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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
8 October 2015 (08.10.2015)

WIPO | PCT

(10) International Publication Number
WO 2015/154064 A3

(51) International Patent Classification:
A61K 38/12 (2006.01)

(21) International Application Number:
PCT/US2015/024462

(22) International Filing Date:
6 April 2015 (06.04.2015)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/975,587 4 April 2014 (04.04.2014) US
62/062,246 10 October 2014 (10.10.2014) US

(71) Applicant: **DEL MAR PHARMACEUTICALS** [CA/CA]; Suite 115-887 Great Northern Way, Vancouver, British Columbia, V5T 4T5 (CA).

(72) Inventors; and
(71) Applicants : **BACHA, Jeffrey, A.** [US/CA]; Suite 115-887 Great Northern Way, Vancouver, British Columbia, V5T 4T5 (CA). **BROWN, Dennis, M.**; 3475 Edison Way, Suite R, Menlo Park, CA 94025 (US). **STEINØ, Anne** [CA/CA]; Suite 115-887 Great Northern Way, Vancouver, British Columbia, V5T 4T5 (CA).

(74) Agent: **FARBER, Michael, B.**; Ditthavoung & Steiner, P.C., 3129 Tiger Run Court, Suite A204, Carlsbad, CA 92010 (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, DK, DM, DO, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN, HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KN, KP, KR, 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, SM, ST, SV, SY, TH, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, 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))*

(88) Date of publication of the international search report:
14 January 2016

(54) Title: USE OF DIANHYDROGALACTITOL AND ANALOGS OR DERIVATIVES THEREOF TO TREAT NON-SMALL-CELL CARCINOMA OF THE LUNG AND OVARIAN CANCER

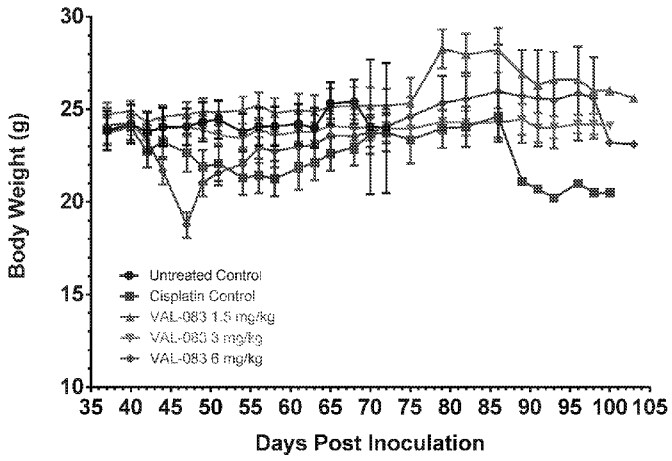


Figure 1

(57) Abstract: The use of dianhydrogalactitol provides a novel therapeutic modality for the treatment of non-small-cell lung carcinoma (NSCLC) and ovarian cancer. Dianhydrogalactitol acts as an alkylating agent on DNA that creates N^7 methylation. Dianhydrogalactitol is effective in suppressing the growth of cancer stem cells and is active against tumors that are refractory to temozolomide, cisplatin, and thymidine kinase inhibitors; the drug acts independently of the MGMT repair mechanism. Dianhydrogalactitol can be used together with other anti-neoplastic agents and can possess additive or super-additive effects.

WO 2015/154064 A3