

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
29 August 2024 (29.08.2024)



(10) International Publication Number
WO 2024/178390 A1

(51) International Patent Classification:

A61P 35/00 (2006.01) C07D 519/00 (2006.01)
C07D 471/04 (2006.01) A61K 31/437 (2006.01)

(21) International Application Number:

PCT/US2024/017162

(22) International Filing Date:

23 February 2024 (23.02.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/486,884	24 February 2023 (24.02.2023)	US
63/506,224	05 June 2023 (05.06.2023)	US
63/618,164	05 January 2024 (05.01.2024)	US

(71) Applicant: **TERREMOTO BIOSCIENCES, INC.**
[US/US]; 1700 Owens Street, Suite 540, San Francisco, California 94158 (US).

(72) Inventors: **CHU, Hang**; 1700 Owens Street, Suite 540, San Francisco, California 94158 (US). **REISBERG, Solomon H.**; 1700 Owens Street, Suite 540, San Francisco, California 94158 (US). **ZAJDLIK, Adam**; 1700 Owens Street, Suite 540, San Francisco, California 94158 (US). **YANG, Kin S.**; 1700 Owens Street, Suite 540, San Francisco, California 94158 (US). **CARELLI, Jordan D.**; 1700 Owens Street, Suite 540, San Francisco, California 94158 (US). **THOMPSON, Peter A.**; 1700 Owens Street, Suite 540, San Francisco, California 94158 (US).

(74) Agent: **PERLA, Luis**; WILSON SONSINI GOODRICH & ROSATI, 650 Page Mill Road, PALO ALTO, California 94304-1050 (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, 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:

— of inventorship (Rule 4.17(iv))

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))

(54) Title: COVALENT MODIFIERS OF AKT1 AND USES THEREOF

(57) Abstract: Provided herein are covalent modifiers of AKT1 of Formula (A), (A-1), (I), (I-A), (II), (II-A), (II-B), (III), (III-A), (III-B), (IV), (IV-A), (IV-B), (V), (V-A), (V-B), (VI), (VI-A), (VI-B), (VII), (VII-A), (VII-B), (VIII), (VIII-A), (VIII-B), (IX), (IX-A), (IX-B), (X), (X-A), (X-B), (XI), (XI-A), or (XI-B), and pharmaceutical compositions thereof. In some embodiments, the present disclosure provides methods of modulating AKT1 using a compound or salt of Formula (A), (A-1), (I), (I-A), (II), (II-A), (II-B), (III), (III-A), (III-B), (IV), (IV-A), (IV-B), (V), (V-A), (V-B), (VI), (VI-A), (VI-B), (VII), (VII-A), (VII-B), (VIII), (VIII-A), (VIII-B), (IX), (IX-A), (IX-B), (X), (X-A), (X-B), (XI), (XI-A), or (XI-B), and pharmaceutical compositions thereof.



WO 2024/178390 A1