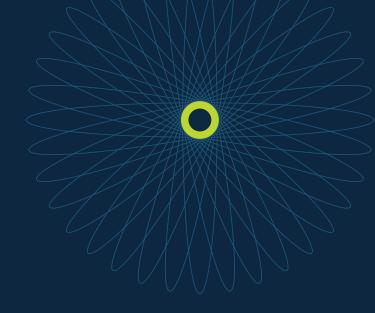
How biomarkers are impacting decisions across the product lifecycle



Each person's cancer possesses a distinct pattern of biomarkers that can play a pivotal role in treatment decisions

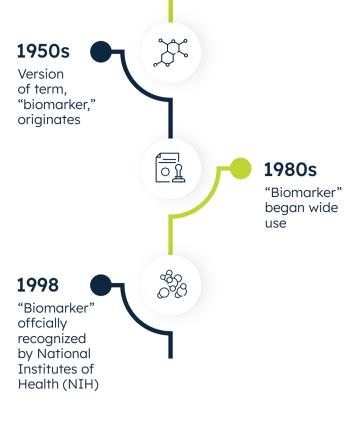
Biomarkers

Biological molecules found in blood, other body fluids, or tissues that reflect signs of a

normal or abnormal process, or of a condition or disease1 How biomarkers have

Research growth⁵ Number of publications referencing "biomarker" in the title or abstract 30000

evolved & grown in use^{2,3,4}



Less than

2000

Testing growth

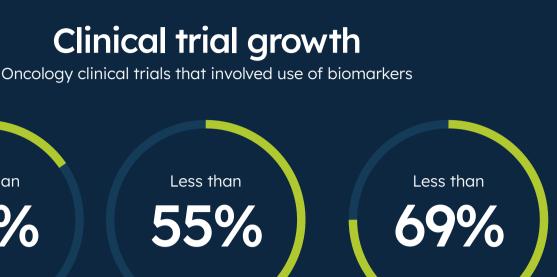
Origin

25000 20000 15000 760 27,500 10000 5000 2003 2021 Number of publications referencing "biomarker" & "immune" in the title of an abstract 3000 2500 2000 1500

2010 3,500 1000 500

2021

2010



100

80



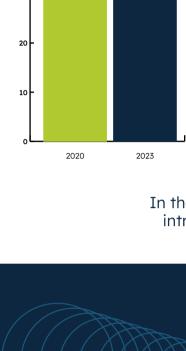
49%

39%

Percentage of cancer

patients who had

biomarker testing⁶

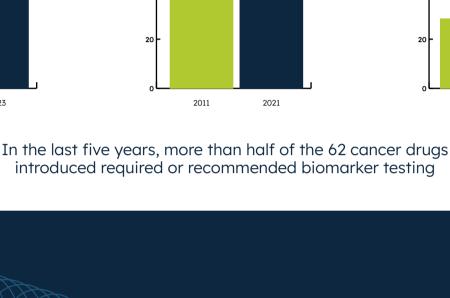


53.3%

(eNSCLC) patients receiving

81.1%

biomarker testing⁷

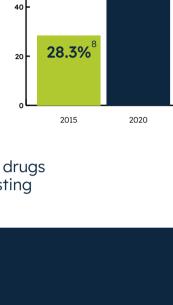


advanced/metastatic

Nonsquamous NSCLC

90%

patients receiving biomarker testing



are impacting decisions across the product

Discovery Identify potential drug targets or stratify patients based on genetic mutations or gene expression patterns

to identify specific cancer subtypes that may respond

differently to treatment

Commercialization

specific patient populations

based on their molecular

profile for whom the drug

Tailor efforts toward

is most appropriate

Launch /

Clinical development Select patients who are more likely to benefit from a targeted therapy, enabling more precise patient selection & increasing the chances of demonstrating efficacy in clinical trials

How biomarkers

lifecycle



How biomarkers are being used in precision oncology today Today, biomarkers are commonly used in precision oncology to

Assess cancer risk, diagnosis, prognosis

Identify patients based on their

biomarker status

Deliver personalized care based on

Predict rate of disease growth and spread

molecular profile for clinical trial inclusion



any potential safety concerns in specific patient populations that may not have been captured during

performance and identify

approval & surveillance

Post-marketing

Assess the drug's

clinical trials

Look for signs of cancer recurrence

Guide treatment selection including

Monitor treatment effectiveness

targeted therapies and immunotherapies

77%

of patients said biomarker testing helped treat

their cancer better

about biomarker testing In patient & provider surveys^{10,11}

85%

of providers agree that

enhancing access to

biomarker testing will

improve health equity

What patients and providers say

plans¹³

How

trends¹²

legislators

are reacting

to biomarker

89%

of providers agree

that biomarker testing

enables better treatment

recommendation

What the future of biomarkers

in oncology

looks like¹⁷

18 states have enacted legislation requiring

coverage in both public & private insurance

22 states are opening, or looking at how to

CMS covers next-generation sequencing as a

diagnostic laboratory test when performed in a clinical laboratory improvement amendment

