

(19) World Intellectual Property
Organization
International Bureau



WIPO | PCT



(10) International Publication Number

WO 2018/222144 A8

(43) International Publication Date
06 December 2018 (06.12.2018)

(51) International Patent Classification:
C12Q 1/68 (2006.01)

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(21) International Application Number:
PCT/TH2017/000040

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(22) International Filing Date:
29 May 2017 (29.05.2017)

(25) Filing Language: English

(26) Publication Language: English

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(54) **Title:** A METHOD OF PREDICTING SURVIVAL OUTCOME OF A SUBJECT HAVING HEPATOCELLULAR CARCINOMA (HCC) OR CHOLANGIOCARCINOMA (CCA)

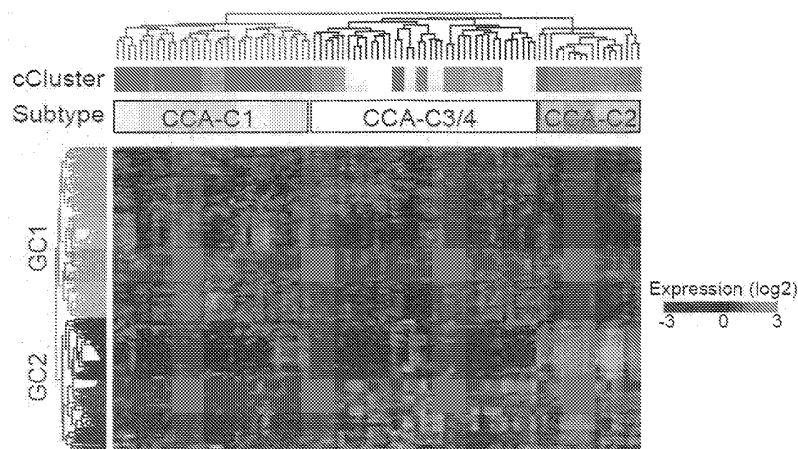


Figure 2A

(57) **Abstract:** The present disclosure provides a method for generating a predictive survival outcome of a subject affected of liver cancer. The method preferably comprises providing a tissue specimen of the subject, the tissue specimen being one of hepatocellular carcinoma or cholangiocarcinoma; performing at least one nucleic acid-based and/or proteomic-based assay to quantify transcriptome and/or protein expression of polo-like kinase 1 (PLK1) and epithelial cell transforming 2 (ECT2) in the provided specimen; deriving a ratio of PLK1 expression over ECT2 expression within a defined area on the provided specimen; and generating the predictive survival outcome of the subject according to the derived ratio, the subject being regarded with a first predictive survival outcome when the derived ratio is less than a predetermined value or a second predictive survival outcome when the derived ratio is equal to or greater than the predetermined value. The first predictive survival outcome corresponds to more than 40%-60% of overall survival percentage within a predetermined period in a survival analysis, and the second predictive survival outcome corresponds to 40%-60% or lower of overall survival percentage within the predetermined period in the survival analysis.

[Continued on next page]

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(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, BN, BR, BW, BY, BZ,
 CA, CH, CL, CN, CO, CR, CU, CZ, DE, DJ, DK, DM, DO,
 DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, GT, HN,
 HR, HU, ID, IL, IN, IR, IS, JP, KE, KG, KH, KN, KP, KR,
 KW, KZ, LA, LC, LK, LR, LS, LU, LY, MA, MD, ME, MG,
 MK, MN, MW, MX, MY, MZ, NA, NG, NI, NO, NZ, OM,
 PA, PE, PG, PH, PL, PT, QA, RO, RS, RU, RW, SA, 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, RW, SD, SL, ST, SZ, TZ,
 UG, ZM, ZW), Eurasian (AM, AZ, BY, KG, KZ, 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,
 KM, ML, MR, NE, SN, TD, TG).

Published:

— with international search report (Art. 21(3))

(48) **Date of publication of this corrected version:**

02 May 2019 (02.05.2019)

(15) **Information about Correction:**

see Notice of 02 May 2019 (02.05.2019)