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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
22 September 2005 (22.09.2005)

PCT

(10) International Publication Number
WO 2005/087948 A3

(51) International Patent Classification[7]: C12Q 1/68, A61K 31/282

(21) International Application Number: PCT/GB2005/001022

(22) International Filing Date: 14 March 2005 (14.03.2005)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
0405561.2 12 March 2004 (12.03.2004) GB
0405728.7 15 March 2004 (15.03.2004) GB

(71) Applicant *(for all designated States except US)*: **THE QUEEN'S UNIVERSITY OF BELFAST** [GB/GB]; University Road, Belfast BT7 1NN (GB).

(72) Inventors; and

(75) Inventors/Applicants *(for US only)*: **JOHNSTON, Patrick, Gerard** [GB/GB]; 10 Garland Hill, Belfast BT8 6IL (GB). **LONGLEY, Daniel** [GB/GB]; 24 Woodland Ave., Lambeg, Lisburn BT27 4PJ (GB).

(74) Agent: **MURGITROYD & COMPANY**; 165-169 Scotland Street, Glasgow G5 8PL (GB).

(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, SM, 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, LT, 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*
— *before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments*

(88) Date of publication of the international search report: 19 January 2006

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.

(54) Title: CANCER TREATMENT AND ASSAYS FOR DETERMINING RESISTANCE TO PLATINUM-BASED CHEMOTHERAPEUTIC AGENT

(57) Abstract: Described is a method to predict response of tumour cells to *in vivo* treatment with a platinum-based chemotherapeutic agent, the method based on the determination of the expression of one or more of the genes encoding BCRP protein, wherein enhanced expression of said gene correlates with enhanced resistance to the chemotherapeutic agent. Also described are methods of sensitising cancer cells, particularly colorectal cancer cells to treatment.

WO 2005/087948 A3