg; and the therapeutic amount per day of zinc may be selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg.

[0011] According to some embodiments, the two or more substances selected may be hydroxychloroquine and vitamin C. Optionally, the therapeutic amount per day of hydroxychloroquine may be selected from the group comprising of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, and 600–800 mg; and the therapeutic amount per day of vitamin C may be selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg.

[0012] According to some embodiments, the two or more substances selected may be hydroxychloroquine, vitamin C, and zinc. Optionally, the therapeutic amount per day of hydroxychloroquine may be selected from the group comprising of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, and 600–800 mg; the therapeutic amount per day of vitamin C may be selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg; and the therapeutic amount per day of zinc may be selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg.

[0013] According to some embodiments, the two or more substances selected may be povidone-iodine and vitamin C. Optionally, the therapeutic amount per day of povidone-iodine

may be selected from the group comprising of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, and 500–600 μg; and the therapeutic amount per day of vitamin C may be selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg.

[0014] According to some embodiments, the two or more substances selected may be povidone-iodine and zinc. Optionally, the therapeutic amount per day of povidone-iodine may be selected from the group comprising of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, and 500–600 μg; and the therapeutic amount per day of zinc may be selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg.

[0015] According to some embodiments, the two or more substances selected may be povidone-iodine, zinc, and vitamin C. Optionally, the therapeutic amount per day of povidone-iodine may be selected from the group comprising of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, and 500–600 μg; the therapeutic amount of zinc may be selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg; and the therapeutic amount per day of vitamin C may be selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg.

[0016] According to some embodiments, the two or more substances selected may be zinc and vitamin C. Optionally, the therapeutic amount per day of zinc may be selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg; and the therapeutic amount per day of vitamin C may be selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg.

[0017] According to some embodiments, the therapeutic amount per day of hydroxychloroquine may be 0.00001–800 mg. Optionally, the therapeutic amount per day of hydroxychloroquine may be 1–800 mg.

[0018] According to some embodiments, the therapeutic amount per day of povidone-iodine may be 1–600 μg. Optionally, the therapeutic amount per day of povidone-iodine is 89–356 μg.

[0019] According to some embodiments, the therapeutic amount per day of zinc may be 0.00001–200 mg.

[0020] According to some embodiments, the therapeutic amount per day of vitamin C may be 0.00001–2000 mg. Optionally, the therapeutic amount per day of vitamin C may be 0.00001–1000 mg.

[0021] According to some embodiments, the inhalation delivery system may be selected from the group comprising of nebulisation, aerosolization and oral gargle.

[0022] According to some embodiments, delivery may be carried out based on a dosing regimen.

[0023] There is further provided according to some embodiments of the disclosure, a composition of two or more substances for use in the prevention or treatment of respiratory illness by inhalation, wherein the two or more substances are selected from the group comprising of hydroxychloroquine, zinc, vitamin C and povidone-iodine, characterized in that the two or more substances are in a form selected from the group comprising of liquid, powder, and aerosol.

[0024] There is further provided according to some embodiments of the disclosure, use of a composition comprising two or more substances selected from the group comprising of hydroxychloroquine, zinc, vitamin C and povidone-iodine for preventing or treating respiratory illness, characterized in that the two or more substances are in a form selected from the group comprising of liquid, powder, and aerosol.

DETAILED DESCRIPTION OF THE INVENTION

[0025] In the following detailed description, numerous specific details are set forth in order to provide a thorough understanding of the invention. However, it will be understood by those of ordinary skill in the art that the invention may be practiced without these specific details. In other instances, well-known methods, procedures, components, modules, units and/or circuits have not been described in detail so as not to obscure the invention.

[0026] Although embodiments of the invention are not limited in this regard, the terms “plurality” and “a plurality” as used herein may include, for example, “multiple” or “two or more”. The terms “plurality” or “a plurality” may be used throughout the specification to

describe two or more components, devices, elements, units, parameters, or the like. Unless explicitly stated, the method embodiments described herein are not constrained to a particular order or sequence. Additionally, some of the described method embodiments or elements thereof can occur or be performed simultaneously, at the same point in time, or concurrently. Unless otherwise indicated, use of the conjunction "or" as used herein is to be understood as inclusive (any or all of the stated options).

[0027] For the avoidance of doubt, and unless specified to the contrary, any doses of medication discussed and disclosed in the present disclosure refers to the total dose of each medication to be administered per day. The total dose of each medication to be administered per day may be administered in a single dose a day or may be administered in multiple doses a day.

