WHAT IS CLAIMED:

1. Use of a serotonin agonist in the manufacture of a medicament for preventing or treating a psychological disorder, wherein the medicament is to be administered in combination with a serotonin receptor 2A antagonist, and wherein the medicament is to be administered separately, sequentially or simultaneously with the serotonin receptor 2A antagonist.

2. The use of claim 1, wherein the serotonin agonist is psilocybin, psilocin, baeocystin, norbaeocystin, lisurgide, LSD, dimethyltryptamine, carboxamindotryptamine, ibogaine, 3,4-methylenedioxy-methamphetamine (MDMA), or a derivative or metabolite thereof.

3. The use of claim 2, wherein the serotonin agonist is psilocybin or psilocin or a derivative thereof.

4. The use of claim 3, wherein said derivative of psilocybin or psilocin is [3-(2-Dimethylaminoethyl)-1H-indol-4-yl] dihydrogen phosphate, 4-hydroxy-N,N-dimethyltryptamine, [3-(2-methylaminoethyl)-1H-indol-4-yl] dihydrogen phosphate, 4-hydroxy-N-methyltryptamine, [3-(aminoethyl)-1H-indol-4-yl] dihydrogen phosphate, 4-hydroxytryptamine, [3-(2-trimethylaminoethyl)-1H-indol-4-yl] dihydrogen phosphate or 4-hydroxy-N,N,N-trimethyltryptamine.

5. The use of claim 3, wherein the psilocybin or psilocin is present in the form of an extract from a mushroom and/or truffle (sclerotium).

6. The use of claim 5, wherein the mushroom or truffle is from the genus *Psilocybe*, *Gymnopilus*, *Panaeolus*, *Copelandia*, *Hypholoma*, *Pluteus*, *Inocybe*, *Conocybe*, *Panaeolina*, *Gerronema*, *Agrocybe*, *Galerina* and/or *Mycena*.

7. The use of claim 6, wherein the mushroom or truffle is *P. azurescens*, *P. semilanceata*, *P. cyanescens*, *P. cubensis*, P. *subcubensis*, P. *tampanensis*, P. *mexicana*, P. *atlantis*, and/or P. *semilanceata*.

8. The use of claim 2, wherein the serotonin agonist is 3,4-methylenedioxy-methamphetamine (MDMA) or a metabolite thereof.

9. The use of claim 8, wherein the metabolite of MDMA is 3,4-methylenedioxyamphetamine (MDA), 4-hydroxy-3-methoxymethamphetamine (HMMA), 4-hydroxy-3-methoxyamphetamine (HMA), 3,4-dihydroxyamphetamine (DHA), 3,4-methylenedioxyphenylacetone (MDP2P), or 3,4-methylenedioxy-N-hydroxyamphetamine (MDOH).

10. The use of claim 1, wherein the serotonin receptor 2A antagonist is MDL-11,939, ketanserin, ritanserin, altanserin, acepromazine, mianserin, quetiapine, SB204741, SB206553, SB242084, LY272015, SB243213, Blonanserin, SB200646, RS102221, nefazodone, or MDL-100,907.

11. The use of claim 1, wherein the psychological disorder is depression, psychotic disorder, schizophrenia, schizophreniform disorder (acute schizophrenic episode), schizoaffective disorder; bipolar I disorder (mania, manic disorder, manic-depressive psychosis), bipolar II disorder, major depressive disorder with psychotic feature (psychotic depression), delusional disorders (paranoia), shared Psychotic Disorder (shared paranoia disorder), Brief Psychotic disorder (other and unspecified Reactive Psychosis), psychotic disorder not otherwise specified (unspecified psychosis), paranoid personality disorder, schizoid personality disorder, schizotypal personality disorder, anxiety disorder, panic disorder, panic attacks, agoraphobia, attention deficit syndrome, premenstrual dysphoric disorder, premenstrual syndrome, ADHD, ADD, anorexia nervosa, antisocial personality disorder, autism, addiction, avoidant personality disorder, bipolar disorder, bulimia nervosa, borderline personality disorder, catatone schizophrenia, chronic motor or vocal tic disorder, conversion disorder, cyclothymia, dependent personality disorder, delier, dementia, depersonalization disorder, depression, Dhat syndrome, dissociative amnesia, dissociative fugue, dissociative identity disorder, dissociative disorder, dissociative disorder, not otherwise specified, dysthymic disorder, Da Costa's syndrome, ephobophilia, exhibitionism, generalized anxiety disorder, grandiose delusions,

