

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

(19) World Intellectual Property Organization
International Bureau



(43) International Publication Date
11 August 2011 (11.08.2011)

PCT

(10) International Publication Number
WO 2011/095894 A3

(51) International Patent Classification:

G01N 33/68 (2006.01) *G01N 33/15* (2006.01)
C12Q 1/68 (2006.01) *G01N 33/574* (2006.01)

(21) International Application Number:

PCT/IB2011/000382

(22) International Filing Date:

4 February 2011 (04.02.2011)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data:

61/337,465 4 February 2010 (04.02.2010) US

(71) Applicant (for all designated States except US): **JICHI MEDICAL UNIVERSITY** [JP/JP]; 2-6-3 Hirakawa-cho, Chiyoda-ku, Tokyo 102-0093 (JP).

(72) Inventors; and

(75) Inventors/Applicants (for US only): **MANO, Hiroyuki** [JP/JP]; 4-13-3 Hongo, Bunkyo-ku, Tokyo 113-0033 (JP). **CHOI, Young, L.** [KR/JP]; 2-3-4-204 Kojima, Taito-ku, Tokyo 111-0056 (JP). **SODA, Manabu** [JP/JP]; 5-5-4 East Gion, Shimotsuke-shi, Tochigi 329-0434 (JP).

(74) Agents: **YANAGIDA, Masashi** et al.; Yanagida & Associates, 7F, Shin-Yokohama KS Bldg., 3-18-3, Shin-Yokohama, Kohoku-ku, Yokohama-shi Kanagawa 222-0033 (JP).

(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, 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, PE, PG, PH, PL, PT, RO, RS, RU, 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, SD, SL, SZ, TZ, UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, 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))
- before the expiration of the time limit for amending the claims and to be republished in the event of receipt of amendments (Rule 48.2(h))

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

1 March 2012

(54) Title: IDENTIFICATION, ASSESSMENT, AND THERAPY OF CANCERS WITH INNATE OR ACQUIRED RESISTANCE TO ALK INHIBITORS

(57) Abstract: Described herein are compositions, kits, and methods for determining whether subjects having cancer(s) positive for ALK mutations are likely to respond to treatment with an ALK inhibitor and/or whether a patient having such cancer(s) is likely to have a relatively slower disease progression. Further described are methods for prognosing a time course of disease in a subject having such cancer.



WO 2011/095894 A3