

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
16 February 2023 (16.02.2023)



(10) International Publication Number
WO 2023/017263 A1

(51) International Patent Classification:

C07D 213/74 (2006.01) A61P 25/00 (2006.01)
C07D 401/12 (2006.01) A61K 31/4439 (2006.01)
C07D 405/14 (2006.01) A61K 31/444 (2006.01)
C07D 471/04 (2006.01) A61K 31/496 (2006.01)
C07D 487/04 (2006.01) A61K 31/506 (2006.01)

(21) International Application Number:

PCT/GB2022/052083

(22) International Filing Date:

10 August 2022 (10.08.2022)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

21190704.3 10 August 2021 (10.08.2021) EP

(71) Applicant: AUTIFONY THERAPEUTICS LIMITED

[GB/GB]; Stevenage Bioscience Catalyst, Gunnels Wood Road, Stevenage Hertfordshire SG1 2FX (GB).

(72) Inventors: ALVARO, Giuseppe; c/o Autifony Therapeutics Limited, Stevenage Bioscience Catalyst, Gunnels Wood Road, Stevenage Hertfordshire SG1 2FX (GB). MARASCO, Agostino; c/o Autifony Therapeutics Limited, Stevenage Bioscience Catalyst, Gunnels Wood Road, Stevenage Hertfordshire SG1 2FX (GB). RIVERS, Dean; c/o Autifony Therapeutics Limited, Stevenage Bioscience Catalyst, Gunnels Wood Road, Stevenage Hertfordshire SG1 2FX (GB).

(74) Agent: GOODALL, Scott et al.; Sagittarius IP, Marlow International, Parkway, Marlow Buckinghamshire SL7 1YL (GB).

(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, CV, CZ, DE, DJ, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IQ, IR, IS, IT, JM, 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.

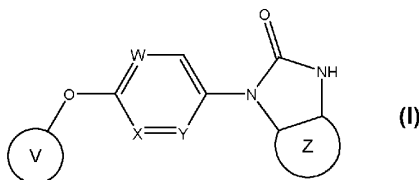
(84) Designated States (unless otherwise indicated, for every kind of regional protection available):

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).

Published:

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

(54) Title: POTASSIUM CHANNEL MODULATORS



(57) Abstract: Ion channel modulator compounds of the formula: (Formula (I)), and related aspects.

WO 2023/017263 A1