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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
13 April 2017 (13.04.2017)

WIPO | PCT

(10) International Publication Number
WO 2017/062619 A2

(51) International Patent Classification:
A61K 31/785 (2006.01) *C08F 128/04* (2006.01)

(21) International Application Number:
PCT/US2016/055750

(22) International Filing Date:
6 October 2016 (06.10.2016)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
62/239,020 8 October 2015 (08.10.2015) US

(71) Applicant: **MACROGENICS, INC.** [US/US]; 9704 Medical Center Drive, Rockville, MD 20850 (US).

(72) Inventors: **VASSELLI, James**; 9704 Medical Center Drive, Rockville, MD 20850 (US). **WIGGINTON, Jon, Marc**; 9704 Medical Center Drive, Rockville, MD 20850 (US). **BONVINI, Ezio**; 11136 Powder Horn Drive, Potomac, MD 20854 (US). **KOENIG, Scott**; 10901 Ralston Road, Rockville, MD 20852 (US).

(74) Agents: **AUERBACH, Jeffrey, I.** et al.; AuerbachSchrot LLC, 2200 Research Blvd., Suite 560, Rockville, MD 20850 (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, JP, KE, KG, 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.

(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:

— *without international search report and to be republished upon receipt of that report (Rule 48.2(g))*

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

WO 2017/062619 A2

(54) **Title**: COMBINATION THERAPY FOR THE TREATMENT OF CANCER

(57) **Abstract**: The present invention is directed to a combination therapy involving the administration of a first molecule that specifically binds to human B7-H3 and a second molecule that that specifically binds to human PD-1 to a subject for the treatment of cancer and/or inflammation. The invention also concerns pharmaceutical compositions that comprise a first molecule that specifically binds to human B7-H3 and a second molecule that specifically binds to human PD-1 that are capable of mediating, and more preferably enhancing, the activation of the immune system against cancer cells that are associated with any of a variety of human cancers. The invention also relates to the use of such pharmaceutical compositions to treat cancer and other diseases in recipient subjects.