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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
21 November 2013 (21.11.2013)

WIPO | PCT

(10) International Publication Number
WO 2013/172955 A1

(51) International Patent Classification:
G01N 33/574 (2006.01) *C12N 5/07* (2010.01)
G01N 33/15 (2006.01)

(21) International Application Number:
PCT/US2013/031300

(22) International Filing Date:
14 March 2013 (14.03.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
61/647,248 15 May 2012 (15.05.2012) US

(71) Applicant: **DIATECH ONCOLOGY** [US/US]; 9208 Heritage Drive, Brentwood, TN 37027 (US).

(72) Inventors: **PRESANT, Cary**; 2345 Cumberland Road, San Marino, CA 91108 (US). **PERREE, Mathieu**; 1620 Holy Cross Street, Montreal, H4E 2A1 (CA). **HALLQUIST, Allan**; 13351 Rosehawk Drive, Morning View, KY 41063 (US).

(74) Agent: **MOORE, Chester, G.**; Baker, Donelson, Bearman, Caldwell & Berkowitz, PC, 920 Massachusetts Avenue, Suite 900, Washington, DC 20001 (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, IS, JP, KE, KG, KM, KN, KP, KR, KZ, LA, LC, LK, LR, LS, LT, 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, 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, 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, ML, MR, NE, SN, TD, TG).

Published:

— *with international search report (Art. 21(3))*

WO 2013/172955 A1

(54) Title: TUMOR CELL ISOLATION/PURIFICATION PROCESS AND METHODS FOR USE THEREOF

(57) Abstract: Methods of isolating and purifying hematologic or non-hematologic tumor cells useful a variety of assays and procedures, including tumor drug efficacy screening such as Microcuiture Kinetic assays, are disclosed herein. Further, Microcuiture Kinetic assays and methods suitable for comparing the relative efficacy of generic versus proprietary anti-cancer drugs are also disclosed.