CLAIMS

1. Use of a human natural IgM and/or IgA antibody recognizing oxidized phospholipids and/or oxidation-specific epitopes in the manufacture of a medicament for the treatment or prevention of a disorder or a disease associated with/related to/caused by a natural IgM/IgA antibody deficiency (NAD) in a subject, said disorder or disease is selected from the group consisting of a natural antibody deficient infectious, neurodegenerative, metabolic, autoimmuine, and cardiovascular diseases, wherein said human natural IgM and/or IgA antibody is a subgroup of the IgM and/or IgA antibodies repertoire of a subject, said subgroup essentially consisting of antibodies recognizing oxidized phospholipids and/or oxidation-specific epitopes,
   wherein said human natural IgM and/or IgA antibodies contain more than 35% antibodies recognizing oxidized phospholipids and/or oxidation-specific epitopes of the total IgM and/or IgA antibodies.

2. The use according to claim 1, wherein said human natural IgM and/or IgA antibody is a subgroup of IgM and/or IgA antibodies derived from IgM and/or IgA enriched plasma pools from healthy individuals, said subgroup essentially consisting of antibodies recognizing oxidized phospholipids and/or oxidation-specific epitopes.

3. The use according to claim 1 or 2, wherein said disorder or disease associated with/related to/caused by natural IgM/IgA antibody deficiency (NAD) is the virus infection disease COVID-19 caused by the β-Coronavirus SARS-CoV2 or is long COVID-19.

4. The use according to any one of claims 1 to 3, wherein said antibody is capable of inhibiting the spreading of a virus from an infected cell to an adjacent second non-infected cell (cell-to-cell spread).

5. The use according to any one of claims 1 to 4, wherein said antibody has an anti-inflammatory activity, preferably the capability of:
   reducing the accumulation of free oxidized phospholipids, preferably in infect lungs,
   clearing cellular debris in lung tissue,
   stimulating IL-10 and/or TGFβ secretion; and/or
   neutralizing of pro-inflammatory immune responses triggered by cytokines.

6. The use according to any one of claims 1 to 5, wherein said disorder or disease associated with natural IgM/IgA antibody deficiency (NAD) is an inflammatory disease or a virus infection disease.

7. The use according to claim 6, wherein said inflammatory disease is selected from the group consisting of infectious diseases mediated by respiratory viruses, preferably COVID19, long COVID-19, influenza, MERS-COV orSARS-COV; infectious diseases caused by bacterial infections mediated by gram positive or gram negative pathogens, fungi, or parasites; and sterile inflammatory diseases, preferably cardiovascular diseases, atherosclerosis, coronary heart disease, heart attack and stroke, metabolic disorders like diabetes mellitus, neurodegenerative diseases, preferably Alzheimer's Disease, and autoimmune diseases, preferably Systemic Lupus Erythematodes, or Multiple Sclerosis.

8. The use according to claim 6, wherein said virus infection disease is selected from the group consisting of infections by coronaviruses, preferably SARS-CoV, SARS-CoV-2, MERS); influenza viruses, parainfluenza viruses, respiratory syncytial viruses (RSV), rhinoviruses, adenoviruses, enteroviruses, human metapneumoviruses, herpesviruses, preferably HSV-1, HSV-2, VZV, EBV, HCMV, HHV-6, HHV-7, HHV-8.

9. The use according to any one of claims 1 to 8, wherein the medicament is a pharmaceutical composition which further comprises at least one pharmaceutically acceptable excipient.

10. The use according to any one of claims 1 to 9,
wherein the medicament is to be administered in combination with:
    (a) an inhibitor/antagonist of the Angiotensin-Converting-Enzyme (ACE), an inhibitor/antagonist of the Angiotensin-II-type 1 receptor (AT1R) and/or a compound that modulates the expression of the ACE2 receptor; and/or Ang(1-7), AT2R agonists and/or MAS-receptor agonists;
    (b) a compound inhibiting/antagonizing/neutralizing ligands of Receptor of Advanced Glycation Endproducts (RAGE) and/or an inhibitor/antagonist of RAGE; and/or
    (c) Granulocyte-Macrophage Colony-Stimulating Factor (GM-CSF) and/or a compound that increases the phagocytic activity of alveolar macrophages (AM), preferably azithromycin.

11. The use according to any one of claims 1 to 9,
wherein the medicament is to be administered in combination with:
an antiviral compound, preferably wherein said antiviral compound is:
remdesivir;
favipiravir;
camostat mesylate;
nafamostat mesylate;
umifenovir; and/or
stronger neo-minophagen C.

12. The use according to any one of claims 1 to 9,
wherein the medicament is to be administered in combination with an immunomodulator, preferably wherein said immunomodulator is:
an anti-PD-1-, anti-PD-L1, anti-CD40-, CD40-Ligand-, anti-CSF-1R-, and/or anti-CTLA-4-antibody; and/or
an antibody that binds to cytokines (preferably to IL-6), an antibody that binds to its specific cytokine receptor (preferably to IL-6R), an antibody that binds to chemokine(s) (preferably to CCL2 and CCL5), an antibody that binds to their specific chemokine receptor(s) (preferably to CCR2 and CCR5), and/or synthetic molecules (preferably Maraviroc); and/or
dexamethason.