

CORRECTED VERSION

(19) World Intellectual Property
Organization
International Bureau



(10) International Publication Number
WO 2022/183011 A9

(43) International Publication Date
01 September 2022 (01.09.2022)

WIPO | PCT

(51) International Patent Classification:

C12N 15/113 (2010.01) *A61K 45/06* (2006.01)
C12Q 1/6876 (2018.01) *C12Q 1/6844* (2018.01)
A61P 25/24 (2006.01) *A61P 25/18* (2006.01)
C12Q 1/6874 (2018.01)

Published:

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

(48) Date of publication of this corrected version:

17 November 2022 (17.11.2022)

(21) International Application Number:

PCT/US2022/017936

(15) Information about Correction:

see Notice of 17 November 2022 (17.11.2022)

(22) International Filing Date:

25 February 2022 (25.02.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/154,168 26 February 2021 (26.02.2021) US

(72) Inventors; and

(71) Applicants: **MELLIOS, Nikolaos** [US/US]; 9216 Calistoga Avenue NE, Albuquerque, New Mexico 87122 (US).
TRIVEDI, Madhukar H. [US/US]; 101 Broadway Blvd. NE, Suite 1100, Albuquerque, New Mexico 87102 (US).

(74) Agent: **PERDOK, Monique M.** et al.; P.O. Box 2938, Minneapolis, Minnesota 55402 (US).

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

(54) Title: CIRCULAR RNAs FOR DIAGNOSIS OF DEPRESSION AND PREDICTION OF RESPONSE TO ANTIDEPRESSANT TREATMENT

(57) Abstract: A plurality of circular RNAs (circRNAs) the expression of which is correlated with diagnosis for Major Depressive Disorder (MDD) and Bipolar Disorder (BD) and response to treatment with various antidepressants is provided. The circRNAs are useful for compositions, kits, assays, and methods for the identification, diagnosis, screening, treatment, and/or monitoring of brain disorders such as MDD and BD.

WO 2022/183011 A9