hypochondria, hoarding disorder, intermittent explosive disorder, jealousy, kleptomania, Kluver-Bucy syndrome, maternity psychosis, mental retardation, monomania, Munchhausen syndrome, misophony, narcissistic personality disorder, obsessive-compulsive disorder, oniomania, organic personality disorder, phobia, paranoid personality disorder, paranoid delusions, passive-aggressive personality, pathological gambling, pathological lying, personality disorder not otherwise defined, pervasive developmental disorder, pica, pain disorder, post encephalitic syndrome, postpartum depression, posttraumatic stress disorder, psychosis, psychotic disorder due to substance use, pyromania, querulant delusions, ruminational disorder, schizophrenia, schizoaffective disorder, schizoid personality disorder, schizotypal personality disorder, separation anxiety, social phobia, somatisation disorder, somatic delusion, somatoform disorder, syndrome of Capgras, syndrome of Cotard, syndrome of Ganser, syndrome of Gilles de la Tourette, selective mutism, theatrical personality disorder, trichotillomania, or undifferentiated somatoform disorder.

12. Use of an agonist of a serotonin receptor in the manufacture of a medicament for preventing or treating a psychological disorder, wherein the medicament is to be administered in combination with a serotonin receptor 2A antagonist, and wherein the medicament is to be administered separately, sequentially or simultaneously with the serotonin receptor 2A antagonist.

13. The use of claim 12, wherein the agonist is an agonist of serotonin receptor 1B, serotonin receptor 4, serotonin receptor 6, or serotonin receptor 7.

14. The use of claim 13, wherein the agonist is an agonist of serotonin receptor 1B and is selected from the group consisting of ergotamine, oxymetazoline, sumatriptan, zolmitriptan, 5-carboxamidotryptamine, CGS-12066A, CP-93,129, CP-94,253, CP-122,288, CP135,807, RU24969, vortioxetine, psilocybin, psilocin, baeocystin, norbaeocystin, lisurgide, LSD, dimethyltryptamine, and carboxamindotryptamine.

15. The use of claim 13, wherein the agonist is an agonist of serotonin receptor 4 and is selected from the group consisting of BIMU-8, Cisapride, CJ-033, ML-

10302, Mosapride, Prucalopride, Renzapride, RS-67506, RS-67333, SL65.0155, Tegaserod, Zacopride, Metoclopramide, Sulpiride, psilocybin, psilocin, baeocystin, norbaeocystin, lisurgide, LSD, dimethyltryptamine, and carboxamindotryptamine.

16. The use of claim 13, wherein the agonist is an agonist of serotonin receptor 6 and is selected from the group consisting of EMD 386088, E-6801, WAY 181187, and WAY 208466.

17. The use of claim 13, wherein the agonist is an agonist of serotonin receptor 7 and is selected from the group consisting of 5-carboxamidotryptamine, 5-methoxytryptamine, 8-OH-DPAT, aripiprazole, AS-19, E-55888, E-57431, 4-(2-diphenyl)-N-(1,2,3,4-tetrahydronaphthalen-1-yl)-1-piperazinehexanamide, 4-[2-(methylthio)phenyl]-N-(1,2,3,4-tetrahydro-1-naphthalenyl)-1-piperazinehexanamide, LP-211, MSD-5a, N-methylserotonin, N-1,2,3,4-Tetrahydronaphthalen-1-yl)-4-aryl-1-piperazinehexanamides, N,N-dimethytryptamine, AGH-107, AH-494, AGH-192, psilocybin, psilocin, baeocystin, norbaeocystin, lisurgide, LSD, dimethyltryptamine, and carboxamindotryptamine.

18. The use of claim 13, wherein the agonist of the serotonin receptor is psilocybin or psilocin or a derivative thereof.

