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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
07 July 2022 (07.07.2022)

WIPO | PCT

(10) International Publication Number
WO 2022/147092 A1

(51) International Patent Classification:
A61K 31/519 (2006.01) *A61K 39/395* (2006.01)
A61K 31/4375 (2006.01) *A61K 45/06* (2006.01)
A61K 31/506 (2006.01) *A61P 35/00* (2006.01)

(21) International Application Number:
PCT/US2021/065472

(22) International Filing Date:
29 December 2021 (29.12.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
63/131,659 29 December 2020 (29.12.2020) US

(71) Applicant: **INCYTE CORPORATION** [US/US]; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US).

(72) Inventors: **WANG, Hui**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **ALMAGRO, Juan CARLOS**; 320 Concord Ave., Cambridge, Massachusetts 02138 (US). **BUONPANE, Rebecca A.**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **CARLSEN, Peter NIELS**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **HUANG, Taisheng**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **LI, Yong**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **NASTRI, Horacio G.**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **QI, Chao**; 782 Jacobsen Cir., Newark, Delaware 19702 (US). **STEWART, Shaun M.**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **WANG, Xiaozhao**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **WU, Liangxing**; 108 Sassafrass Court, Wilmington, Delaware 19808 (US). **YAO, Wenqing**; 45 Magnolia Way, Chadds Ford, Pennsylvania 19317 (US). **ZHOU, Jing**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US). **ZHU, Wenyu**; 1801 Augustine Cut-Off, Wilmington, Delaware 19803 (US).

(74) Agent: **DAVEY, Evan A.** et al.; Fish & Richardson P.C., P.O. Box 1022, Minneapolis, Minnesota 55440-1022 (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).

Declarations under Rule 4.17:
— *as to applicant's entitlement to apply for and be granted a patent (Rule 4.17(ii))*

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))*

(54) Title: COMBINATION THERAPY COMPRISING A2A/A2B INHIBITORS, PD-1/PD-L1 INHIBITORS, AND ANTI-CD73 ANTIBODIES

(57) Abstract: Disclosed are combination therapies comprising administration of a CD73 inhibitor, an adenosine A2A or A2B receptor inhibitor, and a PD-1/PD-L1 inhibitor. The disclosed combination therapies are useful in the treatment of diseases related to the activity of adenosine receptors and/or CD73 and/or PD-1/PD-L1 including, for example, cancer, inflammatory diseases, cardiovascular diseases, and neurodegenerative diseases. Anti-CD73 antibodies, PD-1/PD-L1 inhibitors, and A2A/A2B inhibitors are also disclosed.

WO 2022/147092 A1