

# Improving Access to Biomarker Testing

## Advancing Precision Medicine in Cancer Care

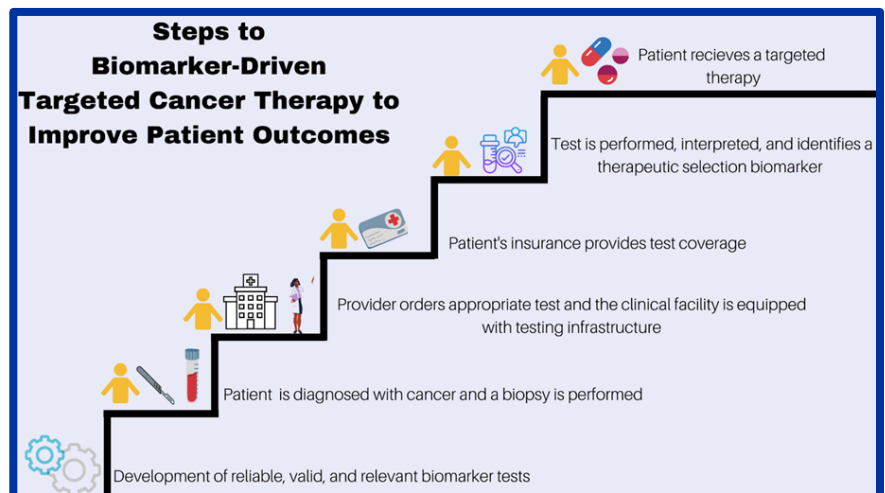


The ACS CAN report *Improving Access to Biomarker Testing - Advancing Precision Medicine in Cancer Care* ([fightcancer.org/biomarkers](https://fightcancer.org/biomarkers)) explores the current landscape of cancer biomarker testing, sheds light on the nature of challenges limiting adoption of appropriate testing, and proposes recommendations to increase the uptake of testing and advance the use of precision medicine in cancer.

## Executive Summary

Precision medicine uses information about a person's own genes or proteins to prevent, diagnose, or treat disease.<sup>1</sup> When used in the treatment of cancer, precision medicine incorporates specific information (e.g. genetic alterations, molecular signatures) about a person's cancer to inform diagnosis, prognosis, therapy selection, and to monitor how well therapy is working.

The knowledge and practice of precision medicine in cancer have been progressing rapidly and advances have led to targeted cancer therapies, which work by interfering with specific cellular processes involved in the growth, spread, and progression of cancer. Treatment with targeted therapy often requires diagnostic testing to analyze biological samples taken from patients, to identify and evaluate specific biomarkers. Research shows that targeted therapy can improve patient survival and quality life.



Biomarkers provide insight into physiological processes, medical conditions, or diseases. Cancer biomarkers can include molecules like proteins or genetic alterations such as mutations, rearrangements, or fusions. **Testing patients for specific biomarkers is integral to precision medicine in cancer care, but despite evidence pointing to the clinical benefits associated with biomarker testing, routine clinical use does not always follow, and testing rates lag behind clinical guideline recommendations.**

Patient access to appropriate biomarker testing relies on a combination of factors including reliable, valid, and relevant tests, insurer coverage, knowledgeable health care providers, and health care facilities equipped with the appropriate testing infrastructure for the efficient and sufficient collection and handling of tissue for testing.

<sup>1</sup> NCI Dictionary of Cancer Terms. <https://www.cancer.gov/publications/dictionaries/cancer-terms/def/precision-medicine>. Accessed September 7, 2020.