[0028] The present combination therapy is focused on the administration or delivery of a combination of two or more substances by inhalation. The inhalation may be through the nasal, oropharyngeal and tracheobronchial routes. The substances may be pharmaceutical drugs or active ingredients. Delivery of a therapeutic agent by inhalation to the respiratory system using an inhalation delivery system allows for a direct delivery of medication to where the medication is needed and avoids the first-pass effect with minimum reduction of bioavailability. In addition, the large surface area in the pulmonary region facilitates rapid absorption of the delivered drug from the alveolar region to the blood. As aerosol delivery is non-invasive, a much lower dose of medications is required to achieve the same efficacy compared to oral administration.

[0029] In some embodiments of the present disclosure, the two or more pharmaceutical drugs or active ingredients may be administered through the nasal, oropharyngeal or the tracheobronchial tract. The two or more pharmaceutical drugs or active ingredients may be delivered to the nasal, nasopharynx, oropharynx, and tracheobronchial spaces.

[0030] In some embodiments of the present disclosure, the two or more pharmaceutical drugs or active ingredients may be administered through therapeutic inhalation delivery systems which facilitate the transport and deposition of drugs in the human respiratory tract. The therapeutic inhalation delivery systems may be a pressurised metered-dose inhaler (MDI), a dry powder inhaler, a medical nebuliser, a solution mist inhaler, or an oral/nasal spray. The person skilled in the art would appreciate that the therapeutic inhalation delivery system may differ depending on several factors, including particle characteristics (e.g., particle size, shape,

density, charge and hygroscopicity), airway geometry (due to age, gender, and disease status), and breathing pattern (e.g., frequency, tidal volume, and breath-holding time).

[0031] In some embodiments of the present disclosure, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, povidone-iodine, zinc, or vitamin C. In some embodiments, hydroxychloroquine may be administered within a range of 0.00001–800 mg per day, and preferably within a range of 1–800 mg per day. In some embodiments, povidone-iodine may be administered within a range of 1–600 μg a day. In some embodiments, povidone-iodine may be administered within a range of 1–4 sprays of a commercially available spray, which may amount to a range of 89–356 μg of povidone-iodine. In some embodiments, zinc may be administered within a range of 0.00001–200 mg per day. In some embodiments, vitamin C may be administered within a range of 0.00001–2000 mg per day, and preferably within a range of 0.00001–1000 mg per day. In some embodiments, the composition may be hydroxychloroquine with povidone-iodine, hydroxychloroquine with zinc, hydroxychloroquine with vitamin C, hydroxychloroquine with vitamin C and zinc, povidone-iodine with vitamin C, povidone-iodine with zinc, povidone-iodine with zinc and vitamin C, or zinc with vitamin C. The person skilled in the art would appreciate that the dosage range may vary depending on several factors, including the therapeutic delivery system employed and characteristics of the recipient.

[0032] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and povidone-iodine. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, povidone-iodine may be administered within a range of 1–100 μg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0033] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and povidone-iodine. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, povidone-iodine may be administered within a range of 100–200 μg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0034] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and povidone-iodine. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, povidone-iodine may be administered within a range of 200–300 μg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0035] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and povidone-iodine. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, povidone-iodine may be administered within a range of 300–400 μg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0036] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and povidone-iodine. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, povidone-iodine may be administered within a range of 400–500 μg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0037] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and povidone-iodine. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, povidone-iodine may be administered within a range of 500–600 μg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0038] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0039] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 1–10 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0040] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 10–20 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0041] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 20–40 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0042] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0043] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 60–80 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0044] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 80–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0045] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0046] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 125–150 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0047] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0048] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, zinc may be administered within a range of 175–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0049] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and vitamin C. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0050] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and vitamin C. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0051] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and vitamin C. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0052] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and vitamin C. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0053] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and vitamin C. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0054] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and vitamin C. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0055] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine and vitamin C. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0056] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0057] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0058] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 0.00001–1 mg, and the combination may

be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0059] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0060] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0061] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0062] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0063] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 1–10 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0064] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 1–10 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0065] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 1–10 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0066] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 1–10 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0067] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–

400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 1–10 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0068] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 1–10 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0069] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 20–40 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0070] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 20–40 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0071] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 20–40 mg, and the combination may be

administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0072] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 20–40 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0073] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 20–40 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0074] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 20–40 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0075] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 20–40 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0076] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0077] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0078] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0079] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0080] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–

