

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
26 October 2023 (26.10.2023)



(10) International Publication Number
WO 2023/205116 A1

(51) International Patent Classification:

A61K 31/44 (2006.01) *A61K 31/135* (2006.01)
A61K 31/395 (2006.01) *A61K 31/33* (2006.01)
A61K 31/13 (2006.01)

LU, LV, MC, ME, 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).

(21) International Application Number:

PCT/US2023/018899

Published:

- with international search report (Art. 21(3))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

(22) International Filing Date:

18 April 2023 (18.04.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/332,324 19 April 2022 (19.04.2022) US

(71) Applicant: **GILGAMESH PHARMACEUTICALS, INC.** [US/US]; 113 University Place - Suite 1019, New York, New York 10003 (US).

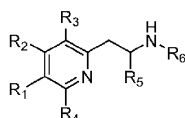
(72) Inventors: **O'NEILL, Brian Thomas**; 111 Meeting House Rd., Haddam, Connecticut 06438 (US). **COE, Jotham Wadsworth**; 8 Bush Hill Dr., Niantic, Connecticut 06357 (US). **KRUEGEL, Andrew Carry**; 1552 Long Hill Rd., Millington, New Jersey 07946 (US).

(74) Agent: **GROLZ, Edward**; Scully, Scot, Murphy & Presser, 400 Garden City Plaza Suite 300, Garden City, New York 11530 (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, CV, 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, MG, MK, MN, MU, 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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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,

(54) Title: PYRIDINE DERIVATIVES FOR TREATING PSYCHIATRIC DISORDERS



(57) Abstract: The present disclosure relates to a compound of the formula; or a pharmaceutically acceptable salt thereof, wherein R_1 , R_2 , R_3 , R_4 , R_5 , and R_6 are as defined herein. It also relates to pharmaceutical compositions comprising a compound of Formula I and to the use of the compound of Formula I for treating psychiatric disorders.

WO 2023/205116 A1