

LIQUID BIOPSY

by Atharva Shrivastav

CHALLENGES

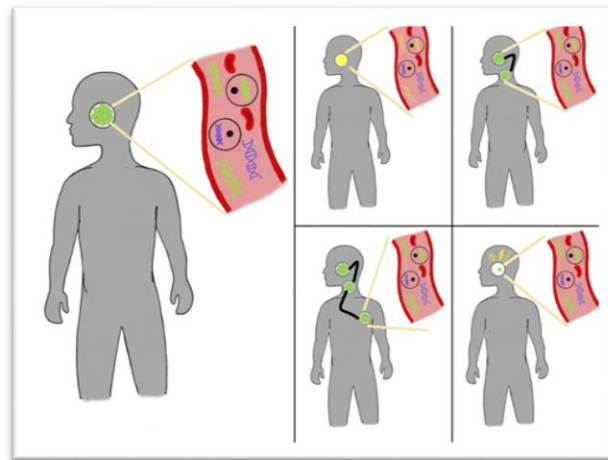
Despite the growing interest in biomarkers in Liquid Biopsy, establishing sensitive and reliable detection methods for clinical applications remains challenging due to the complexity of biological samples as well as the extremely low concentration of the analytes.

WHAT IS LIQUID BIOPSY?

Liquid biopsy is a minimally invasive technology for the detection of molecular biomarkers without the need for costly or invasive procedures. It is a simple and non-invasive alternative to surgical biopsies that enable medical doctors to discover a range of information about a disease or a tumor through a simple blood sample. A liquid biopsy may be used to help find cancer at an early stage. It may also be used to help plan treatment or to find out how well treatment is working or if cancer has come back.

Quick Fact

Liquid Biopsy is also widely used in detection of Breast Cancer.



?- WHAT DO LIQUID BIOPSIES OFFER?

Defined as a test to search for cancer cells or pieces of DNA from tumor cells in a blood sample, liquid biopsies can serve a variety of purposes, including:

- diagnosing cancers earlier than traditional means such as radiology or imaging.
- customizing treatment for detected diseases through genotyping.
- identifying mechanisms of resistance to therapies.
- measuring minimal residual disease or remaining disease after treatment.
- assessing for cancer relapse or resistance to administered treatment.

