



(43) International Publication Date
17 April 2014 (17.04.2014)

(10) International Publication Number
WO 2014/058321 A1

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

(21) International Application Number:
PCT/NL2013/050729

(22) International Filing Date:
14 October 2013 (14.10.2013)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
12188377.1 12 October 2012 (12.10.2012) EP

(71) Applicant: SELF-SCREEN B.V. [NL/NL]; De Boelelaan
1117, Room 3E36, NL-1081 HV Amsterdam (NL).

(72) Inventors: MEIJER, Christophorus, Joannes, Lam-
bertus, Maria; c/o De Boelelaan 1117, NL-1081 HV Am-
sterdam (NL). SNIJDERS, Petrus, Josephus, Ferdinan-
dus; c/o De Boelelaan 1117, NL-1081 HV Amsterdam
(NL). STEENBERGEN, Renske, Daniëla, Maria; c/o De
Boelelaan 1117, NL-1081 HV Amsterdam (NL).

(74) Agent: JANSEN, C., M.; V.O., Johan de Wittlaan 7, NL-
2517 JR Den Haag (NL).

(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, 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, 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, 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, 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))
- with sequence listing part of description (Rule 5.2(a))

(54) Title: PRDM14 AND FAM19A4, MOLECULAR DIAGNOSTIC MARKERS FOR HPV-INDUCED INVASIVE CANCERS AND THEIR HIGH-GRADE PRECURSOR LESIONS

(57) Abstract: The invention relates to method for detecting HPV-induced high- grade precancerous lesions and HPV-induced in-
vasive cancers, said method comprising detection of hypermethylation in the PRDM14 and/or FAM19A4 gene in a cell whereby
such hypermethylation indicates the presence of HPV-induced precursor lesions with invasive potential and HPV-induced invasive
cancers. The invention further comprises the use of the PRDM14 and/or FAM19A4 gene in such a method and a testkit for the de-
tection of PRDM14 and/or FAM19A4 methylation.



WO 2014/058321 A1