In 2023, only six states required some level of coverage for whole-genome sequencing and

open, access to panel biomarker testing¹⁴

(clia)-certified laboratory or ordered by a treating physician under specific conditions¹⁵

- next-generation sequencing¹⁶
- Biomarker testing is expected to be the core of oncologic care With tech advances, testing will become more sensitive & specific Cancer diagnoses may be possible from liquid biopsy

Testing may increasingly be used to determine

a person's risk of developing cancer

Driven by increased access to precision medicine therapeutics, the global clinical oncology biomarker testing market is predicted by a 2024 report to reach \$12.6

billion by 202818

Diagnosis-level

biomarker test & lab recommendations at point of care

Biomarker ordering

Evidence-based

value pathways



In turn, testing and treatment patterns based on biomarker

information are reflected in our real-world data (RWD), which life

To learn more about how Ontada can support your

real-world data and research needs, get in touch with one

of our oncology research experts for an introductory call.

sciences companies can use in their commercialization strategies. This is how we advance cancer care together.

Learn more

Ontada is an oncology technology and insights business dedicated to transforming the fight against cancer. Part of McKesson Corporation, Ontada was founded on the core belief that precise insights - delivered exactly at the point

ontada

of need - can save more patients' lives. We connect the full patient journey by combining technologies used by The US Oncology Network and other community oncology providers with real-world data and research relied on by all top 15 global life sciences companies. Our work helps accelerate innovation and powers the future of cancer care. For more information, visit ontada.com.

- References
- "Biomarker, NCI Dictionary of Cancer Terms," National Cancer Institute. <u>Click Here</u>. Biomarkers: Promising and valuable tools towards diagnosis, prognosis and treatment of Covid-19 and other diseases," National Library of Medicine, February 2023. Click Here. Special Report: The Evolution of Biomarker Use in Clinical Trials for Cancer Treatments, Precision Medicine Quarterly, December 8, 2020. Click Here
- 4 New Survey: Top Barriers to Biomarker Use in Cancer Care Include Coverage and Cost Concerns, American Cancer Society Cancer Action Network, December 2, 2021. Click Here. 5 Clinically relevant biomarker strategies in drug development, News-Medical Life Sciences, Jan. 9, 2023. Click Here.
- 6 Cancer Patients and Survivors Overwhelming Agree Biomarker Testing Improved their Treatment. American Cancer Society Cancer Action Network. Click Here. Real-World Data Shows Significant Increase of Biomarker Testing in Past Decade for NSCLC. Targeted Oncology, May 8, 2023. Click Here.

10 Cancer Patients and Survivors Overwhelming Agree Biomarker Testing Improved their Treatment. American Cancer Society Cancer Action Network. Click Here.

- 8 Biomarker Testing for Patients With Advanced/Metastatic Nonsquamous NSCLC in the United States of America, 2015 to 2021. JTO Clinical and Research Reports, June, 2022. Click Here. Predictors of biomarker testing among patients (pts) with metastatic non-small cell lung cancer (mNSCLC), Journal of Clinical Oncology, June 2022. Click Here.
 - 11 New Survey: Top Barriers to Biomarker Use in Cancer Care Include Coverage and Cost Concerns, American Cancer Society Cancer Action Network, December 2, 2021. Click Here. 12 Biomarker legislation could improve patient access in 2024. Healthcare IT News. December 29, 2023. Click Here. 13 "The State of State Biomarker Testing Insurance Coverage Laws," Journal of American Medical Association, May 13, 2024. Click Here. 14 "Biomarker legislation could improve patient access in 2024," Healthcare IT News, Dec. 29, 2023. Click Here.
 - 15 Next Gen Sequencing (NGS) for Medicare Beneficiaries with Advanced Cancer, CMS.gov. Click Here. 16 Fostering Access to Next-Generation Sequencing to Shorten the Rare Disease Diagnostic Odyssey, Alexion, AstraZeneca Rare Disease white paper, October 2023. Click Here. 17 Biomarker Testing and the Future of Oncology. Texas Oncology. April 13, 2023. Click Here.

18 DeciBio Forecasts the Global Clinical Oncology Biomarker Testing Market to Grow at 13% p.a., Reaching -\$12.6B in 2028, Yahoo! Finance, Jan. 3, 2024. Click Here.

How Ontada integrates biomarkers into our technology & RWD Biomarker information is integrated into providers' workflow in our oncology EHR, iKnowMed®, helping providers access at the point of need

> and workflow support in selecting & ordering molecular tests