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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
19 March 2020 (19.03.2020)

WIPO | PCT

(10) International Publication Number
WO 2020/056066 A1

(51) International Patent Classification:
A61K 45/00 (2006.01)

(21) International Application Number:
PCT/US2019/050709

(22) International Filing Date:
11 September 2019 (11.09.2019)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/729,925 11 September 2018 (11.09.2018) US
62/815,964 08 March 2019 (08.03.2019) US

(71) Applicant: **AMBRX, INC.** [US/US]; 10975 North Torrey Pines Road, La Jolla, CA 92037 (US).

(72) Inventors: **CHEN, Sigeng**; 10704 Ballystock Court, San Diego, CA 92131 (US). **LU, Yingchun**; 6291 Sunrose Crest Way, San Diego, CA 92130 (US). **RASHID, Md, Harunur**; 9525 Genesee Ave. Apt 213, San Diego, CA 92121 (US). **KNUDSEN, Nickolas**; 1916 Rohn Road, Escondido, CA 92025 (US). **TIAN, Feng**; 8374 Orange Haven Place, San Diego, CA 92129 (US).

(74) Agent: **BERESFORD, Sharon**; c/o Ambrx, Inc., 10975 North Torrey Pines Road, La Jolla, CA 92037 (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, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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).

Published:
— *with international search report (Art. 21(3))*
— *with sequence listing part of description (Rule 5.2(a))*

(54) Title: INTERLEUKIN-2 POLYPEPTIDE CONJUGATES AND THEIR USES

(57) Abstract: The present invention provides methods for targeting interleukin-2 receptor-expressing cells, and, in particular, inhibiting the growth of such cells by using an interleukin-2 (IL-2) variant conjugated to a biologically active molecule that will affect cells expressing the interleukin-2 receptor.

WO 2020/056066 A1