



Methods for Detecting and Quantifying Cancer Nucleic Acid

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The Invention

UW-Madison researchers developed a method of quantifying genetic breakpoints in circulating tumor DNA that is relatively simple and can be completed in less than a day. This method can be used to monitor residual cancer and is sensitive enough to detect circulating tumor DNA at very low levels. This method should catch cancer at very early stages. Structural Variant Enumeration (SVEN) involves sequencing a patient's tumor biopsy, comparing it to a reference genome sequence, identifying the genetic breakpoints in the tumor genome, and creating a panel of primers specific to the structural variants in the tumor biopsy. The researchers have developed a means of creating primers that result in quantifiable breakpoint detection. The primer design and resulting amplification steps provides the sensitivity needed to detect cancer at early stages.

Additional Information

For More Information About the Inventors

- [Muhammed Murtaza](#)

Tech Fields

- [Diagnostics & Biomarkers : Diagnostics](#)

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