400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0081] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0082] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0083] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0084] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 60–80 mg, and the combination may be

administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0085] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 60–80 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0086] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 60–80 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0087] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 60–80 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0088] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 60–80 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0089] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 60–80 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0090] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 60–80 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0091] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 80–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0092] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 80–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0093] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–

400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 80–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0094] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 80–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0095] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 80–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0096] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 80–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0097] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 80–100 mg, and the combination may

be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0098] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0099] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0100] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0101] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0102] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0103] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0104] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0105] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 125–150 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0106] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–

400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 125–150 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0107] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 125–150 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0108] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 125–150 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0109] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 125–150 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0110] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 125–150 mg, and the combination may be

administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0111] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 125–150 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0112] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0113] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0114] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0115] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0116] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0117] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0118] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0119] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–

400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 0.00001–1 mg, zinc may be administered within a range of 175–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0120] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 1–100 mg, zinc may be administered within a range of 175–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0121] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 100–200 mg, zinc may be administered within a range of 175–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0122] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 200–400 mg, zinc may be administered within a range of 175–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0123] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 400–600 mg, zinc may be administered within a range of 175–200 mg, and the combination may be

administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0124] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 600–800 mg, zinc may be administered within a range of 175–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0125] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be hydroxychloroquine, vitamin C and zinc. Hydroxychloroquine may be administered within a range of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, 600–800 mg, vitamin C may be administered within a range of 800–1,000 mg, zinc may be administered within a range of 175–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0126] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0127] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0128] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0129] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0130] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0131] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0132] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0133] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0134] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 1–10 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0135] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 10–20 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0136] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 20–40 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0137] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 40–60 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0138] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 60–80 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0139] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 80–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0140] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 100–125 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0141] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 125–150 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0142] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 150–175 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0143] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine and zinc. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 175–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0144] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 0.00001–1 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0145] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 1–10 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0146] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 10–20 mg, vitamin C may be administered within a range of

0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0147] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 20–40 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0148] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 40–60 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0149] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 60–80 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0150] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 80–100 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0151] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 100–125 mg, vitamin C may be administered within a range of

0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0152] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 125–150 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0153] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 150–175 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0154] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 175–200 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0155] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 0.00001–1 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0156] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 1–10 mg, vitamin C may be administered within a range of 1–

100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0157] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 10–20 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0158] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 20–40 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0159] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 40–60 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0160] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 60–80 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0161] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 80–100 mg, vitamin C may be administered within a range of

1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0162] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 100–125 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0163] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 125–150 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0164] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 150–175 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0165] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 175–200 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0166] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 0.00001–1 mg, vitamin C may be administered within a range

of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0167] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 1–10 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0168] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 10–20 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0169] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 20–40 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0170] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 40–60 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0171] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 60–80 mg, vitamin C may be administered within a range of

100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0172] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 80–100 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0173] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 100–125 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0174] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 125–150 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0175] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 150–175 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0176] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 175–200 mg, vitamin C may be administered within a range of

100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0177] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 0.00001–1 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0178] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 1–10 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0179] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 10–20 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0180] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 20–40 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0181] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 40–60 mg, vitamin C may be administered within a range of

200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0182] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 60–80 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0183] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 80–100 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0184] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 100–125 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0185] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 125–150 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0186] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 150–175 mg, vitamin C may be administered within a range of

200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0187] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 175–200 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0188] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 0.00001–1 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0189] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 1–10 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0190] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 10–20 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0191] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 20–40 mg, vitamin C may be administered within a range of

400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0192] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 40–60 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0193] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 60–80 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0194] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 80–100 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0195] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 100–125 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0196] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 125–150 mg, vitamin C may be administered within a range of

400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0197] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 150–175 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0198] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 175–200 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0199] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 0.00001–1 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0200] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 1–10 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0201] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 10–20 mg, vitamin C may be administered within a range of

600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0202] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 20–40 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0203] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 40–60 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0204] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 60–80 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0205] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 80–100 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0206] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 100–125 mg, vitamin C may be administered within a range of

600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0207] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 125–150 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0208] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 150–175 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0209] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 175–200 mg, vitamin C may be administered within a range of 600–800 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0210] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 0.00001–1 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0211] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 1–10 mg, vitamin C may be administered within a range of 800–

