

## A GENOMIC SIGNATURE OF PROGNOSIS FOR STAGE II COLORECTAL CANCER DERIVED FROM FFPE TISSUE

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We have developed a microarray with specific content that is focused around colorectal cancer: the Colorectal Cancer DSA™ research tool (CCDSA). The Cancer DSA™ range of tools (patent pending) are the first microarrays based on the transcriptome of an individual disease, delivering reliable and relevant information not available on other arrays. Powered by the Affymetrix GeneChip® System, these arrays have been designed to maximize the expression data obtained from the chosen disease setting, enabling Almac Diagnostics to generate significantly more information relevant to the disease of interest than that obtained with generic arrays. Using the CCDSA, we have developed a prognostic signature for the stage II colorectal cancer population that works with formalin fixed, paraffin embedded (FFPE) tissue. Overall classification accuracy is 80%, thus 80% of all stage II colorectal patients will be correctly classified as either low risk or high risk of relapse. The sensitivity is 79% and specificity is 81%, thus 79% of high risk patients will be correctly classified and 81% of low risk patients will be correctly classified.

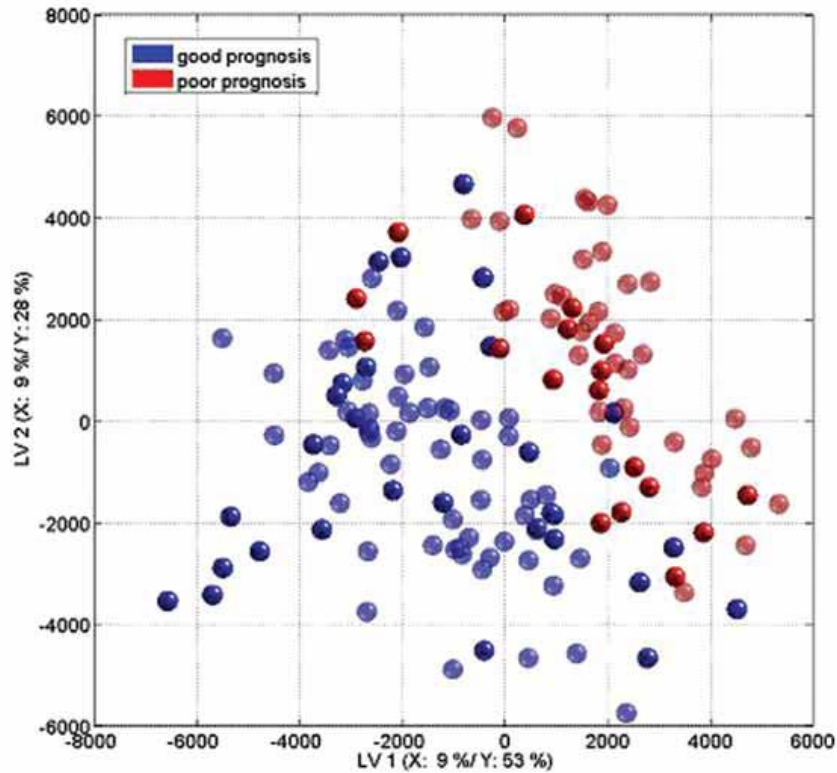


Figure 1. PLS model: the first two dimensions of the six dimensional space in which the PLS model classifies the data. Training and test set data are displayed as semi-solid and solid spheres, respectively.

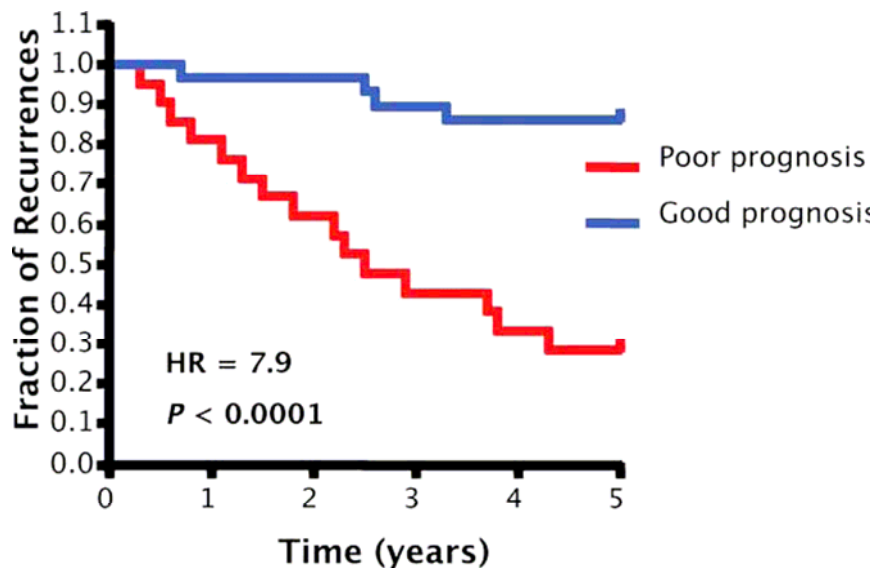


Figure 3. Kaplan-Meier curves demonstrating the time to cancer recurrence for the poor prognosis and good prognosis patients in the independent test set, which were identified by the prognostic gene signature.