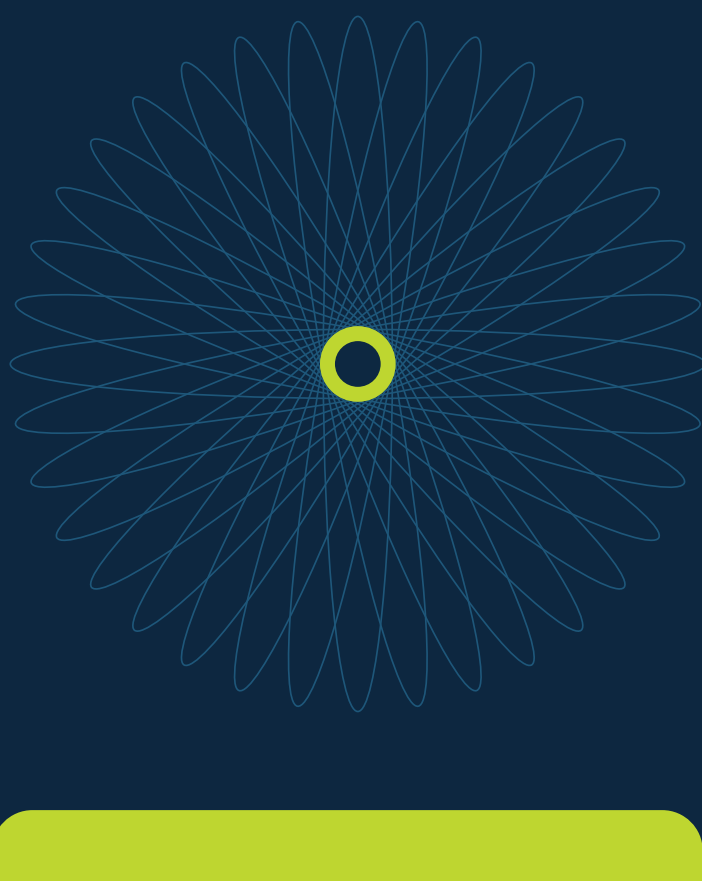
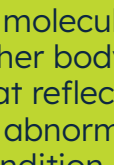


How biomarkers are impacting decisions across the product lifecycle



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

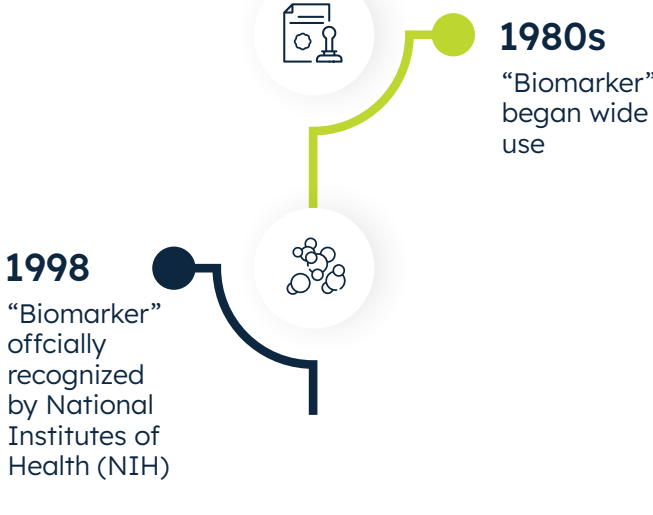


Biomarkers

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

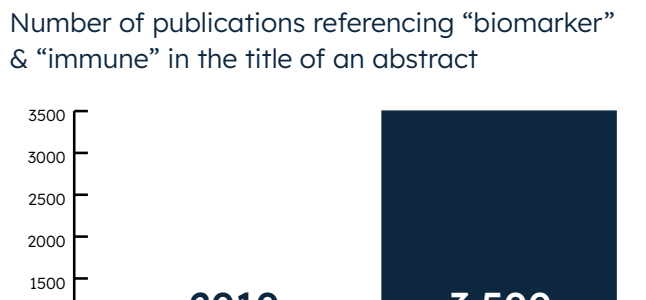
How biomarkers have evolved & grown in use^{2,3,4}

Origin

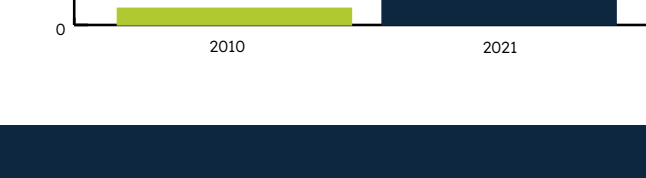


Research growth⁵

Number of publications referencing "biomarker" in the title or abstract



Number of publications referencing "biomarker" & "immune" in the title of an abstract



