

# Where ctDNA Testing May Fit in Breast Cancer Care Now and in the Future

## Breast Cancer Timeline

A timeline overview of how circulating tumor DNA (ctDNA) may be used in breast cancer care.

### ICON INDEX:

- Standard of care
- Available in a clinical trial or commercially, but not currently part of routine care

### Questions to Ask Your Doctor:

1. Is ctDNA testing right for me?
2. How could ctDNA testing results affect my follow-up or treatment plan?
3. Is there a clinical trial using ctDNA that I am eligible for?
4. What are the benefits and limitations of ctDNA tests?

## Screening

- Some multi-cancer early detection (MCED) tests under investigation look for ctDNA signals from many cancer types at one time. These may one day have a role in breast cancer screening.

## Diagnosis

- *ctDNA is not typically used at diagnosis; diagnosis still relies on tissue biopsy and imaging. This is a step when tumor tissue is often collected here for potential later use in tumor-informed tests.*

## During initial treatment (Surgery, chemotherapy, radiation)

- In early-stage breast cancer, ctDNA may be used during or after initial treatment in clinical trials to help estimate prognosis and recurrence risk.
- ctDNA changes are being studied to monitor how well treatment is working and detect minimal residual disease.

## Monitoring and follow-up care

- ctDNA assays may detect minimal residual disease (MRD) before imaging picks it up, but regular surveillance is currently not standard follow-up care.

## In the case of metastatic breast cancer (MBC)

- ctDNA can be used to guide treatment decisions by identifying mutations like *ESR1* or *PIK3CA*. This is standard if clinical or radiologic progression is detected to help with hormone and targeted therapy choices, but without progression, therapy-switching is not solely determined by these tests nor recommended to do so.
- ctDNA may be used to monitor how well the treatment is working by complementing or adding more information to standard imaging – not as a standalone for monitoring.

# KNOW MORE



Considering a clinical trial? Our trained specialists are here to answer your questions and guide you through the process of finding and joining a trial. Please call our Helpline at 1-877 GO KOMEN (1-877-465-6636) to connect with a trained specialist.

©2026 Susan G. Komen®.

KOMEN.ORG