

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
30 September 2021 (30.09.2021)



(10) International Publication Number
WO 2021/195131 A1

(51) International Patent Classification:

A61K 51/04 (2006.01) G01N 33/574 (2006.01)
A61K 39/395 (2006.01)

(21) International Application Number:

PCT/US2021/023755

(22) International Filing Date:

23 March 2021 (23.03.2021)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/993,622 23 March 2020 (23.03.2020) US

(71) Applicant: **FUSION PHARMACEUTICALS INC.**
[CA/CA]; 270 Longwood Road South, Hamilton, Ontario
L8P 0A6 (CA).

(72) Inventor; and

(71) Applicant (for US only): **BURAK, Eric Steven** [US/CA];
40 James Street, Cambridge, Ontario N1S 1C5 (CA).

(72) Inventors: **SCHWABISH, Marc**; 73 Edgemoor Avenue,
Wellesley, Massachusetts 02482 (US). **GRINSHTEIN,**
Natalie; 112 River Oaks Blvd., Building E, Oakville, On-
tario L6H 4C5 (CA).

(74) Agent: **BIEKER, Kristina** et al.; Goodwin Procter LLP,
100 Northern Avenue, IP DOCKETING DEPT./7TH FL,
Boston, Massachusetts 02210 (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.

(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).

(54) Title: FGFR3-TARGETED RADIOIMMUNOCONJUGATES AND USES THEREOF

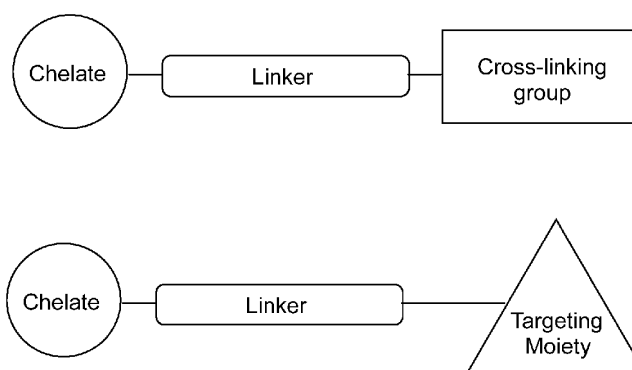


Fig. 1A

(57) Abstract: Radioimmunoconjugates including a chelating moiety or a metal complex thereof, a linker, and an FGFR3 targeting moiety. Pharmaceutical compositions of such radioimmunoconjugates and methods of treatment for conditions, e.g., cancer, using such pharmaceutical compositions.

[Continued on next page]



WO 2021/195131 A1

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))*
- *with sequence listing part of description (Rule 5.2(a))*