6793-4

PCT WORLD INTELLECTUAL PROPERTY ORGANIZATION
International Bureau

INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(51) International Patent Classification 6 :
C07K 16/00, A61K 39/395 — A1

(11) International Publication Number: WO 99/60023

(43) International Publication Date: 25 November 1999 (25.11.99)

(21) International Application Number: PCT/US99/10741

(22) International Filing Date: 14 May 1999 (14.05.99)

(30) Priority Data:

60/085,613	15 May 1998 (15.05.98)	US
09/079,612	15 May 1998 (15.05.98)	US
09/206,138	7 December 1998 (07.12.98)	US

(71) Applicants: IMCLONE SYSTEMS INCORPORATED [US/US]; 180 Varick Street, New York, NY 10014 (US). UAB RESEARCH FOUNDATION [US/US]; The University of Alabama at Birmingham, 1120G Administration Building, 701 20th Street South, Birmingham, AL 35294-0111 (US).

(72) Inventors: WAKSAL, Harlan, W.; 85 Stonebridge Road, Montclair, NJ 07042 (US). SALEH, Mansoor, N.; 5268 Birdsong Road, Birmingham, AL 35243 (US). ROBERT, Francisco; 1996 Rocky Brook Drive, Birmingham, AL 35243 (US). BUCHSBAUM, Donald, Jay; 1013 32nd Street South, Birmingham, AL 35205 (US).

(74) Agents: FEIT, Irving, N. et al.; Hoffmann & Baron, LLP, 6900 Jericho Turnpike, Syosset, NY 11791 (US).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, 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, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, 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.

Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: TREATMENT OF HUMAN TUMORS WITH RADIATION AND INHIBITORS OF GROWTH FACTOR RECEPTOR TYROSINE KINASES

(57) Abstract

A method to inhibit the growth of tumors in human patients, comprising treating the human patients with an effective amount of a combination of radiation and a non-radiolabeled protein receptor tyrosine kinase inhibitor, the overexpression of which can lead to tumorigenesis.