



(51) International Patent Classification:

A61P 25/00 (2006.01) *A61K 47/68* (2017.01)
A61K 31/566 (2006.01) *A61P 3/00* (2006.01)
A61K 31/724 (2006.01) *A61P 29/00* (2006.01)
C07J 41/00 (2006.01) *A61P 35/00* (2006.01)
C07J 71/00 (2006.01)

(21) International Application Number:

PCT/US2018/031839

(22) International Filing Date:

09 May 2018 (09.05.2018)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/508,315 18 May 2017 (18.05.2017) US

(71) Applicant: **REGENERON PHARMACEUTICALS, INC.** [US/US]; 777 OLD SAW MILL RIVER ROAD, TARRYTOWN, New York 10591 (US).

(72) Inventors: **HAN, Amy**; c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707 (US). **OLSON, William**; c/o Regeneron Pharmaceuticals, Inc., 777 Old Saw Mill River Road, Tarrytown, New York 10591-6707 (US).

(74) Agent: **PATHAK, Rahul** et al.; Squire Patton Boggs (US) LLP, 1801 page Mill Road, Palo Alto, California 94304 (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.

(54) Title: CYCLODEXTRIN PROTEIN DRUG CONJUGATES

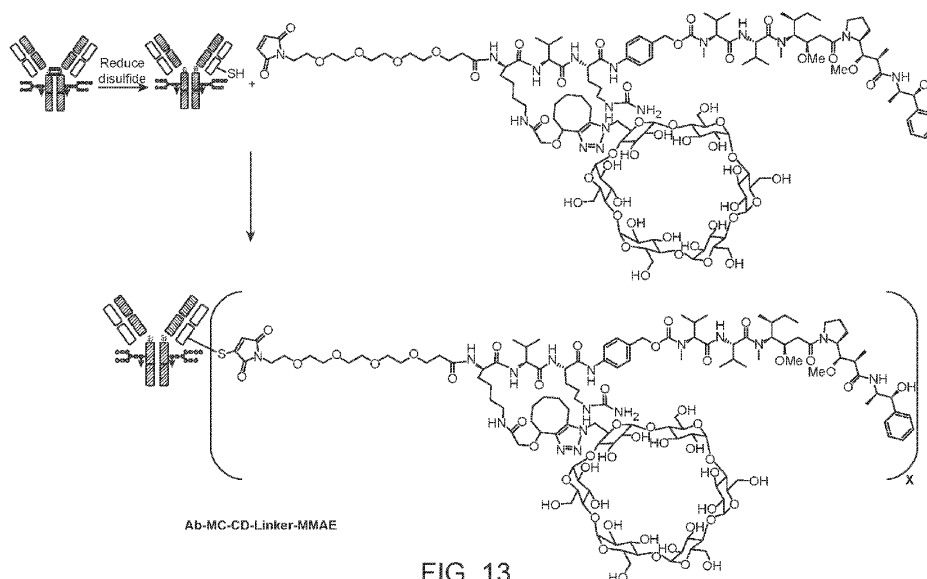


FIG. 13

(57) Abstract: Provided herein are compounds, compositions, conjugates and methods for the treatment of diseases, and/or conditions such as, but not limited to, proliferative diseases. In certain embodiments, compounds, compositions, and conjugates are provided, which include cyclodextrin-based linker-payloads and protein conjugates thereof, and/or in combination with other agents. By administering these compounds, compositions, and conjugates as described herein to specific target cells, side-effects due to non-specific binding phenomena, for example, to non-target cells are reduced.

[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 the identity of the inventor (Rule 4.17(i))*
- *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))*