1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0212] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 10–20 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0213] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 20–40 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0214] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 40–60 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0215] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 60–80 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0216] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 80–100 mg, vitamin C may be administered within a range of

800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0217] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 100–125 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0218] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 125–150 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0219] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 150–175 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0220] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be povidone-iodine, zinc and vitamin C. Povidone-iodine may be administered within a range of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, 500–600 μg, zinc may be administered within a range of 175–200 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0221] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be zinc and vitamin C. Zinc may be administered within a range of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, 175–200 mg, vitamin C may be administered within a range of 0.00001–1 mg, and the

combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0222] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be zinc and vitamin C. Zinc may be administered within a range of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, 175–200 mg, vitamin C may be administered within a range of 1–100 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0223] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be zinc and vitamin C. Zinc may be administered within a range of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, 175–200 mg, vitamin C may be administered within a range of 100–200 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0224] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be zinc and vitamin C. Zinc may be administered within a range of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, 175–200 mg, vitamin C may be administered within a range of 200–400 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0225] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be zinc and vitamin C. Zinc may be administered within a range of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, 175–200 mg, vitamin C may be administered within a range of 400–600 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0226] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be zinc and vitamin C. Zinc may be administered within a range of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, 175–200 mg, vitamin C may be administered within a range of 600–800 mg, and the

combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0227] In some embodiments, the two or more pharmaceutical drugs or active ingredients may be zinc and vitamin C. Zinc may be administered within a range of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, 175–200 mg, vitamin C may be administered within a range of 800–1,000 mg, and the combination may be administered per day, orally and/or by spray applied to the nasal, oropharyngeal or respiratory systems.

[0228] In some embodiments of the present disclosure, the two or more pharmaceutical drugs or active ingredients may be administered according to a dosage regimen, including administration one or more times a day. The person skilled in the art would appreciate that the dosage regimen may vary depending on several factors, including the therapeutic delivery system employed, the pharmaceutical drug or active ingredient administered.

[0229] Different embodiments are disclosed herein. Features of certain embodiments may be combined with features of other embodiments; thus, certain embodiments may be combinations of features of multiple embodiments. The foregoing description of the embodiments of the invention has been presented for the purposes of illustration and description. It is not intended to be exhaustive or to limit the invention to the precise form disclosed. It should be appreciated by persons skilled in the art that many modifications, variations, substitutions, changes, and equivalents are possible in light of the above teaching. It is, therefore, to be understood that the appended claims are intended to cover all such modifications and changes as fall within the true spirit of the invention.

[0230] While certain features of the invention have been illustrated and described herein, many modifications, substitutions, changes, and equivalents will now occur to those of ordinary skill in the art. It is, therefore, to be understood that the appended claims are intended to cover all such modifications and changes as fall within the true spirit of the invention.

CLAIMS

1. A composition of matter for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are selected from the group comprising of hydroxychloroquine, zinc, vitamin C and povidone-iodine characterized in that the two or more substances are in a form selected from the group comprising of liquid, powder, and aerosol.

2. The composition of claim 1, wherein the two or more substances are delivered through the nasal tract, oropharyngeal tract, or the respiratory tract.

3. The composition of claim 1 or 2, wherein the two or more substances selected are hydroxychloroquine and povidone-iodine.

4. The composition of claim 3, wherein:

the therapeutic amount per day of hydroxychloroquine is selected from the group comprising of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, and 600–800 mg; and

the therapeutic amount per day of povidone-iodine is selected from the group comprising of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, and 500–600 μg.

5. The composition of claim 1 or 2, wherein the two or more substances selected are hydroxychloroquine and zinc.

6. The composition of claim 5, wherein:

the therapeutic amount per day of hydroxychloroquine is selected from the group comprising of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, and 600–800 mg; and

the therapeutic amount per day of zinc is selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg.

7. The composition of claim 1 or 2, wherein the two or more substances selected are hydroxychloroquine and vitamin C.

8. The composition of claim 7, wherein:

the therapeutic amount per day of hydroxychloroquine is selected from the group comprising of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, and 600–800 mg; and

the therapeutic amount per day of vitamin C is selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg.

9. The composition of claim 1 or 2, wherein the two or more substances selected are hydroxychloroquine, vitamin C, and zinc.

