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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
14 May 2020 (14.05.2020)

WIPO | PCT

(10) International Publication Number
WO 2020/096986 A3

(51) International Patent Classification:
C12N 5/0783 (2010.01) *A61K 35/17* (2015.01)

(21) International Application Number:
PCT/US2019/059716

(22) International Filing Date:
04 November 2019 (04.11.2019)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

62/756,006	05 November 2018 (05.11.2018)	US
62/826,831	29 March 2019 (29.03.2019)	US
62/903,629	20 September 2019 (20.09.2019)	US
62/924,602	22 October 2019 (22.10.2019)	US

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(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.

(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: SELECTION OF IMPROVED TUMOR REACTIVE T-CELLS

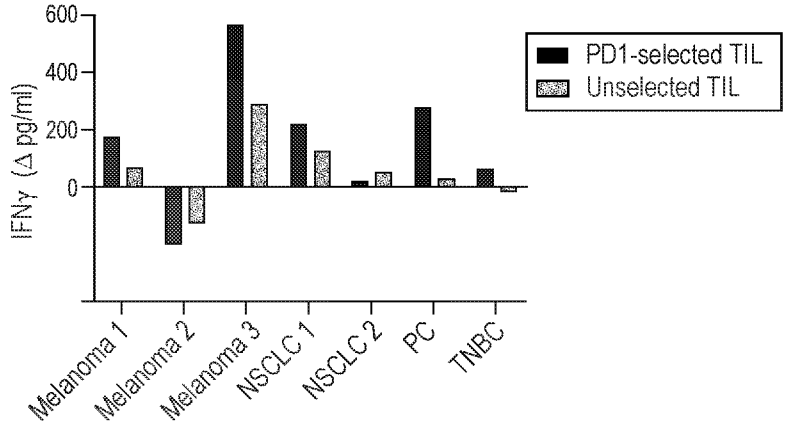


FIG. 171

(57) Abstract: The present invention provides methods for preselecting TILs based on PD-1 expression, as well as methods for expanding those preselected PD-1 positive TILs in order to produce therapeutic populations of TILs with enhanced tumor-specific killing capacity (*e.g.*, enhanced cytotoxicity).

[Continued on next page]

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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))*

(88) Date of publication of the international search report:
18 June 2020 (18.06.2020)

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2019/059716

A. CLASSIFICATION OF SUBJECT MATTER
INV. C12N5/0783 A61K35/17
ADD.

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)
C12N A61K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
EPO-Internal, WPI Data

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ALENA GROS ET AL: "PD-1 identifies the patient-specific CD8+ tumor-reactive repertoire infiltrating human tumors", JOURNAL OF CLINICAL INVESTIGATION, vol. 124, no. 5, 1 May 2014 (2014-05-01), pages 2246-2259, XP055193068, ISSN: 0021-9738, DOI: 10.1172/JCI73639	183-187
Y	abstract page 2248; figure 2 page 2249; figure 3 page 2256, right-hand column, paragraph 2 page 2257, right-hand column, paragraph 3	1-182, 188-205

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[X] Further documents are listed in the continuation of Box C.

[X] See patent family annex.

* Special categories of cited documents :

"A" document defining the general state of the art which is not considered to be of particular relevance

"E" earlier application or patent but published on or after the international filing date

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Date of the actual completion of the international search	Date of mailing of the international search report
29 April 2020	12/05/2020

Name and mailing address of the ISA/	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Fax: (+31-70) 340-3016	Grötzinger, Thilo

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Form PCT/ISA/210 (second sheet) (April 2005)

INTERNATIONAL SEARCH REPORT

International application No
PCT/US2019/059716

C(Continuation). DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Y	JIANJIAN JIN ET AL: "Simplified Method of the Growth of Human Tumor Infiltrating Lymphocytes in Gas-permeable Flasks to Numbers Needed for Patient Treatment :", JOURNAL OF IMMUNOTHERAPY, vol. 35, no. 3, 1 April 2012 (2012-04-01), pages 283-292, XP055568014, US ISSN: 1524-9557, DOI: 10.1097/CJI.0b013e31824e801f abstract page 3, paragraph 2-4	1-205
Y	Anthony F Massaro ET AL: "Solid-Phase Anti-CD3 Antibody Activation of Murine Tumor-infiltrating Lymphocytes1", CANCER RESEARCH, 1 May 1990 (1990-05-01), pages 2587-2592, XP055690431, Retrieved from the Internet: URL:https://cancerres.aacrjournals.org/content/canres/50/9/2587.full.pdf [retrieved on 2020-04-29] abstract page 2589; figure 2	1-205
Y	WO 2018/081473 A1 (IOVANCE BIOTHERAPEUTICS INC [US]) 3 May 2018 (2018-05-03) abstract page 21, paragraph 143	1-205

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No
PCT/US2019/059716

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