

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

(19) World Intellectual Property
Organization
International Bureau

(43) International Publication Date
24 August 2023 (24.08.2023)



(10) International Publication Number
WO 2023/154984 A1

(51) International Patent Classification:

A61K 31/336 (2006.01) *A61K 33/243* (2019.01)
A61K 9/00 (2006.01) *A61N 5/10* (2006.01)
A61K 31/513 (2006.01) *A61P 35/00* (2006.01)

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

(21) International Application Number:

PCT/AU2023/050108

(22) International Filing Date:

17 February 2023 (17.02.2023)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:

2022900340 17 February 2022 (17.02.2022) AU

(71) Applicant: **QBIOTICS PTY LTD** [AU/AU]; Suite 3A
Level 1, 165 Moggill Road, Taringa, Queensland 4068
(AU).

(72) Inventors: **REDDELL, Paul Warren**; 7 Penda Street,
Yungaburra, Queensland 4884 (AU). **PARSONS, Peter
Gordon**; 317 Swann Road, St Lucia, Queensland 4067
(AU). **BOYLE, Glen Mathew**; 65 Hillsdon Road, Taringa,
Queensland 4068 (AU). **CULLEN, Jason Kingsley**; 6 Con-
sort Street, Alexandra Hills, Queensland 4161 (AU).

(74) Agent: **GRIFFITH HACK**; GPO Box 1285, Melbourne,
Victoria 3001 (AU).

(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, 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, 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).

(54) Title: COMBINATION THERAPIES

(57) Abstract: Provided herein are combination therapies comprising an epoxytiglane compound (for example, tigilanol tiglate) and either irradiation or a chemotherapeutic agent that is i) a chemotherapeutic agent that damages DNA (for example, cisplatin), or ii) a chemotherapeutic agent that inhibits tumour-associated host-derived cells that support the growth and/or invasion of tumour cells (for example, 5-fluoruracil, or doxorubicin). Pharmaceutical compositions and kits containing epoxytiglane compounds and the chemotherapeutic agents are also provided.

WO 2023/154984 A1