

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
25 January 2024 (25.01.2024)



(10) International Publication Number
WO 2024/020419 A1

(51) International Patent Classification:

C07D 471/04 (2006.01) C07D 495/04 (2006.01)
C07D 487/10 (2006.01) A61P 35/00 (2006.01)
C07D 491/107 (2006.01)

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.

(21) International Application Number:

PCT/US2023/070457

(22) International Filing Date:

18 July 2023 (18.07.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/390,251 18 July 2022 (18.07.2022) US
63/512,046 05 July 2023 (05.07.2023) US

(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,
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).

Declarations under Rule 4.17:

— as to applicant's entitlement to apply for and be granted a
patent (Rule 4.17(ii))

Published:

— with international search report (Art. 21(3))

(71) Applicant: IAMBIC THERAPEUTICS, INC. [US/US];
4470 W. Sunset Boulevard, Suite 107, PMB 94758, Los An-
geles, California 90027 (US).

(72) Inventors: VERNIER, William; 4470 W. Sunset Boule-
vard, Suite 107, PMB 94758, Los Angeles, California
90027 (US). NGUYEN, Quynh Nhu; 4470 W. Sunset
Boulevard, Suite 107, PMB 94758, Los Angeles, Califor-
nia 90027 (US). REZAYEE, Nomaan; 4470 W. Sunset
Boulevard, Suite 107, PMB 94758, Los Angeles, California
90027 (US). GOMEZ, Laurent; 4470 W. Sunset Boule-
vard, Suite 107, PMB 94758, Los Angeles, California 90027
(US). ZHANG, Chao; 4470 W. Sunset Boulevard, Suite
107, PMB 94758, Los Angeles, California 90027 (US).
MILLER, III, Thomas Francis; 4470 W. Sunset Boule-
vard, Suite 107, PMB 94758, Los Angeles, California 90027
(US). MANBY, Frederick Roy; 4470 W. Sunset Boule-
vard, Suite 107, PMB 94758, Los Angeles, California 90027
(US).

(74) Agent: MARGULIEUX, Grant et al.; WILSON
SONSINI, 650 Page Mill Road, Palo Alto, California 94304
(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,

(54) Title: AZA-QUINAZOLINE COMPOUNDS AND METHODS OF USE

(57) Abstract: Substituted aza-quinazoline compounds, conjugates, and pharmaceutical compositions for use in the treatment of cancer are disclosed herein. The disclosed compounds are useful, among other things, in the inhibition of CDK. In certain aspects, the disclosure generally relates to substituted quinolinone amide compounds or salts of Formula (I), (IA), (IAA), (IAAA), (IB), (IBB), (IC), (ICC), (ID), (IDD), (IE), and (IEE) and pharmaceutical compositions thereof.

WO 2024/020419 A1