10. The composition of claim 9, wherein:

the therapeutic amount per day of hydroxychloroquine is selected from the group comprising of 1–10 mg, 10–50 mg, 50–100 mg, 100–150 mg, 150–200 mg, 200–300 mg, 300–400 mg, 400–600 mg, and 600–800 mg;

the therapeutic amount per day of vitamin C is selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg; and

the therapeutic amount per day of zinc is selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg.

11. The composition of claim 1 or 2, wherein the two or more substances selected are povidone-iodine and vitamin C.

12. The composition of claim 11, wherein:

the therapeutic amount per day of povidone-iodine is selected from the group comprising of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, and 500–600 μg; and

the therapeutic amount per day of vitamin C is selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg.

13. The composition of claim 1 or 2, wherein the two or more substances selected are povidone-iodine and zinc.

14. The composition of claim 13, wherein:

the therapeutic amount per day of povidone-iodine is selected from the group comprising of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, and 500–600 μg; and

the therapeutic amount per day of zinc is selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg.

15. The composition of claim 1 or 2, wherein the two or more substances selected are povidone-iodine, zinc, and vitamin C.

16. The composition of claim 15, wherein:

the therapeutic amount per day of povidone-iodine is selected from the group comprising of 1–100 μg, 100–200 μg, 200–300 μg, 300–400 μg, 400–500 μg, and 500–600 μg;

the therapeutic amount of zinc is selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg; and

the therapeutic amount per day of vitamin C is selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg.

17. The composition of claim 1 or 2, wherein the two or more substances selected are zinc and vitamin C.

18. The composition of claim 17, wherein:

the therapeutic amount per day of zinc is selected from the group comprising of 0.00001–1 mg, 1–10 mg, 10–20 mg, 20–40 mg, 40–60 mg, 60–80 mg, 80–100 mg, 100–125 mg, 125–150 mg, 150–175 mg, and 175–200 mg; and

the therapeutic amount per day of vitamin C is selected from the group comprising of 0.00001–1 mg, 1–100 mg, 100–200 mg, 200–400 mg, 400–600 mg, 600–800 mg, and 800–1000 mg.

19. The composition of claim 1 or 2, wherein the therapeutic amount per day of hydroxychloroquine is 0.00001–800 mg.

20. The composition of any of claims 1, 2 or 19, wherein the therapeutic amount per day of hydroxychloroquine is 1–800 mg.

21. The composition of claim 1 or 2, wherein the therapeutic amount per day of povidone-iodine is 1–600 μg.

22. The composition of any of claims 1, 2 or 21, wherein the therapeutic amount per day of povidone-iodine is 89–356 μg.

23. The composition of claim 1 or 2, wherein the therapeutic amount per day of zinc is 0.00001–200 mg.

24. The composition of claim 1 or 2, wherein the therapeutic amount per day of vitamin C is 0.00001–2000 mg.

25. The composition of any of claims 1, 2 or 24, wherein the therapeutic amount per day of vitamin C is 0.00001–1000 mg.

26. The composition of any of claims 1 to 25, wherein the inhalation delivery system is selected from the group comprising of nebulisation, aerosolization and oral gargle.

27. The composition of any of claims 1 to 26, wherein delivery is carried out based on a dosing regimen.

28. A composition of two or more substances for use in the prevention or treatment of respiratory illness by inhalation, wherein the two or more substances are selected from the group comprising of hydroxychloroquine, zinc, vitamin C and povidone-iodine, characterized in that the two or more substances are in a form selected from the group comprising of liquid, powder, and aerosol.

29. Use of a composition comprising two or more substances selected from the group comprising of hydroxychloroquine, zinc, vitamin C and povidone-iodine for preventing or treating respiratory illness, characterized in that the two or more substances are in a form selected from the group comprising of liquid, powder, and aerosol.

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SG2021/050621

A. CLASSIFICATION OF SUBJECT MATTER

See Supplemental Box

According to International Patent Classification (IPC)

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

A61K A61P

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

FAMPAT/MEDLINE/EMBASE/BIOSIS/CNKI: hydroxychloroquine, povidone-iodine, vitamin C, zinc, inhalation, respiratory illness, 聚维酮碘, 羟氯喹, 维生素C, 锌 and related terms.

