

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
24 August 2006 (24.08.2006)

PCT

(10) International Publication Number
WO 2006/089233 A3

(51) International Patent Classification:
G01N 33/50 (2006.01) *C12Q 1/68* (2006.01)

MA 01983 (US). **DORNER, Andrew, J.** [US/US]; 20 Baskin Road, Lexington, Massachusetts 02421 (US).

(21) International Application Number:
PCT/US2006/005855

(74) Agents: **FAIRCHILD, Brian, A.** et al.; Kirkpatrick & Lockhart Nicholson Graham LLP, State Street Financial Center, One Lincoln Street, Boston, MA 02111-2950 (US).

(22) International Filing Date:
16 February 2006 (16.02.2006)

(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, KM, KN, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, LY, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NG, 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.

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/653,117 16 February 2005 (16.02.2005) US

(71) Applicant (for all designated States except US): **WYETH** [US/US]; Five Giralda Farms, Madison, New Jersey 07940 (US).

(72) Inventors; and

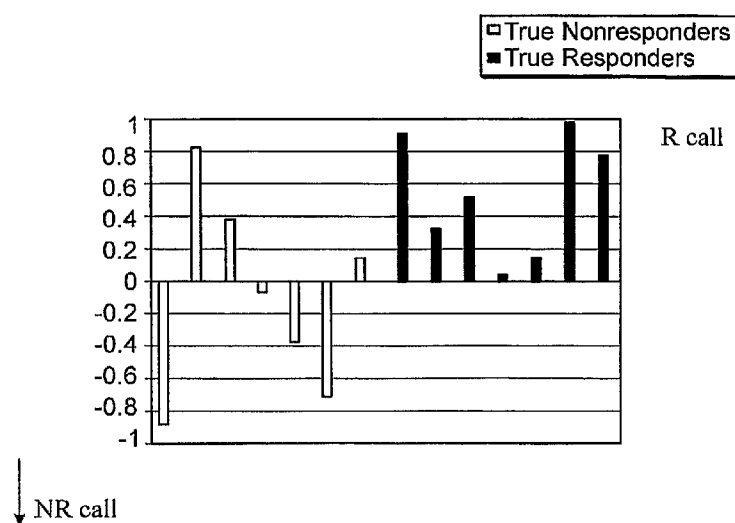
(75) Inventors/Applicants (for US only): **BURCZYNSKI, Michael, E.** [US/US]; 824 Red Coat Road, Collegeville, PA 19426 (US). **IMMERMANN, Frederick** [US/US]; 194 Haverstraw Road, Suffern, New York 10901 (US). **TWINE, Natalie, C.** [US/US]; 379 Shirley Hill Road, Goffstown, New Hampshire 03045 (US). **STOVER, Jennifer, Ann** [US/US]; 146 Ipswich Road, Topsfield,

(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, LV, 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).

[Continued on next page]

(54) Title: METHODS AND SYSTEMS FOR DIAGNOSIS, PROGNOSIS AND SELECTION OF TREATMENT OF LEUKEMIA

Classification of baseline PBMCs from AML patients who responded or failed to respond to the GO/Daunorubicin therapy regimen in an independent clinical trial.



(57) Abstract: The present invention provides methods, systems and equipment for the prognosis, diagnosis and selection of treatment of AML or other types of leukemia. Genes prognostic of clinical outcome of leukemia patients can be identified according to the present invention. Leukemia disease genes can also be identified according to the present invention. These genes are differentially expressed in PBMCs of AML patients relative to disease-free humans. These genes can be used for the diagnosis or monitoring the development, progression or treatment of AML.

WO 2006/089233 A3



Published:

— with international search report

(88) Date of publication of the international search report:

29 March 2007

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.