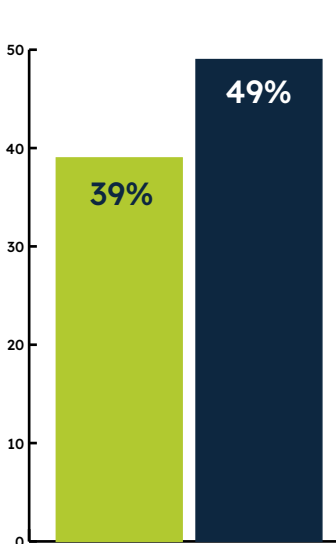
Clinical trial growth

Oncology clinical trials that involved use of biomarkers

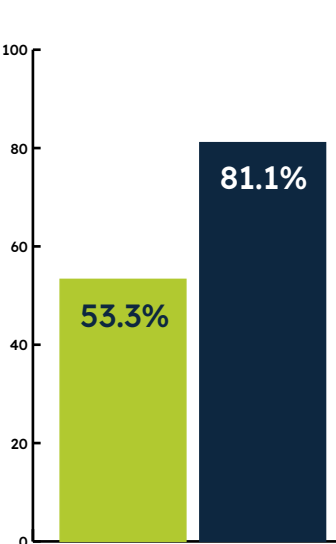


Testing growth

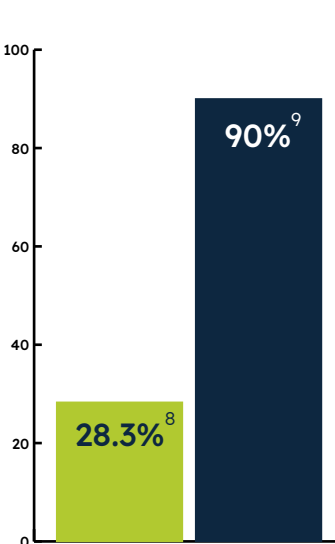
Percentage of cancer patients who had biomarker testing⁶



Percentage of early-stage non-small cell lung cancer (eNSCLC) patients receiving biomarker testing⁷



Percentage of advanced/metastatic Nonsquamous NSCLC patients receiving biomarker testing



In the last five years, more than half of the 62 cancer drugs introduced required or recommended biomarker testing



How biomarkers are impacting decisions across the product lifecycle



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



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



Launch / Commercialization

Tailor efforts toward specific patient populations based on their molecular profile for whom the drug is most appropriate



Post-marketing approval & surveillance

Assess the drug's performance and identify any potential safety concerns in specific patient populations that may not have been captured during clinical trials

How biomarkers are being used in precision oncology today

Today, biomarkers are commonly used in precision oncology to

- Assess cancer risk, diagnosis, prognosis
- Predict rate of disease growth and spread
- Identify patients based on their molecular profile for clinical trial inclusion
- Deliver personalized care based on biomarker status
- Look for signs of cancer recurrence
- Guide treatment selection including targeted therapies and immunotherapies
- Monitor treatment effectiveness

What patients and providers say about biomarker testing

In patient & provider surveys^{10,11}

89%

of providers agree that biomarker testing enables better treatment recommendation

85%

of providers agree that enhancing access to biomarker testing will improve health equity

77%

of testing said biomarker testing helped treat their cancer better



How legislators are reacting to biomarker trends¹²

- 18 states have enacted legislation requiring coverage in both public & private insurance plans¹³
- 22 states are opening, or looking at how to open, access to panel biomarker testing¹⁴
- CMS covers next-generation sequencing as a diagnostic laboratory test when performed in a clinical laboratory improvement amendment (clia)-certified laboratory or ordered by a treating physician under specific conditions¹⁵
- In 2023, only five states required some level of coverage for whole-genome sequencing and next-generation sequencing¹⁶



What the future of biomarkers in oncology looks like¹⁷

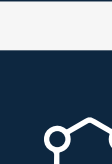
- Driven by increased access to precision medicine therapeutics, the global clinical oncology biomarker testing market is predicted by a 2024 report to reach \$12.6 billion by 2028¹⁸
- Biomarker testing is expected to be the core of oncologic care
- With tech advances, testing will become more sensitive & specific
- Cancer diagnoses may be possible from liquid biopsy
- Testing may increasingly be used to determine a person's risk of developing cancer

How Ontada integrates biomarkers into our technology & RWD

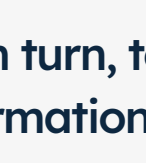
Biomarker information is integrated into providers' workflow in our oncology EHR, iKnowMed®, helping providers access at the point of need



Patient biomarker data



Diagnosis-level biomarker test & lab recommendations at point of care



Evidence-based value pathways



Biomarker ordering and workflow support in selecting & ordering molecular tests

In turn, testing and treatment patterns based on biomarker information are reflected in our real-world data (RWD), which life sciences companies can use in their commercialization strategies.

This is how we advance cancer care together.

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.

Learn more