

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

(19) World Intellectual Property
Organization

International Bureau

(43) International Publication Date
19 December 2024 (19.12.2024)



(10) International Publication Number
WO 2024/259378 A1

(51) International Patent Classification:

A61K 39/395 (2006.01) C07K 14/725 (2006.01)
A61P 35/02 (2006.01) C07K 16/28 (2006.01)
C07K 7/00 (2006.01)

(21) International Application Number:

PCT/US2024/034204

(22) International Filing Date:

14 June 2024 (14.06.2024)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/508,265 14 June 2023 (14.06.2023) US
63/647,855 15 May 2024 (15.05.2024) US

(71) Applicant: AMGEN INC. [US/US]; One Amgen Center Drive, Thousand Oaks, CA 91320-1799 (US).

(72) Inventors: CONNER, Kip; c/o Amgen Inc., One Amen Center Drive, Mail Stop 28-5-A, Thousand Oaks, CA 91320-1799 (US). ACKER, Tim; c/o Amgen Inc., One Amen Center Drive, Mail Stop 28-5-A, Thousand Oaks, CA 91320-1799 (US). ROCK, Dan; c/o Amgen Inc., One Amen Center Drive, Mail Stop 28-5-A, Thousand Oaks, CA 91320-1799 (US). THINN, Aye, Myat; c/o Amgen Inc., One Amen Center Drive, Mail Stop 28-5-A, Thousand Oaks, CA 91320-1799 (US). UMEDA, Aiko; c/o Amgen Inc., One Amen Center Drive, Mail Stop 28-5-A, Thousand Oaks, CA 91320-1799 (US).

(74) Agent: JANULIS, Lynn, L.; Marshall, Gerstein & Borun LLP, 233 South Wacker Drive, 6300 Willis Tower, Chicago, IL 60606-6357 (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):

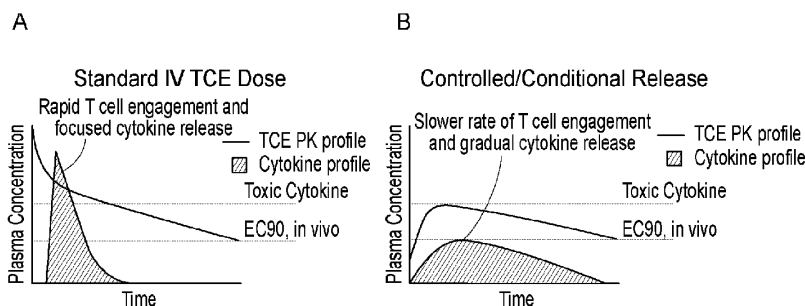
ARIPO (BW, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, SD, SL, ST, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, RU, TJ, TM), European (AL, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HR, HU, IE, IS, IT, LT, LU, LV, MC, ME, MK, MT, NL, NO, PL, PT, RO, RS, SE, SI, SK, SM, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, KM, ML, MR, NE, SN, TD, TG).

Published:

- with international search report (Art. 21(3))
- with sequence listing part of description (Rule 5.2(a))

(54) Title: T CELL ENGAGER MASKING MOLECULES

FIG. 1



(57) Abstract: The present invention relates to T cell engager masking molecules, and methods related thereto, that reduce the severity of cytokine release syndrome, wherein said molecules have (i.) a binding peptide which binds to a T-cell engaging paratope of a bispecific T cell engager molecule (TCE), (ii.) a linker, and (iii.) a half-life extending polymer.