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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
2 June 2005 (02.06.2005)

PCT

(10) International Publication Number
WO 2005/049008 A1

(51) International Patent Classification[7]: A61K 31/235, 31/245, 31/192, 31/166, 31/136, 31/343, 31/47, 31/4748, 31/404, A61P 35/00

(21) International Application Number:
PCT/AU2004/001619

(22) International Filing Date:
19 November 2004 (19.11.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
2003906386 19 November 2003 (19.11.2003) AU

(71) Applicant *(for all designated States except US)*: **NOVOGEN RESEARCH PTY LTD** [AU/AU]; 140 Wicks Road, North Ryde, Sydney, New South Wales 2113 (AU).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **KELLY, Graham, Edmund** [AU/AU]; 17 Peel Street, Kirribilli, Sydney, New South Wales 2061 (AU). **BROWN, David** [AU/AU]; Unit 2, 21 Ashburn Place, Gladesville, New South Wales 2111 (AU).

(74) Agents: **ROSS MITCHELL HEISEY** et al.; DAVIES COLLISON CAVE, Level 10, 10 Barrack Street, Sydney, New South Wales 2000 (AU).

(81) Designated States *(unless otherwise indicated, for every kind of national protection available)*: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.

(84) Designated States *(unless otherwise indicated, for every kind of regional protection available)*: ARIPO (BW, GH, GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IS, IT, LU, MC, NL, PL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:
— *with international search report*

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

WO 2005/049008 A1

(54) Title: COMBINATIONAL RADIOTHERAPY AND CHEMOTHERAPY COMPOSITIONS AND METHODS

(57) Abstract: This invention relates to combination therapies involving radiotherapy and chemotherapy. In particular the invention relates to the use of isoflavones or analogues thereof in combination with radiotherapy or chemotherapy in the treatment of cancer and related diseases and conditions. The invention also relates to compositions and agents useful for same and methods for their manufacture.