4176, AZD-3514, and AZD-5312, apatorsen, galeterone, ODM-2014, TRC-253, BMS-641988, proxalutamid, Luteinizing hormone-releasing hormone (LH-RH), follicle-stimulating hormone (FSH), triptorelin pamoate, docetaxel, diethylstilbestrol, tadalafil, silodosin, tamsulosin hydrochloride, naftopidil, solifenacin succinate, tamsulosin, tamsulosin hydrochloride, alfuzosin hydrochloride, prazosin hydrochloride, doxazosin, doxazosin mesylate, solifenacin succinate, allylestrenol, benzydamine hydrochloride, cefatrizine, chlormadinone acetate, flavoxate hydrochloride, gestonorone caproate, indoramin hydrochloride, mepartricin, oxybutynin chloride, phenoxybenzamine hydrochloride, terazosin, terazosin hydrochloride, or degarelix. The agent that counters the effect of androgens is a sex hormone-binding globulin (SHBG) stimulator. The glucocorticoid is anticorticotropin. The insulin sensitizing medication is metformin.

[0009] In some embodiments, the composition is formulated to facilitate administration of the composition topically to the skin, nasally, sub-lingually, orally, by injection (e.g., intramuscular, intravenous, subcutaneous, depot), via inhalation, or ocular application.

[0010] In some embodiments, the viral respiratory infection is any one or combination of coronavirus, influenza, influenza A, influenza B, SARS-CoV-1, SARS-CoV-2, MERS-CoV, or rhinoviruses.

[0011] In some embodiments, the compositions is formulated to alter androgen receptor function and subsequently down stream genes under regulatory control of the androgen receptor.

[0012] In some embodiments, the down stream genes include any one or combination of angiotensin converting enzyme 2 (ACE2), furin, and transmembrane protease serine 2 (TMPRSS2).

[0013] In some embodiments, the composition is formulated to block the production of proteins in the lung so as to alter viral entry into cells or to bolster host immunity.

[0014] In some embodiments, the anti-androgen is combined with any one or combination of an anti-inflammatory agent, an anti-bacterial agent, or aspartame.

[0015] In some embodiments, the composition is formulated for use as a treatment of the viral respiratory infection, a therapy for the viral respiratory infection, a prophylactic for the viral respiratory infection, a preventive measure for contracting the viral respiratory infection, a diagnosis of a type of viral respiratory infection, a prediction for respiratory disease severity of the viral respiratory infection, a prediction for determining an effective treatment or prophylactic composition, and/or a prediction for determining an effective administration dosage of the composition for use as a treatment or prophylactic.

[0016] In an exemplary embodiment, a method of using a composition on a subject having or suspected of having a viral respiratory infection involves administering a composition to a subject, the composition including any one or combination of: an androgen receptor antagonists or anti-androgen; an androgen synthesis inhibitor; an agent that counters the effect of androgens; a globulin (SHBG) stimulator; an antigonadotropin; a mineralocorticoid to suppress androgen production in the adrenal gland; a glucocorticoid to suppress androgen production in the adrenal gland; an insulin sensitizing medication; and vaccine or an immunogen against androstenedione that reduces the level of testosterone or increases estrogen.

[0017] In some embodiments: the anti-androgen is any one or combination of: cyproterone acetate, megestrol acetate, chlormadinone acetate, spironolactone, medrogestone, oxendolone, osaterone, bifluranol acetate, finasteride, dutastride, flutamide, bicalutamide, nilutamide, topilutamide, enzalutamide, apalutamide, dienogest, drospirenone, medrogestone, nomegestrol acetate, promegestone, trimegestone, ketoconazole, abiraterone acetate, seviteronel, aminoglutethimide, epristeride, alfaestradiol, isotretinoin, saw palmetto, marijuana, cannabinoids, darolutamide, EZN-4176, AZD-3514, and AZD-5312, apatorsen, galeterone, ODM-2014, TRC-253, BMS-641988, proxalutamid, Luteinizing hormone-releasing hormone (LH-RH), follicle-stimulating hormone (FSH), triptorelin pamoate, docetaxel, diethylstilbestrol, tadalafil, silodosin, tamsulosin hydrochloride, naftopidil, solifenacin succinate, tamsulosin, tamsulosin hydrochloride, alfuzosin hydrochloride, prazosin hydrochloride, doxazosin, doxazosin mesylate, solifenacin succinate, allylestrenol, benzydamine hydrochloride, cefatrizine, chlormadinone acetate, flavoxate hydrochloride, gestonorone caproate, indoramin hydrochloride, mepartricin, oxybutynin chloride, phenoxybenzamine hydrochloride, terazosin, terazosin hydrochloride, or degarelix. The agent that counters the effect of androgens is a sex hormone-binding globulin (SHBG) stimulator. The glucocorticoid is anticorticotropin. The insulin sensitizing medication is metformin.

[0018] In some embodiments, the administration of the composition involves any one or combination of topical application to the skin, nasal application, oral application, via injection, via inhalation, or ocular application.

[0019] In some embodiments, the viral respiratory infection is any one or combination of coronavirus, influenza, influenza A, influenza B, SARS-CoV-1, SARS-CoV-2, MERS-CoV or rhinoviruses.

[0020] In some embodiments, the method involves altering androgen receptor function and subsequently down stream genes under regulatory control of the androgen receptor.

[0021] In some embodiments, the down stream genes include any one or combination of angiotensin converting enzyme 2 (ACE2), furin, and transmembrane protease serine 2 (TMPRSS2).

[0022] In some embodiments, the method involves blocking the production of proteins in the lung so as to alter viral entry into cells or to bolster host immunity.

[0023] In some embodiments, the composition is use as a treatment of the viral respiratory infection, a therapy for the viral respiratory infection, a prophylactic for the viral respiratory infection, a preventive measure for contracting the viral respiratory infection, a diagnosis of a type of viral respiratory infection, a prediction for respiratory disease severity of the viral respiratory infection, a prediction for determining an effective treatment or prophylactic composition, and/or a prediction for determining an effective administration dosage of the composition for use as a treatment or prophylactic.

[0024] In some embodiments, the treatment involves administering the composition as a treatment for the viral respiratory infection and/or a prophylactic for the viral respiratory infection before, during, and/or after the subject is first diagnosed with the viral respiratory infection and/or before, during, and/or after the subject is hospitalized due to the viral respiratory infection.