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(54) Title: MATERIALS AND METHODS RELATING TO BREAST CANCER CLASSIFICATION

(57) **Abstract:** The inventors set out to identify a set of genes for use as prognostic markers for breast tumours which correlate with the Nottingham Prognostic Index (NPI). Initially they were unable to identify a single set of genes whose expression correlates with the NPI. However after segregating the dataset into molecular subcategories (estrogen receptor positive, estrogen receptor negative, and ErbB2 positive) they identified a set of 62 genes which are differentially expressed in tumours of different prognoses. Methods and apparatus for determining prognosis are provided. Also provided are methods of determining the response of tumours to chemotherapy involving comparing the expression levels of the predictive gene set before and after treatment.



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