



- (51) **International Patent Classification:**
C12Q 1/6886 (2018.01) *C12N 15/113* (2010.01)
- (21) **International Application Number:**
PCT/CN2019/117176
- (22) **International Filing Date:**
11 November 2019 (11.11.2019)
- (25) **Filing Language:** English
- (26) **Publication Language:** English
- (30) **Priority Data:**
201811336972.2 12 November 2018 (12.11.2018) CN
- (71) **Applicants:** **MIRXES(HANGZHOU) BIOTECHNOLOGY CO., LTD** [CN/CN]; Unit 16, Unit 1, Building 4, No. 2, Science And Technology Park Road, Baiyang Street, Hangzhou Economic And Technological Development Zone, Hangzhou, Zhejiang 310018 (CN). **ZHEJIANG CANCER HOSPITAL** [CN/CN]; No 1, East Banshan Road, Gongshu District, hangzhou, Zhejiang 310011 (CN).
- (72) **Inventors:** **ZOU, Ruiyang**; Unit 16, Unit 1, Building 4, No. 2, Science And Technology Park Road, Baiyang

Street, Hangzhou Economic And Technological Development Zone, Hangzhou, Zhejiang 310018 (CN). **SU, Dan**; Unit 16, Unit 1, Building 4, No. 2, Science And Technology Park Road, Baiyang Street, Hangzhou Economic And Technological Development Zone, Hangzhou, Zhejiang 310018 (CN). **CHENG, He**; Unit 16, Unit 1, Building 4, No. 2, Science And Technology Park Road, Baiyang Street, Hangzhou Economic And Technological Development Zone, Hangzhou, Zhejiang 310018 (CN). **YING, Lisha**; Unit 16, Unit 1, Building 4, No. 2, Science And Technology Park Road, Baiyang Street, Hangzhou Economic And Technological Development Zone, Hangzhou, Zhejiang 310018 (CN). **ZHOU, Lihan**; Unit 16, Unit 1, Building 4, No. 2, Science And Technology Park Road, Baiyang Street, Hangzhou Economic And Technological Development Zone, Hangzhou, Zhejiang 310018 (CN).

- (74) **Agent:** **HANGZHOU ZHIJIAN PATENT ATTORNEY CO., LTD**; HUANG, Juan, Rm1403, No 2 Building Hongjietiancheng, No 288 Xinfeng Rd., Jianggan District, Hangzhou, Zhejiang 310017 (CN).

- (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,

- (54) **Title:** A peripheral blood miRNA marker for diagnosis of non-small cell lung cancer

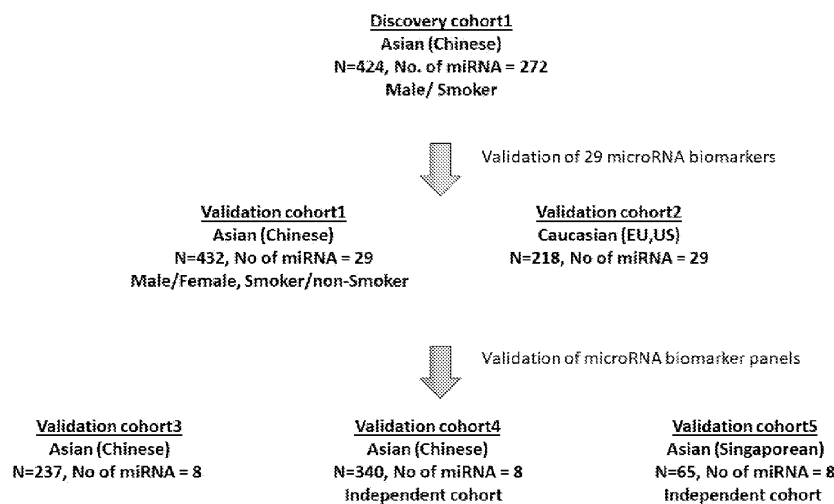


Figure 1

- (57) **Abstract:** Provided are peripheral blood miRNA markers for diagnosis of non-small cell lung cancer, wherein the peripheral blood miRNA markers comprise hsa-miR-1291, hsa-miR-1-3p, hsa-miR-214-3p, hsa-miR-375 or hsa-let-7a-5p. Five specific diagnostic markers suitable for diagnosing non-small cell lung cancer in Asian and Caucasian populations are validated on a large number of samples, and have higher population specificity compared to other miRNA markers previously reported. These five miRNA diagnostic markers are proposed for the first time and are shown to be more reliable than other miRNA molecular markers.

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, JO, 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).

Declarations under Rule 4.17:

— *of inventorship (Rule 4.17(iv))*

Published:

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

— *with sequence listing part of description (Rule 5.2(a))*