

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
08 October 2020 (08.10.2020)



(10) International Publication Number
WO 2020/206354 A1

(51) International Patent Classification:

C07K 16/28 (2006.01) A61P 37/00 (2006.01)
A61P 31/00 (2006.01)

(21) International Application Number:

PCT/US2020/026721

(22) International Filing Date:

03 April 2020 (03.04.2020)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

62/830,139 05 April 2019 (05.04.2019) US

(71) Applicant: **DREN BIO, INC.** [US/US]; 321 Grunion Ct.,
Foster City, California 94404 (US).

(72) Inventors: **FOTAKIS, Panagiotis**; c/o Dren Bio, Inc., 321
Grunion Ct., Foster City, California 94404 (US). **CHAN,**
Chanty Mariategue; c/o Dren Bio, Inc., 321 Grunion
Ct., Foster City, California 94404 (US). **SHI, Ruo Shi**; c/

o Dren Bio, Inc., 321 Grunion Ct., Foster City, California 94404 (US). **SALLES, Adam Lewis**; c/o Dren Bio, Inc., 321 Grunion Ct., Foster City, California 94404 (US). **TOMASEVIC, Nenad**; c/o Dren Bio, Inc., 321 Grunion Ct., Foster City, California 94404 (US).

(74) Agent: **JONES, Kevin**; Morrison & Foerster LLP, 425
Market Street, San Francisco, California 94105 (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, ST, SV, SY, TH, TJ, TM, TN, TR,
TT, TZ, UA, UG, US, UZ, VC, VN, WS, ZA, ZM, ZW.

(54) Title: METHODS OF DEPLETING DISEASE CAUSING AGENTS VIA ANTIBODY TARGETED PHAGOCYTOSIS

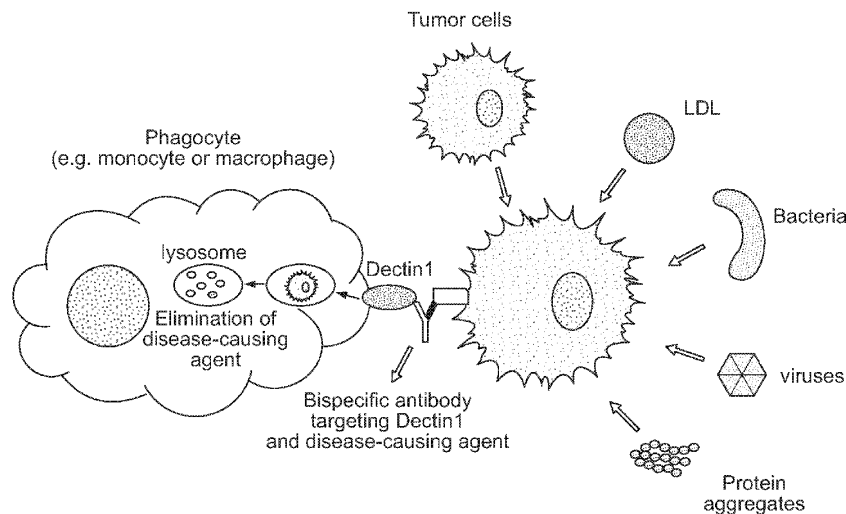


FIG. 1B

(57) Abstract: The present disclosure relates to a method of depleting or reducing the numbers of disease-causing agents including host cells, or host cells products, microbes or their products in a human subject upon administration of molecule that causes targeted phagocytosis and comprises a binding domain that binds a specific phagocytotic receptor, such as Dectin-1, and a binding domain that binds a specific disease-causing agent. In a specific embodiment, a method of the disclosure depletes or reduces the number of disease-causing agents in tissues, blood, or bone marrow by targeted phagocytosis.

[Continued on next page]



WO 2020/206354 A1

(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).

Published:

— with international search report (Art. 21(3))