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(54) **Title:** METHODS FOR PROFILING AND QUANTITATING CELL-FREE RNA

(57) **Abstract:** The invention generally relates to methods for assessing the health of a tissue by characterizing circulating nucleic acids in a biological sample. According to certain embodiments, methods for assessing the health of a tissue include the steps of detecting a sample level of RNA in a biological sample, comparing the sample level of RNA to a reference level of RNA specific to the tissue, determining whether a difference exists between the sample level and the reference level, and characterizing the tissue as abnormal if a difference is detected.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US 13/23471

A. CLASSIFICATION OF SUBJECT MATTER

IPC(8) - C12Q 1/68, C40B 30/04 (2013.01)

USPC - 435/6.11, 506/9

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC(8) - C12Q 1/68, C40B 30/04 (2013.01)

USPC - 435/6.11, 506/9

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

435/6.12, 506/7, 702/19

Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)

PubWEST; Google Scholar; PatBase

search terms: classif\$, compar\$, differential, differential\$, characteri\$, profil\$, screen\$, cell, free, abnorm\$, normal, healthy, pathol\$, diseas\$, maternal, fetal, fetus, presenc\$, level, amount, concentrat\$, quantif\$, quantit\$, nucleic, rna, ribonucl\$, genetic, genom\$, gene

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X --- Y	US 2011/0003294 A1 (LIEW C.) 06 January 2011 (06.01.2011) Table 1; para [0009]; [0011]; [0014]; [0029]; [0038]-[0040]; [0045]; [0054]-[0056]; [0063]; [0069]; [0073].	1-6, 8, 10-15, 17, 19 ----- 9, 18, 30
X --- Y	US 2011/0150775 A1 (SLONIM et al.) 23 June 2011 (23.06.2011) Tables 2 and 4; para [0010]; [0011]; [0013]; [0070]; [0089]; [0100]-[0102]; [0292].	20-25, 27 ----- 26, 28-30
X	US 2006/0003342 A1 (BIANCHI et al.) 05 January 2006 (05.01.2006) para [0008]; [0009]; [0028]; [0031]; [0042]; [0043]; [0066]; [0048]; [0235].	1, 7, 12, 16
Y	US 2009/0318304 A1 (DRMANAC et al.) 24 December 2009 (24.12.2009) abstract; para [0059].	9, 18, 26
Y	US 2002/0045176 A1 (LO et al.) 18 April 2002 (18.04.2002) abstract; para [0004]-[0007]; [0026].	28, 29

Further documents are listed in the continuation of Box C.

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"&" document member of the same patent family

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