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

(57) Abstract: Classification of breast tumours into Estrogen Receptor positive and negative (ER+ and ER-) subtypes is an important distinction in the treatment of breast cancer. ER typing is frequently performed using expression profiles of genes whose expression is known to be affected by ER activity. Some tumours cannot confidently be assigned to a particular ER type based on such expression data. The present inventors have found that such "low confidence" tumours constitute a distinct biological subtype of breast tumours associated with significantly worse overall survival than high confidence tumours. Gene sets capable of distinguishing low confidence from high confidence tumours are provided, along with methods and apparatus for performing appropriate classification. of breast tumours.

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