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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
10 February 2022 (10.02.2022)

WIPO | PCT

(10) International Publication Number
WO 2022/032132 A1

(51) International Patent Classification:
A61K 31/403 (2006.01) *C07D 401/14* (2006.01)
C07D 209/92 (2006.01)

(21) International Application Number:
PCT/US2021/045000

(22) International Filing Date:
06 August 2021 (06.08.2021)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

63/063,011	07 August 2020 (07.08.2020)	US
63/173,160	09 April 2021 (09.04.2021)	US
63/212,463	18 June 2021 (18.06.2021)	US

(71) Applicant: **C4 THERAPEUTICS, INC.** [US/US]; 490 Arsenal Way, Suite 200, Watertown, MA 02472 (US).

(72) Inventors: **PROIA, David**; c/o C4 Therapeutics, Inc., 490 Arsenal Way, Suite 200, Watertown, MA 02472 (US). **HENDERSON, James, A.**; c/o C4 Therapeutics, Inc., 490 Arsenal Way, Suite 200, Watertown, MA 02472 (US). **HE, Minsheng**; c/o C4 Therapeutics, Inc., 490 Arsenal Way, Suite 200, Watertown, MA 02472 (US). **GOOD, Andrew, Charles**; c/o C4 Therapeutics, Inc., 490 Arsenal Way, Suite 200, Watertown, MA 02472 (US). **PHILLIPS, Andrew, J.**; 6 Red Maple, Littleton, CO 80127 (US).

(74) Agent: **BELLOWS, Brent, R.** et al.; Knowles Intellectual Property Strategies, LLC, 400 Perimeter Center Terrace, Suite 200, Atlanta, GA 30346 (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))*

— *as to the applicant's entitlement to claim the priority of the earlier application (Rule 4.17(iii))*

(54) Title: ADVANTAGEOUS THERAPIES FOR DISORDERS MEDIATED BY IKAROS OR AIOLOS

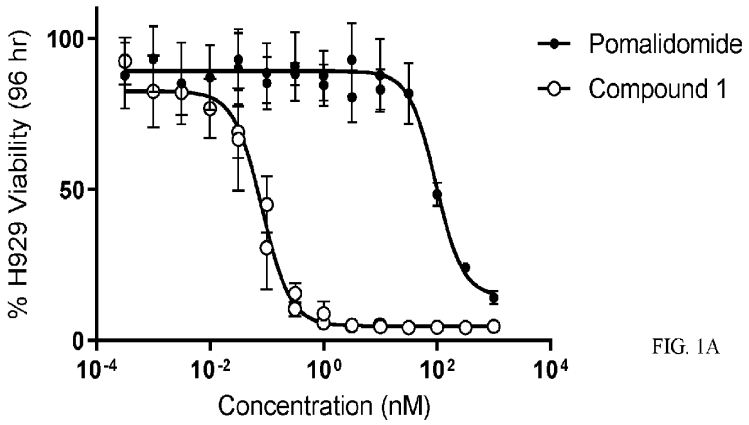


FIG. 1A

(57) Abstract: New treatments for Ikaros and/or Aiolos mediated disorders are provided that comprise administering an effective amount of a cereblon binder that degrades Ikaros or Aiolos by the ubiquitin proteasome pathway.

[Continued on next page]

WO 2022/032132 A1

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))*