Microarrays: Bidding Adieu?

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A microarray is an analytical device that comprises an array of molecules (oligonucleotides, cDNAs, clones, PCR products, polypeptides, antibodies, and others) or tissue sections immobilized at discrete ordered or nonordered micrometer-to-millimeter-sized locations on the surface of a porous or nonporous insoluble solid support. These devices have been highly effective for the simultaneous detection of large numbers of SNPs/transcripts in a sample, and microarrays have become important analytical tools in many branches of the biological sciences. A microarray-based analytical strategy is quicker and more convenient than serial testing for each analyte, and it has been successfully applied to both RNA and DNA-based assays. The current scope of microarray applications that includes resequencing, mutation detection, copy number variation, comparative genome hybridization, drug discovery, expression analysis, is shrinking due to the advancements in the Next generation sequencing. Having said that Microarrays continue to play an important role in validation and Diagnostics.