



(51) International Patent Classification:

A61K 51/10 (2006.01) A61P 35/00 (2006.01)
A61K 47/68 (2017.01)

(21) International Application Number:

PCT/IB2022/050673

(22) International Filing Date:

26 January 2022 (26.01.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

63/142,147 27 January 2021 (27.01.2021) US
63/144,586 02 February 2021 (02.02.2021) US

(71) Applicant: **JANSSEN BIOTECH, INC.** [US/US];
800/850 Ridgeview Drive, Horsham, Pennsylvania 19044
(US).

(72) Inventors: **SHEN, Fei**; Welsh & McKean Roads, Spring
House, Pennsylvania 19477 (US). **MCDEVITT, Theres-**
sa; Welsh & McKean Rds., Spring House, Pennsylvania
19477 (US). **GOLDBERG, Shalom**; 1400 McKean Road,

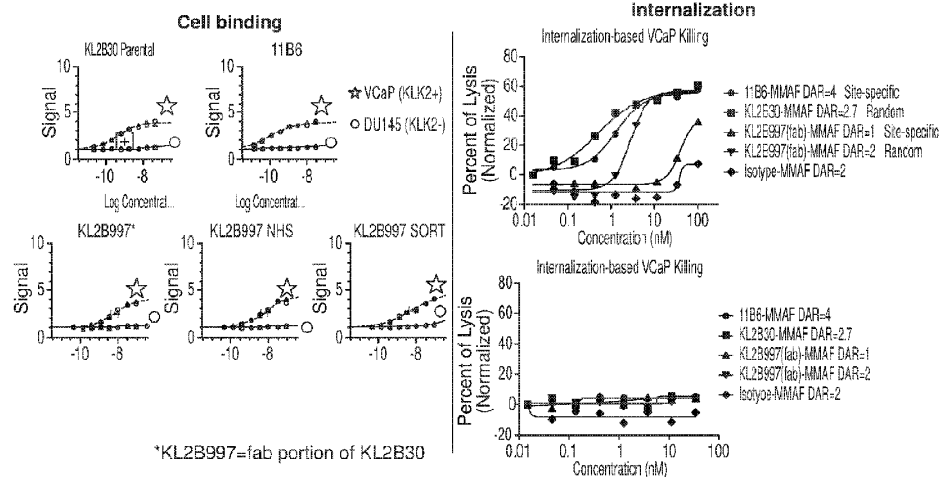
Spring House, Pennsylvania 19477 (US). **WILEY, Kris-**
ten; Welsh & McKean Rds., Spring House, Pennsylvania
19477 (US). **SMITH, Ryan M.**; Welsh & McKean Rds.,
Spring House, Pennsylvania 19477 (US). **VENKATARA-**
MANI, Sathyadevi; Welsh & McKean Rds., Spring House,
Pennsylvania 19477 (US).

(74) Agent: **SHIRTZ, Joseph F.** et al.; Johnson & Johnson,
One Johnson & Johnson Plaza, New Brunswick, New Jer-
sey 08933 (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, IT, 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, ST, SV, SY, TH, TJ, TM, TN,
TR, TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(54) Title: IMMUNOCONJUGATES COMPRISING KALLIKREIN RELATED PEPTIDASE 2 ANTIGEN BINDING DOMAINS
AND THEIR USES

Cell binding and internalization

**FIG. 1**

(57) Abstract: Provided herein are immunoconjugates, such as radioimmunoconjugates, comprising a therapeutic moiety conjugated to an antibody or antigen binding domain with binding specificity for hK2. In certain embodiments, the hK2-specific immunoconjugate demonstrates a short half-life. Also provided herein are methods of using the immunoconjugates for selectively targeting cancer cells and for treating diseases such as prostate cancer.

[Continued on next page]

(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).

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))*
- *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))*
- *with sequence listing part of description (Rule 5.2(a))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*

(88) Date of publication of the international search report:

29 September 2022 (29.09.2022)