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(54) **Title:** MITOCHONDRIAL DNA DELETION BETWEEN ABOUT RESIDUES 12317-16254 FOR USE IN THE DETECTION OF CANCER

(57) **Abstract:** The present invention relates to methods for predicting, diagnosing and monitoring cancer. The methods comprise obtaining biological samples, extracting mitochondrial DNA (mtDNA) from the samples, quantifying a mtDNA mutation in the sample and comparing the level of the mtDNA mutation present in the sample with a reference value The methods of the invention may also be effective in screening for new therapeutic agents and treatment regimes Further, said methods may be also be useful for monitoring the response of a subject to a preventative or therapeutic treatment.

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