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	US 2011/0104259 A1 (SCHUSTER J.A. ET AL.) 5 May 2011 abstract, para [0025], [0026]	-
A	WO 2012/106575 A1 (NOVARTIS AG) 9 August 2012 abstract, claim 1	-
A	US 2002/0137764 A1 (DRECHSEL K. ET AL.) 26 September 2002 abstract	-

☒ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

*Special categories of cited documents:

"A" document defining the general state of the art which is not considered to be of particular relevance

"D" document cited by the applicant in the international application

"E" earlier application or patent but published on or after the international filing date

"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)

"O" document referring to an oral disclosure, use, exhibition or other means

"P" document published prior to the international filing date but later than the priority date claimed

"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention

"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone

"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art

"&" document member of the same patent family

Date of the actual completion of the international search	Date of mailing of the international search report
19/01/2022 *(day/month/year)*	*21/01/2022* *(day/month/year)*

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INTERNATIONAL SEARCH REPORT	International application No. PCT/SG2021/050621

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	BIDRA A.S. ET AL., Rapid In-Vitro Inactivation of Severe Acute Respiratory Syndrome Coronavirus 2 (SARS-CoV-2) Using Povidone-Iodine Oral Antiseptic Rinse. *J Prosthodont*, 16 June 2020, Vol. 29, No. 6, pages 529-533 [Retrieved on 2022-01-19] <DOI: 10.1111/JOPR.13209> whole document	1-4, 11-16, 19-29
Y	ClinicalTrials.gov Identifier: NCT04371965 Povidone Iodine Mouthwash, Gargle, and Nasal Spray to Reduce Naso-Pharyngeal Viral Load in Patients With COVID-19 (KILLER). 1 May 2020 [Retrieved on 2022-01-19 from https://clinicaltrials.gov/ct2/show/NCT04371965] whole document	1-4, 11-16, 19-29
X	ClinicalTrials.gov Identifier: NCT04446104 A Preventive Treatment for Migrant Workers at High-risk of COVID-19. 24 June 2020	1-4, 11, 12, 19-22, 24-29
Y	[Retrieved on 2022-01-19 from https://clinicaltrials.gov/ct2/show/NCT04446104] whole document	13-16, 23
Y	US 2020/0289552 A1 (KIM D.W. ET AL.) 17 September 2020 whole document, particularly abstract, para [0016], example 2	1-4, 11-16, 19-29
Y	LIU J. ET AL., Hydroxychloroquine, a less toxic derivative of chloroquine, is effective in inhibiting SARS-CoV-2 infection in vitro. *Cell Discov*, 18 March 2020, Vol. 6, pages 1-4 [Retrieved on 2022-01-19] <DOI: 10.1038/S41421-020-0156-0> whole document	1-4, 19-22, 26-29
Y	CN 111297838 A (NINGBO HEKANG BIOMEDICAL TECH CO LTD) 19 June 2020 whole document, particularly abstract, examples 1, 26 of the original non-English language document (a machine translation is enclosed **only** for your reference)	1-4, 19-22, 26-29
P,X	SEET R.C.S. ET AL., Positive impact of oral hydroxychloroquine and povidone-iodine throat spray for COVID-19 prophylaxis: An open-label randomized trial. *Int J Infect Dis*, 20 April 2021, Vol. 106, pages 314-322 [Retrieved on 2022-01-19] <DOI: 10.1016/J.IJID.2021.04.035> whole document	1-4, 11-16, 19-29

INTERNATIONAL SEARCH REPORT	International application No. PCT/SG2021/050621

C (Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	FEYAERTS A.F. & LUYTEN W., Vitamin C as prophylaxis and adjunctive medical treatment for COVID-19? *Nutrition*, 25 July 2020, Vol. 79-80, pages e110948:1-5 [Retrieved on 2022-01-19] <DOI: 10.1016/J.NUT.2020.110948> whole document	1, 2, 11, 12, 15, 16, 21, 22, 24-29
Y	US 6004560 A (HSU W.C. & KENG S.H.) 21 December 1999 whole document	1, 2, 11, 12, 15, 16, 21, 22, 24-29
Y	RONDANELLI M. ET AL., Self-Care for Common Colds: The Pivotal Role of Vitamin D, Vitamin C, Zinc, and Echinacea in Three Main Immune Interactive Clusters (Physical Barriers, Innate and Adaptive Immunity) Involved during an Episode of Common Colds - Practical Advice on Dosages and on the Time to Take These Nutrients/Botanicals in order to Prevent or Treat Common Colds. *Evid Based Complement Alternat Med*, 29 April 2018, Vol. 2018, pages e5813095: 1-36 [Retrieved on 2022-01-19] <DOI: 10.1155/2018/5813095> whole document	1, 2, 11-16, 21-29
Y	HUNTER J. ET AL., Rapid review protocol: Zinc for the prevention or treatment of COVID-19 and other coronavirus-related respiratory tract infections. *Integr Med Res*, 23 June 2020, Vol. 9, No. 3, pages e100457: 1-8 [Retrieved on 2022-01-19] <DOI: 10.1016/J.IMR.2020.100457> whole document	1, 2, 13-16, 21-23, 26-29
Y	EP 01381522 A1 (BRYCE-SMITH, DEREK) 8 August 1990 whole document	1, 2, 13-16, 21-23, 26-29
P,Y	EP 3892275 A1 (INSERM AND CENTRE NATIONAL DE LA RECHERCHE SCIENTIFIQUE) 13 October 2021 whole document	1-4, 19-22, 26-29

