

# Blood biopsies offer early warning of cancer's return

The Harvard Gazette

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# Table of contents

1. Context
2. A custom blood biopsy
3. Results

# Context



- Is published in *The Harvard Gazette*
- Discusses a new technique for early discovering cancer metastases
- Emphasizes how cancer is usually returning in a more aggressive form

**Current situation:** can't tell whether the disease was eliminated completely or not

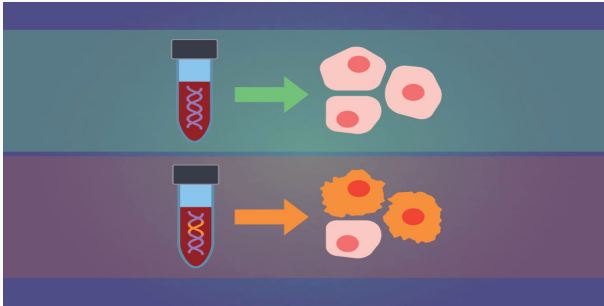
## A custom blood biopsy

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# A custom blood biopsy

- 142 patients with breast cancer
- Patients have been monitored for 13 years for cancer recurrence
- Each individual had customized blood tests based on the DNA sequence of their tumor

# A custom blood biopsy



**Figure 1:** Blood biopsies detect signs of tumor cells by scanning tumor's DNA sequence in the blood for cancer mutations.

## Results





# Results

- 6 patients - the blood biopsy showed signs of cancer in their banked samples
- 26 patients - tested negative, but still developed cancer recurrence
- Everyone else didn't have any record of cancer return

# Observations

- Treated for early stages of breast cancer
- Misdiagnosed patients had a late cancer return (even after 10 years)

**Best results** in patients who:

- had tumor biopsies with several mutations to search for
- had cancer recursion within that 3-year window

Questions?