

Needle Biopsy Imaging tests are essential in identifying and tracking cancer [52]. These examinations use various forms of energy, such as X-rays, sound waves, radioactive particles, or magnetic fields, to produce finely detailed images that reveal important details about the structure and location of the tumor [53,54,55,56]. Findings are crucial for making additional medical choices (grading of tumor; chemotherapy vs. radiation vs. immunotherapy) [58,59,60,61]. In accordance with the precise spot and accessibility of the suspicious region, biopsies can be carried out using a variety of approaches (Figure 4), including surgical biopsies, endoscopic biopsies, and needle biopsies [62]. A special needle with a suction mechanism is used in vacuum-assisted biopsy for acquiring tissue specimens. Imaging tests are .[typically validated by biopsy [57