

A modern approach of pathology and clinical analysis

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Abstract

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Stochastic sensors were developed for simultaneous assay of MMR proteins and KRAS, as well as for the assay of CA 72-4, CA 19-9, CEA and CA 125, as well as for the simultaneous assay of cathepsins B and D, and p53 protein. A voltametric sensors was developed for the assay of maspin. The sensors developed were validated using real biological samples from patients confirmed with gastric cancer, colon cancer, and from healthy volunteers. By comparison of the results with available pathological parameters there were done using modeling different correlations which shown that the sensors developed can be used for early minim or non-invasive diagnosis and differentiation of different colon and gastric cancers.