19. The use of claim 18, wherein the derivative of psilocybin or psilocin is [3-(2-dimethylaminoethyl)-1H-indol-4-yl] dihydrogen phosphate, 4-hydroxy-N,N-dimethyltryptamine, [3-(2-methylaminoethyl)-1H-indol-4-yl] dihydrogen phosphate, 4-hydroxy-N-methyltryptamine, [3-(aminoethyl)-1H-indol-4-yl] dihydrogen phosphate, 4-hydroxytryptamine, [3-(2-trimethylaminoethyl)-1H-indol-4-yl] dihydrogen phosphate, or 4-hydroxy-N,N,N-trimethyltryptamine.

20. The use of claim 18, wherein the psilocybin or psilocin is present in the form of an extract from a mushroom and/or truffle (sclerotium).

21. The use of claim 17, wherein the mushroom or truffle is from the genus *Psilocybe*, *Gymnopilus*, *Panaeolus*, *Copelandia*, *Hypholoma*, *Pluteus*, *Inocybe*, *Conocybe*, *Panaeolina*, *Gerronema*, *Agrocybe*, *Galerina* and/or *Mycena*.

22. The use of claim 21, wherein the mushroom or truffle is *P. azurescens*, *P. semilanceata*, *P. cyanescens*, *P. cubensis*, P. *subcubensis*, P. *tampanensis*, P. *mexicana*, P. *atlantis*, and/or P. *semilanceata*.

23. The use of claim 12, wherein the serotonin receptor 2A antagonist is MDL-11,939, ketanserin, ritanserin, altanserin, acepromazine, mianserin, quetiapine, SB204741, SB206553, SB242084, LY272015, SB243213, Blonanserin, SB200646, RS102221, nefazodone, or MDL-100,907.

24. The use of claim 12, wherein the psychological disorder is depression, psychotic disorder, schizophrenia, schizophreniform disorder (acute schizophrenic episode), schizoaffective disorder; bipolar I disorder (mania, manic disorder, manic-depressive psychosis), bipolar II disorder, major depressive disorder with psychotic feature (psychotic depression), delusional disorders (paranoia), shared Psychotic Disorder (shared paranoia disorder), Brief Psychotic disorder (other and unspecified Reactive Psychosis), psychotic disorder not otherwise specified (unspecified psychosis), paranoid personality disorder, schizoid personality disorder, schizotypal personality disorder, anxiety disorder, panic disorder, panic attacks, agoraphobia, attention deficit syndrome, premenstrual dysphoric disorder, premenstrual syndrome, ADHD, ADD, anorexia nervosa, antisocial personality disorder, autism, addiction, avoidant personality disorder, bipolar disorder, bulimia nervosa, borderline personality disorder, catatone schizophrenia, chronic motor or vocal tic disorder, conversion disorder, cyclothymia, dependent personality disorder, delier, dementia, depersonalization disorder, depression, Dhat syndrome, dissociative amnesia, dissociative fugue, dissociative identity disorder, dissociative disorder, dissociative disorder, not otherwise specified, dysthymic disorder, Da Costa's syndrome, ephobophilia, exhibitionism, generalized anxiety disorder, grandiose delusions, hypochondria, hoarding disorder, intermittent explosive disorder, jealousy, kleptomania, Kluver-Bucy syndrome, maternity psychosis, mental retardation, monomania,

Munchhausen syndrome, misophony, narcissistic personality disorder, obsessive-compulsive disorder, oniomania, organic personality disorder, phobia, paranoid personality disorder, paranoid delusions, passive-aggressive personality, pathological gambling, pathological lying, personality disorder not otherwise defined, pervasive developmental disorder, pica, pain disorder, post encephalitic syndrome, postpartum depression, posttraumatic stress disorder, psychosis, psychotic disorder due to substance use, pyromania, querulant delusions, ruminational disorder, schizophrenia, schizoaffective disorder, schizoid personality disorder, schizotypal personality disorder, separation anxiety, social phobia, somatisation disorder, somatic delusion, somatoform disorder, syndrome of Capgras, syndrome of Cotard, syndrome of Ganser, syndrome of Gilles de la Tourette, selective mutism, theatrical personality disorder, trichotillomania, or undifferentiated somatoform disorder.