162162

PCT

WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

5 JUN 2003

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 7 :
A61K 35/12 // C12N 5:08

A3

(11) International Publication Number: WO 00/33869

(43) International Publication Date: 15 June 2000 (15.06.00)

(21) International Application Number: PCT/GB99/04129

(22) International Filing Date: 9 December 1999 (09.12.99)

(30) Priority Data:
9827104.2 10 December 1998 (10.12.98) GB

(71) Applicant *(for all designated States except US)*: ONYVAX LIMITED [GB/GB]; St. Georges Hospital Medical School, Cranmer Terrace, P.O. Box 17717, London SW17 0WG (GB).

(72) Inventors; and
(75) Inventors/Applicants *(for US only)*: DALGLEISH, Angus, George [GB/GB]; Onyvax Limited, St. Georges Hospital Medical School, Cranmer Terrace, P.O. Box 17717, London SW17 0WG (GB). SMITH, Peter, Michael [GB/GB]; Onyvax Limited, St. Georges Hospital Medical School, Cranmer Terrace, P.O. Box 17717, London SW17 0WG (GB). SUTTON, Andrew, Derek [GB/GB]; Onyvax Limited, St. Georges Hospital Medical School, Cranmer Terrace, P.O. Box 17717, London SW17 0WG (GB). WALKER, Anthony, Ian [GB/GB]; Onyvax Limited, St. Georges Hospital Medical School, Cranmer Terrace, P.O. Box 17717, London SW17 0WG (GB).

(74) Agent: DAVIES, Jonathan, Mark, Reddie & Grose, 16 Theobalds Road, London WCLX 8PL (GB).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, 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, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

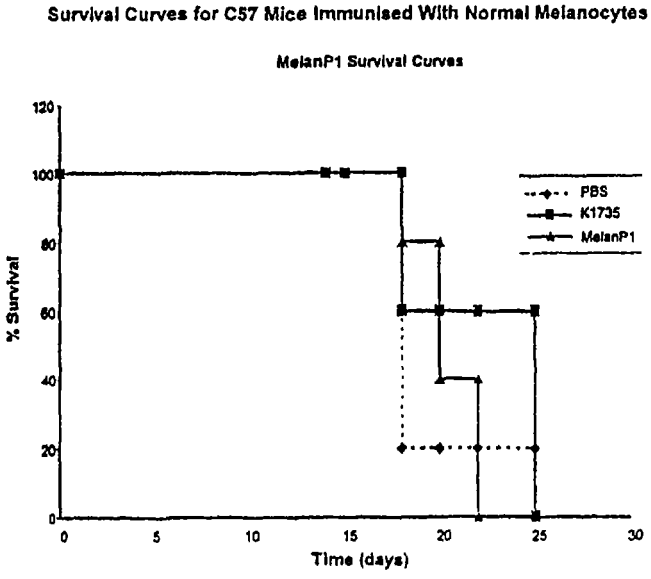
Published
With international search report.

(88) Date of publication of the international search report:
12 October 2000 (12.10.00)

(54) **Title:** USE OF HUMAN PROSTRATE CELL LINES IN CANCER TREATMENT

(57) **Abstract**

The invention here relates to a product comprised of a cell line or lines intended for use as an allogeneic immunotherapy agent for the treatment of cancer in mammals and humans. All of the studies of cell–based cancer vaccines to date have one feature in common, namely the intention to use cells that contain at least some TSAs and/or TAAs that are shared with the antigens present in patients' tumour. In each case, tumour cells are utilised as the starting point on the premise that only tumour cells will contain TSAs or TAAs of relevance, and the tissue origins of the cells are matched to the tumour site in patients. A primary aspect of the invention is the use of immortalised normal, non–malignant cells as the basis of an allogeneic cell cancer vaccine. Normal cells do not possess TSAs or relevant concentrations of TAAs and hence it is surprising that normal cells are effective as anti–cancer vaccines. For prostate cancer, for example, a vaccine may be based on one or a combination of different immortalised normal cell lines derived from the prostate. The cell lines are lethally irradiated utilising gamma irradiation at 50–300 Gy to ensure that they are replication incompetent prior to use in the mammal or human.



G00002