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(54) Title: QUANTITATIVE METHOD OF DETERMINING A MENTAL STATUS BASED ON DRD1 AND/OR DRD5, AND ITS APPLICATION THEREOF

(57) Abstract: A method of treatment of mental disorder of a subject includes the steps of: normalizing an expression of both DRD1 and DRD5, which belong to DRD1-like family, of the subject to a preset standard level. The DRD1/5 level and expression can be increased or decreased bidirectionally by targeting an upstream promoter sequence of DRD1/5. The promoter activity of DRD1/5 can be attenuated by using an antipsychotic which directly targets the DRD1/5 promoter. The antipsychotics being used are typical and/or atypical antipsychotic medications such as Haloperidol, Risperidone, Clozapine and Cariprazine. The treatment is also useful for the subject with an impaired constitutive expression of DRD1/5 gene. The method can be used to treat schizophrenia, autism, depression, mania and bipolar disorders by normalizing the DRD1/5 expression level. The promoter gene sequencing of DRD1 and/or DRD5 can also be used for quantitative mental health screening through comparing with a standard sequence database.

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