ZOO 203 GDB Solution

Fall 2021

How next generation sequencing is better than the Sanger sequencing method?

Next generation sequencing (NGS) has made great strides in sequencing technology as it enables sequencing of genes in a high throughput manner with low cost. One of the important aspects of NGS data is its usage in early disease diagnosis especially in cancer which was earlier not possible with conventional sequencing technologies such as Sanger sequencing, NGS can identify all those mutations which cannot be identified using conventional sequencing technologies as researchers can now sequence the whole genome, exome or transcriptome. Exome sequencing is preferred, as a higher number of mutations are found to exist in the exome part of genes.

In recent years, personalized cancer therapies have brought about a paradigm shift in oncology. The therapies address specific changes in a tumor's genome. This means they are more effective and have fewer side effects than nonspecific chemotherapy. Based on next-generation sequencing (NGS), the technology enables fast and efficient parallel multiplex analysis of therapy-relevant changes.

VU Medical Zone Effort By Amaan Khan

EFFORT BY AMAAN KHAN