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

(19) World Intellectual Property Organization
International Bureau

(43) International Publication Date
30 November 2006 (30.11.2006)

PCT

(10) International Publication Number
WO 2006/126008 A3

(51) International Patent Classification:
G01N 33/53 (2006.01) *G01N 33/574* (2006.01)
G01N 33/564 (2006.01)

(21) International Application Number:
PCT/GB2006/001944

(22) International Filing Date: 26 May 2006 (26.05.2006)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/685,422 27 May 2005 (27.05.2005) US
0510943.4 27 May 2005 (27.05.2005) GB

(71) Applicant *(for all designated States except US)*: **ONCLMMUNE LIMITED** [GB/GB]; Clinical Sciences Building, City Hospital, Hucknall Road, Nottingham NG5 1PB (GB).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: **ROBERTSON, John, Forsyth, Russell** [GB/GB]; Professorial Unit of Surgery, City Hospital, Hucknall Road, Nottingham NG5 1PB (GB). **BARNES, Tony** [US/US]; 5007 Village Terrace Drive, Dunwoody, Georgia 30338 (US). **MURRAY, Andrea** [GB/GB]; Onc-Immune Ltd., Biocity Nottingham, Pennyfoot Street, Nottingham NG1 1GF (GB). **CHAPMAN, Caroline** [GB/GB]; Tumour Immunology, Clinical Sciences Building, University of Nottingham, Hucknall Road, Nottingham NG5 1PB (GB).

(74) Agents: **BALDOCK, Sharon, Claire** et al.; Boult Wade Tennant, Verulam Gardens, 70 Gray's Inn Road, London WC1X 8BT (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, 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.

(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).

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.

(54) Title: IMPROVED IMMUNOASSAY METHODS

(57) Abstract: The invention relates to a method of detecting a disease state or disease susceptibility in a mammalian subject which comprises detecting an antibody in a test sample comprising a bodily fluid from said mammalian subject wherein said antibody is a biological marker of a disease state or disease susceptibility, the method comprising: (a) contacting said test sample with a plurality of different amounts of an antigen specific for said antibody, (b) detecting the amount of specific binding between said antibody and said antigen, (c) plotting or calculating a curve of the amount of said specific binding versus the amount of antigen for each amount of antigen used in step (a) and (d) determining the presence or absence of said disease state or disease susceptibility based upon the amount of specific binding between said antibody and said antigen at each different antigen concentration used.

WO 2006/126008 A3