



- (51) **International Patent Classification:**
C12Q 1/6883 (2018.01) *G01N 33/68* (2006.01)
- (21) **International Application Number:**
PCT/IB2022/054347
- (22) **International Filing Date:**
10 May 2022 (10.05.2022)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
63/187,078 11 May 2021 (11.05.2021) US
- (71) **Applicant:** NEURIM PHARMACEUTICALS (1991) LTD. [IL/IL]; 27 HaBarzel Street, 6971039 Tel Aviv (IL).
- (72) **Inventors:** ZISAPEL, Nava; c/o Neurim Pharmaceuticals (1991) Ltd., 27 HaBarzel Street, 6971039 Tel Aviv (IL). LAUDON, Moshe; c/o Neurim Pharmaceuticals (1991) Ltd., 27 HaBarzel Street, 6971039 Tel Aviv (IL).

(81) **Designated States** (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AO, AT, AU, AZ, BA, BB, BG, BH, BN, BR, BW, BY, BZ, CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, JO, JP, KE, KG, KH, KN, KP, KR, KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG, MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM, PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, SC, SD, SE, SG, SK, SL, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(84) **Designated States** (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM,

(54) **Title:** METHOD FOR DIAGNOSING AND TREATING SUBJECTS HAVING SINGLE NUCLEOTIDE POLYMORPHISMS IN CHROMOSOME 2, 2:107,510,000-107,540,000 LOCUS

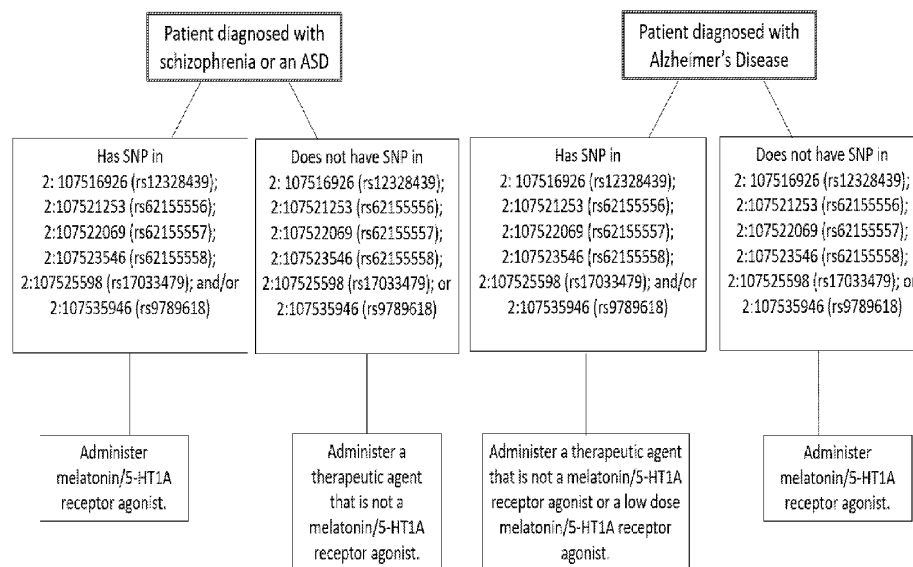


FIG. 1

(57) **Abstract:** Methods and products for identifying individuals who are likely to respond in a positive (benefit) or negative (harm) manner to a pharmacological drug treatment intended for treating or preventing a neuropsychiatric disorder, neurodegeneration, sleep-wake cycles such including and not limited to Alzheimer's disease, schizophrenia, autism and attention disorders based on single nucleotide polymorphisms (SNP) chromosome 2, 2: 107,510,000-107,540,000 locus (as disclosed in the Genome Reference Consortium Human genome build 37 (GRCh37)).

[Continued on next page]

TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW,
KM, ML, MR, NE, SN, TD, TG).

Published:

- *with international search report (Art. 21(3))*
- *with sequence listing part of description (Rule 5.2(a))*