WE CLAIM:

1. Use of D-cycloserine (DCS) or a pharmaceutically acceptable ester of D-cycloserine, or an alkylated D-cycloserine, or a pharmaceutically acceptable precursor of D-cycloserine in the manufacture of a medicament to augment transcranial magnetic stimulation (TMS) therapy for Major Depressive Disorder (MDD) optionally intermittent or continuous theta-burst stimulation (iTBS or cTBS), high- or low-frequency stimulation and combinations thereof, to improve depressive symptoms and provide higher rates of clinical response and remission.
2. Use of D-cycloserine in the manufacture of a medicament to treat Major Depressive Disorder (MDD) in a patient and/or improve and/or alleviate and/or reduce frequency of one or more symptoms of MDD, wherein the medicament is for administration to the patient at a low dose, optionally 1-250mg per patient; and wherein the patient is subjected to transcranial magnetic stimulation, optionally intermittent or continuous theta-burst stimulation (iTBS or cTBS), high- or low-frequency stimulation or combinations thereof.
3. D-cycloserine or a N-methyl-D-aspartate receptor agonist or a partial N-methyl-D-aspartate receptor agonist for use as a transcranial magnetic stimulation, optionally intermittent theta-burst stimulation (iTBS), adjuvant to improve one or more symptoms of MDD including feelings of sadness, tearfulness, hopelessness, short temper, irritability, loss of interest/lack of pleasure, concentration impairments, indecision, memory loss, flat affect, sleep disorders, tiredness, reduced or increased appetite, weight loss or weight gain, feelings of worthlessness or guilt, thoughts of death and/or suicide.
4. Use of low-dose D-cycloserine with and without transcranial magnetic stimulation in the manufacture of a medicament for the management of Major Depressive Disorder (MDD).
5. The use of claim 2, wherein the low dose is a dose of D-cycloserine sufficient to achieve a plasma concentration of D-cycloserine of 1-30 µg/mL.
6. D-cycloserine formulated to achieve maximal plasma levels of 1-30 µg/mL within three hours to support adjunctive use in the treatment of MDD using transcranial magnetic stimulation, optionally intermittent or continuous theta-burst stimulation (iTBS or cTBS), high- or low-frequency stimulation or combinations thereof.
7. Use of D-cycloserine in the manufacture of a medicament for improving and/or reversing and/or partially reversing cognitive impairments in MDD, including working memory and overall subjective cognitive function, wherein the medicament is for administration to the patient at a low dose; and wherein the patient is subject to

transcranial magnetic stimulation, optionally intermittent or continuous theta-burst stimulation (iTBS or cTBS), high- or low-frequency stimulation or combinations thereof.

8. The use according to claim 7, wherein the low dose is a dose of D-cycloserine sufficient to achieve a plasma concentration of D-cycloserine of 1-30 µg/mL.
9. Use of D-cycloserine in the manufacture of a medicament to reduce suicide risk and suicidal ideation in MDD, wherein the medicament is for administration to a patient at a low dose; and wherein the patient is subject to transcranial magnetic stimulation, optionally intermittent or continuous theta-burst stimulation (iTBS or cTBS), high- or low-frequency stimulation or combinations thereof.
10. The use according to claim 9, wherein the low dose is a dose of D-cycloserine sufficient to achieve a plasma concentration of D-cycloserine of 1-30 µg/mL.
11. Use of D-cycloserine in the manufacture of a medicament to improve anxiety symptoms associated with MDD, wherein the medicament is for administration to the patient at a low dose; and wherein the patient is subject to transcranial magnetic stimulation, optionally intermittent or continuous theta-burst stimulation (iTBS or cTBS), high- or low-frequency stimulation or combinations thereof.
12. The use according to claim 11, wherein the low dose is a dose of D-cycloserine sufficient to achieve a plasma concentration of D-cycloserine of 1-30 µg/mL.
13. Use of D-cycloserine or a N-methyl-D-aspartate receptor agonist or a partial N-methyl-D-aspartate receptor agonist in the manufacture of a medicament to prolong effects of transcranial magnetic stimulation, including intermittent theta-burst stimulation, as measured by neurophysiology including electromyography or encephalography, wherein the medicament is for administration to the patient a low dose and wherein the patient is subject to transcranial magnetic stimulation, optionally intermittent or continuous theta-burst stimulation (iTBS or cTBS), high- or low-frequency stimulation or combinations thereof.