



Biomarker Testing: Advancing Precision Medicine

Precision medicine uses **biomarker testing** to gather information about a person's own body to prevent, diagnose, or treat disease.¹ This information is found by testing a patient's tissue, blood, or other biospecimen for the presence of a **biomarker** (e.g., genetic alterations, molecular signatures). The results of biomarker testing can help determine the medication(s) or treatment(s) that will work best for a specific patient.

In certain areas of medicine, like cancer care, advances in precision medicine have been progressing rapidly in recent years and have led to targeted cancer therapies that work by interfering with specific cellular processes involved in the growth, spread, and progression of cancer. In other words, effective treatments can be selected based on the tumor itself, rather than just its location in the body.

Research shows that targeted therapy can improve health outcomes, increase quality of life, and prolong patient survival.

Using the traditional trial and error method, identifying an effective treatment for a particular patient can take months — even years. **In chronic, degenerative diseases like rheumatoid arthritis, any length of time spent trying (and failing) ineffective treatments allows the disease to continue causing irreversible damage to the joints, increasing health care consumption and costs.** In cancer care and some autoimmune conditions, the length of time it takes to identify an effective treatment can be a matter of life or death. **In all cases, ineffective treatments exacerbate the physical, emotional, and economic burdens of disease, and the price is paid by both the patient and the insurer.**

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. In a 2021 survey, 66% of oncology providers reported that insurance coverage for biomarker testing is a significant or moderate barrier to appropriate biomarker testing.²

Expand Access to Biomarker Testing and Precision Medicine

Insurance coverage for biomarker testing is failing to keep pace with innovations and advancements in treatment. We must work to remove barriers to biomarker testing to ensure that patients can unlock the value and cost-savings potential of precision medicine. [Our groups] support expanding appropriate coverage of biomarker testing for public and private insurance plans. Without action to expand coverage and access to biomarker testing, advances in precision medicine could exacerbate existing disparities in access to care and, consequently, health outcomes associated with race, ethnicity, income, and geography.

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

² ACS CAN. "Survey Findings Summary: Understanding Provider Utilization of Cancer Biomarker Testing Across Cancers." December 2021.

https://www.fightcancer.org/sites/default/files/national_documents/provider_utilization_of_biomarker_testing_polling_memo_dec_2021.pdf