Claims

1. Use of an aptamer in the manufacture of a medicament for treating, curing or preventing disease symptoms associated with long COVID in a patient having overcome an infection with a virus from the *Coronaviridae* family, wherein the aptamer comprises a nucleic acid sequence of SEQ ID No. 1 (GGT TGG TGT GGT TGG) and/or a nucleic acid sequence being at least 80% identical to SEQ ID No. 1.

2. The use according to claim 1, wherein the disease symptoms comprise one or more from the group comprising neurological symptoms, such as chronic fatigue syndrome, postural orthostatic tachycardia syndrome (PoTS), dysautonomia, tremor, attention deficit, anomic aphasia, neuropathy, transverse myelitis, acute necrotising myelitis, and Guillain-Barré syndrome, cardiovascular symptoms, such as myocardial inflammation, arrhythmia, tachycardia, bradycardia, hypertension, and atrioventricular (AV) block, dermatological symptoms, such as alopecia and eczema, or gastrointestinal diseases.

3. The use according to any of claims 1 or 2, wherein the aptamer is used to inhibit the interaction of autoantibodies specific for a G-protein coupled receptor with its target proteins.

4. The use according to any of claims 1 to 3, wherein the patient is a patient in which autoantibodies against G-protein coupled receptors can be detected.

5. The use according to any of claims 1 to 4, wherein the patient exhibits functional autoantibodies against G-protein coupled receptors, preferably functional autoantibodies specific for any one of the human G-protein coupled receptor adrenergic alpha-1 receptor, adrenergic beta-2 receptor, endothelin 1 ETA receptor, muscarinic M_2 receptor, angiotensin II AT1 receptor, MAS-receptor and/or the nociception receptor, more preferably for any one of the adrenergic beta-2 receptor, muscarinic M_2 receptor, angiotensin II AT1 receptor, MAS-receptor, particularly preferably wherein the patient exhibits an antibody pattern comprising functional autoantibodies specific for each of the adrenergic beta-2 receptor, muscarinic M_2 receptor, angiotensin II AT1 receptor, and MAS-receptor.

6. The use according to any of claims 1 to 5, wherein the patient has overcome an infection with SARS-CoV-2.

7. The use according to any of claims 1 to 5, wherein the aptamer comprises a nucleic acid sequence of SEQ ID No. 1 (GGT TGG TGT GGT TGG).

8. The use according to claim 7, wherein the aptamer consists of a nucleic acid sequence of SEQ ID No. 1 (GGT TGG TGT GGT TGG).

9. The use according to any of claims 1 to 5, wherein the patient has overcome an infection with SARS-CoV-2, and wherein the aptamer comprises a nucleic acid sequence of SEQ ID No. 1 (GGT TGG TGT GGT TGG).

10. The use according to claim 9, wherein the aptamer consists of a nucleic acid sequence of SEQ ID No. 1 (GGT TGG TGT GGT TGG).

11. The use according to any of claims 1 to 10, wherein the aptamer has anticoagulant activity, preferably wherein the aptamer prevents or reduces microthromboses.

12. The use according to any of claims 1 to 11, wherein the aptamer has anticoagulant activity, preferably wherein the aptamer is able to prolong coagulation time measured as partial thromboplastin time (PTT) of human calibration plasma to 60 seconds or more at an aptamer concentration of 0.03 mg/ml and/or wherein the aptamer is able to lower the prothrombin time (Quick value) of human calibration plasma to 40% or less at an aptamer concentration of 0.03 mg/ml

13. Use of an aptamer as defined in any of claims 1 to 12 and at least one pharmaceutically acceptable excipient in the manufacture of a pharmaceutical composition for treating, curing or preventing disease symptoms associated with long COVID in a patient having overcome an infection with a virus from the *Coronaviridae* family.

14. The use according to claim 13, wherein the patient has overcome an infection with SARS-CoV-2.