

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
01 February 2024 (01.02.2024)



(10) International Publication Number
WO 2024/025953 A3

(51) International Patent Classification:

A61K 31/335 (2006.01) *A61K 31/5415* (2006.01)
A61K 31/352 (2006.01) *A61K 31/55* (2006.01)
A61K 31/365 (2006.01) *A61K 45/06* (2006.01)
A61K 31/366 (2006.01) *A61P 1/00* (2006.01)
A61K 31/38 (2006.01) *A61P 1/16* (2006.01)
A61K 31/382 (2006.01) *A61P 9/00* (2006.01)
A61K 31/453 (2006.01) *A61P 11/00* (2006.01)
A61K 31/473 (2006.01) *A61P 21/00* (2006.01)
A61K 31/496 (2006.01) *A61P 25/28* (2006.01)
A61K 31/5377 (2006.01) *A61P 35/00* (2006.01)

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, CV, GH, GM, KE, LR, LS, MW, MZ, NA, RW, SC, 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, ME, 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).

(21) International Application Number:

PCT/US2023/028706

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))*

(22) International Filing Date:

26 July 2023 (26.07.2023)

(25) Filing Language:

English

(26) Publication Language:

English

(88) Date of publication of the international search report:

07 March 2024 (07.03.2024)

(30) Priority Data:

63/392,606 27 July 2022 (27.07.2022) US
63/412,078 30 September 2022 (30.09.2022) US

(71) Applicant: **VANDRIA SA** [CH/CH]; EPFL Innovation Park, Batiment E, 1015 Lausanne (CH).

(72) Inventors; and

(71) Applicants: **GRETEN, Florian** [US/DE]; Kinzistrasse 9, 61352 Bad Homburg (DE). **DENK, Dominic** [US/DE]; Institute for Tumor Biology and Experimental, Therapy Georg-Speyer-Haus, 60596 Frankfurt (DE).

(72) Inventors: **ANDREUX, Penelope**; Gondoux-Dessus 12, 1312 Eclepens (CH). **DUGI, Klaus, Andreas**; Avenue Eugene-Rambert 30, 1005 Lausanne (CH). **RINSCH, Christopher, L.**; Amazentis SA, EPFL Innovation Park, Batiment C, 1015 Lausanne (CH).

(74) Agent: **GORDON, Dana, M.**; Patent Group, Foley Hoag LLP, 155 Seaport Blvd., Boston, MA 02210-2600 (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, 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, MG, MK, MN, MU, 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,

(54) Title: THERAPEUTIC USES OF UROLITHIN DERIVATIVES

(57) Abstract: Disclosed are Urolithin derivatives for use in methods for treating a neuromuscular disorder, muscle disorder, heart disease, pulmonary fibrosis, liver disease, inflammatory bowel disease, or cancer. Also disclosed are Urolithin derivatives for use in a method of enhancing cancer immunotherapy.

WO 2024/025953 A3