(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)

WIPO | PCT

(10) International Publication Number
WO 2024/256843 A1

(51) International Patent Classification:
A61K 47/64 (2017.01) *C07K 16/46* (2006.01)
A61K 47/68 (2017.01) *C07K 19/00* (2006.01)

(21) International Application Number:
PCT/GB2024/051543

(22) International Filing Date:
17 June 2024 (17.06.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2309123.4 16 June 2023 (16.06.2023) GB
2316923.8 03 November 2023 (03.11.2023) GB

(71) Applicant: **VALINK THERAPEUTICS LTD** [GB/GB]; Imperial Translation & Innovation Hub, 84 Wood Lane, London, W12 0BZ (GB).

(72) Inventors: **SCHEU, Arne Hagen August**; Imperial Translation & Innovation Hub, 84 Wood Lane, London, Greater London W12 0BZ (GB). **KHAIRIL, Irsyad**; Imperial Translation & Innovation Hub, 84 Wood Lane, London, Greater London W12 0BZ (GB). **NIKOV, Georgi**; Imperial Translation & Innovation Hub, 84 Wood Lane, London, Greater London W12 0BZ (GB). **DORGAN, Benjamin**; Imperial Translation & Innovation Hub, 84 Wood Lane, London, Greater London W12 0BZ (GB). **CHAVEZ, Oswaldo Javier Aguay**; Imperial Translation & Innovation Hub, 84 Wood Lane, London, Greater London W12 0BZ (GB).

(74) Agent: **ELKINGTON AND FIFE LLP**; Prospect House, 8 Pembroke Road, Sevenoaks, Kent TN13 1XR (GB).

(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,

WO 2024/256843 A1

(54) Title: CONJUGATED MOLECULES

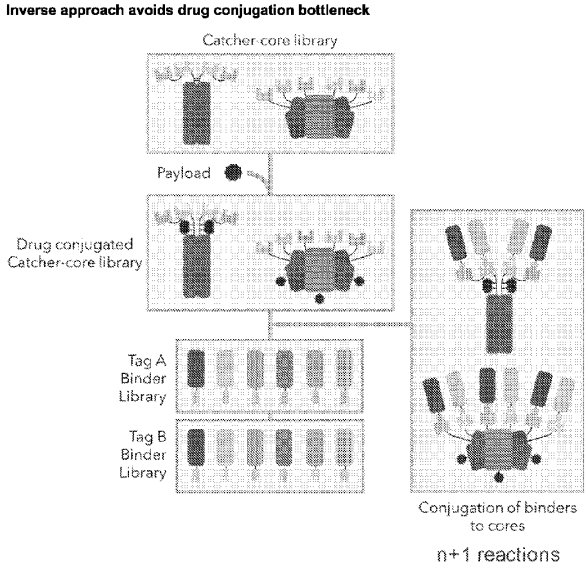


Figure 1

(57) Abstract: Provided herein are methods of preparing and/or identifying multivalent antibody conjugates, for example multispecific antibody conjugates such as bispecific antibody drug conjugates, and the conjugated multivalent molecules that are identified by the method. In particular, the invention relates to a method of preparing a multivalent binding polypeptide conjugated to a molecule of interest, wherein the method comprises combining a first polypeptide that is conjugated to a molecule of interest, with at least one other polypeptide to form a multivalent binding polypeptide conjugated to the molecule of interest. Intermediates, polypeptide constructs, kits and uses are also provided.

[Continued on next page]

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))*