DIAGNOSTIC TESTS FOR PREDICTING PROGNOSIS, RECURRENCE, RESISTANCE OR SENSITIVITY TO THERAPY AND METASTATIC STATUS IN CANCER

The present invention describes a method utilizing a set of genes or gene products whose altered expression in cancer tissue, particularly head and neck cancer and other carcinomas, or its adjacent normal tissues predicts (a) probability of recurrence in time after treatment (b) sensitivity or resistance to therapies or (c) probability of metastasis at the time of initial discovery of the tumor. Furthermore, the invention describes methods of determining the molecular signature in tumor tissues, tissues adjacent to the tumor, or in saliva by using DNA microarray techniques, quantitative real-time PCR, immunohistochemistry or other methods that are used for determining gene or gene product expression levels.
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A.  CLASSIFICATION OF SUBJECT MATTER
   IPC(8) - C12Q 1/68 (2013.01)
   USPC - 435/6.12, 6.13, 6.14
   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 (2013.01)

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

   Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)
   Google; Google Scholar; 'cancer treatment,' 'personalized treatment plan,' 'gene expression,' 'gene expression profile,' 'cancer treatment sensitivity'

C.  DOCUMENTS CONSIDERED TO BE RELEVANT

<table>
<thead>
<tr>
<th>Category*</th>
<th>Citation of document, with indication, where appropriate, of the relevant passages</th>
<th>Relevant to claim No.</th>
</tr>
</thead>
</table>

Further documents are listed in the continuation of Box C.

* Special categories of cited documents:
  "A" document defining the general state of the art which is not considered to be of particular relevance
  "E" earlier application or patent but published on or after the international filing date
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Date of the actual completion of the international search
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Authorized officer:
Shane Thomas
PCT Helpdesk: 571-272-4300
PCT OSP: 571-272-7774

Name and mailing address of the ISA/US
Mail Stop PCT, Attn: ISA/US, Commissioner for Patents
P.O. Box 1450, Alexandria, Virginia 22313-1450
Facsimile No. 571-273-3201