



(51) International Patent Classification:

A61K 31/7052 (2006.01) C07D 487/04 (2006.01)
A61K 31/4985 (2006.01) C07H 17/08 (2006.01)
A61P 35/00 (2006.01)

(21) International Application Number:

PCT/IB2024/062053

(22) International Filing Date:

29 November 2024 (29.11.2024)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

63/604,464 30 November 2023 (30.11.2023) US

(71) Applicant: LUNELLA BIOTECH, INC. [CA/CA]; 145
Richmond Road, Ottawa, Ontario K1Z 1A1 (CA).

(72) Inventors: LISANTI, Michael P.; 842 Wilmslow Road,
Flat 27, Philip Godlee Lodge, Didsbury Village Greater
Manchester M20 2DS (GB). SOTGIA, Federica; 842

Wilmslow Road, Flat 27, Philip Godlee Lodge, Didsbury
Village Greater Manchester M20 2DS (GB). TÓTH, Fan-
ni; Márton utca 12. 4/8, 1094 Budapest (HU).

(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,
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,

(54) Title: SENOLYTIC COMPOSITIONS

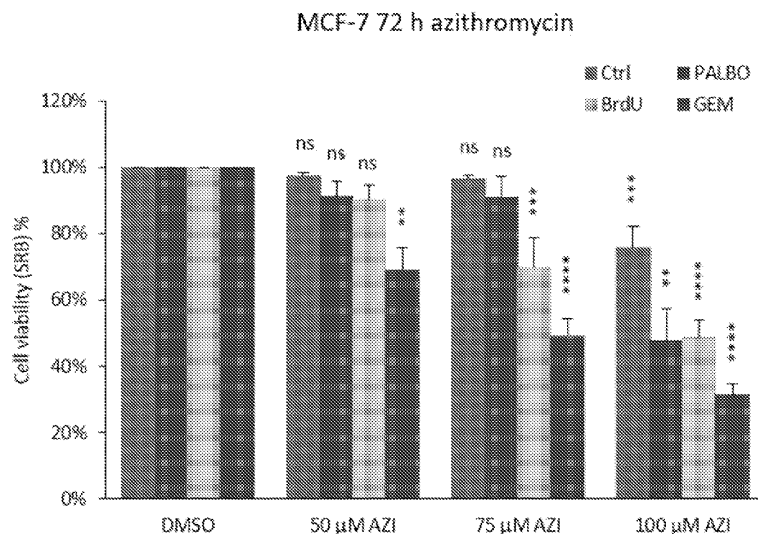


FIG. 1

(57) Abstract: The synergy between inhibiting senescence escaping behavior and senolytics may be used to inhibit the propagation of senescent cells and cancer stem cells. In embodiments of the present approach, a dipeptidyl peptidase-4 (DPP-4) inhibitor is used in combination with a senolytic selected from one of azithromycin and an azithromycin derivative. The senolytic activity of azithromycin and azithromycin derivatives is greatly improved through the DPP-4 inhibitor reducing or eliminating senescence escape in the senescent and/or cancer cell population.

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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).

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))*
- *in black and white; the international application as filed contained color or greyscale and is available for download from PATENTSCOPE*