INTERNATIONAL SEARCH REPORT

International application No.
PCT/SG2021/050621

Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☐ Claims Nos.:

   because they relate to subject matter not required to be searched by this Authority, namely:

2. ☐ Claims Nos.:

   because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically:

3. ☐ Claims Nos.:

   because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

Please refer to Supplemental Box (Continuation of Box No. III).

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.

2. ☐ As all searchable claims could be searched without effort justifying additional fees, this Authority did not invite payment of additional fees.

3. ☒ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claims Nos.:

   1-4, 11-16, 19-29 (Inventions I, IV and V)

4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:

Remark on Protest

☐ The additional search fees were accompanied by the applicant's protest and, where applicable, the payment of a protest fee.

☐ The additional search fees were accompanied by the applicant's protest but the applicable protest fee was not paid within the time limit specified in the invitation.

☒ No protest accompanied the payment of additional search fees.

INTERNATIONAL SEARCH REPORT	International application No. **PCT/SG2021/050621**

Supplemental Box
(Continuation of Box No. III)

This International Searching Authority found multiple inventions in this international application, as follows:

This Authority has found that there are different inventions based on the following features that separate the claims into distinct groups:

Group I – Claims 1, 2, 19-22, 26-29 (all partially); Claims 3, 4 (all completely):
A composition of matter for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are at least **hydroxychloroquine and povidone-iodine**.

Group II – Claims 1, 2, 9, 10, 19, 20, 23, 26-29 (all partially); Claims 5, 6 (all completely):
A composition of matter for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are at least **hydroxychloroquine and zinc**.

Group III – Claims 1, 2, 9, 10, 19, 20, 24-29 (all partially); Claims 7, 8 (all completely):
A composition of matter for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are at least **hydroxychloroquine and vitamin C**.

Group IV – Claims 1, 2, 15, 16, 21, 22, 24-29 (all partially); Claims 11, 12 (all completely):
A composition of matter for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are at least **povidone-iodine and vitamin C**.

Group V – Claims 1, 2, 15, 16, 21-23, 26-29 (all partially); Claims 13, 14 (all completely):
A composition of matter for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are at least **povidone-iodine and zinc**.

Group VI – Claims 1, 2, 9, 10, 15, 16, 23-29 (all partially); Claims 17, 18 (all completely):
A composition of matter for delivery of a therapeutic amount per day of two or more substances to a patient through an inhalation delivery system for prevention or treatment of respiratory illness, wherein the two or more substances are at least **zinc and vitamin C**.

Please refer to **Box No. IV** of Written Opinion of The International Searching Authority (Form PCT/ISA/237) for detailed explanation.

INTERNATIONAL SEARCH REPORT	International application No. **PCT/SG2021/050621**

Supplemental Box
(Classification of Subject Matter)

Int. Cl.

A61K 31/4706 (2006.01)
A61K 33/18 (2006.01)
A61K 31/375 (2006.01)
A61K 33/30 (2006.01)
A61K 9/72 (2006.01)
A61P 11/00 (2006.01)
A61P 31/14 (2006.01)

INTERNATIONAL SEARCH REPORT Information on patent family members	International application No. **PCT/SG2021/050621**

Note: This Annex lists known patent family members relating to the patent documents cited in this International Search Report. This Authority is in no way liable for these particulars which are merely given for the purpose of information.

Patent document cited in search report	Publication date	Patent family member(s)	Publication date
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		WO 02/16149 A1	28/02/2002
		JP 2002059700 A	26/02/2002
EP 3892275 A1	13/10/2021	NONE	