

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
01 February 2024 (01.02.2024)



(10) International Publication Number
WO 2024/020684 A1

(51) International Patent Classification:

C07D 473/18 (2006.01) A61K 47/68 (2017.01)
A61K 31/52 (2006.01) A61P 35/00 (2006.01)
A61K 31/522 (2006.01) C07D 473/16 (2006.01)
A61K 47/50 (2017.01) C07K 5/00 (2006.01)
A61K 47/60 (2017.01) C07K 16/18 (2006.01)
A61K 47/65 (2017.01) C07K 16/30 (2006.01)

(21) International Application Number:

PCT/CA2023/051006

(22) International Filing Date:

26 July 2023 (26.07.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/392,329 26 July 2022 (26.07.2022) US

(71) Applicant: ZYMEWORKS BC INC. [CA/CA]; 114 East 4th Avenue, Suite 800, Vancouver, British Columbia V5T 1G4 (CA).

(72) Inventors: GARNETT, Graham Albert Edwin; 114 East 4th Avenue, Suite 800, Vancouver, British Columbia V5T 1G4 (CA). HIRKALA-SCHAEFER, Truman; 114 East 4th Avenue, Suite 800, Vancouver, British Columbia V5T 1G4 (CA). BRANT, Michael G.; 114 East 4th Avenue, Suite 800, Vancouver, British Columbia V5T 1G4 (CA). COLOMBO, Raffaele; 114 East 4th Avenue, Suite 800, Vancouver, British Columbia V5T 1G4 (CA). DUAN, Zhuang; 114 East 4th Avenue, Suite 800, Vancouver, British Columbia V5T 1G4 (CA). BARNSCHER, Stuart Daniel; 114 East 4th Avenue, Suite 800, Vancouver, British Columbia V5T 1G4 (CA).

(74) Agent: SALISBURY, Clare et al.; Gowling WLG (Canada) LLP, 550 Burrard Street, Suite 2300, Bentall 5, Vancouver, British Columbia V6C 2B5 (CA).

(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).

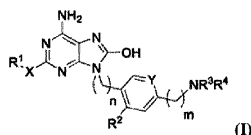
Declarations under Rule 4.17:

- as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))
- as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))

Published:

- with international search report (Art. 21(3))
- in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE

(54) Title: IMMUNOMODULATOR PURINE-DERIVED COMPOUNDS, CONJUGATES THEREOF, AND METHODS OF USE THEREOF



(57) Abstract: Disclosed are purine-derived compounds of general Formula (I), wherein X is O or NH; Y is CH or N; R¹ is an optionally substituted alkyl; n is 1 to 4; m is 0 to 4, R² is H, halogen, alkyl or alkoxy; each of R³ and R⁴ is H, OH, NR⁶R⁷, optionally substituted alkyl, alkenyl, cycloalkyl, heterocycloalkyl, aryl or heteroaryl; or R³, R⁴ and N together may form a ring. Also disclosed are immunostimulatory antibody conjugates (ISACs) comprising such compounds, as well as methods for producing and using such compounds, e.g., for the treatment of diseases such as cancer.

WO 2024/020684 A1