



illumina®

You've always
had what it takes.
**Now you have
what you need.**

Introducing the US FDA-approved IVD
TruSight™ Oncology Comprehensive

Be the change you want to see in cancer care

Current oncology patient care requires optimal management of a limited patient biopsy sample as the iterative single-gene testing approach can lead to tissue depletion and repeat biopsies.¹⁻³ TruSight Oncology Comprehensive is a US FDA–approved comprehensive genomic profiling (CGP) solution that takes a hypothesis-neutral approach and consolidates numerous individual tests into a single panel, minimizing the amount of sample needed and maximizing the ability to potentially identify an actionable biomarker for better patient outcomes.

TruSight Oncology Comprehensive is a kitted solution. This enables testing in house and closer to the patient, potentially reducing the turnaround time to result and empowering pathologists to play a more active role on the patient care team.

As an *in vitro* diagnostic (IVD) test, TruSight Oncology Comprehensive can optimize time to go-live with an easier verification process and help labs prepare for an evolving regulatory landscape.



Preserve precious biopsy, democratize access

Conventional, iterative oncology biomarker testing approaches may lead to rapid biopsy tissue depletion. As tissue is depleted, the ability to assess additional targetable markers is negatively impacted. With TruSight Oncology Comprehensive, patients receive comprehensive biomarker testing that may increase their chances of being genetically matched with a potentially more effective therapy, leading to an improved outcome.⁴⁻⁹ A single CGP test can identify more clinically relevant variants than conventional tests, such as single-gene tests and hotspot NGS panels,^{2,9-12} while saving time and preserving biopsy specimen.

As the first distributable US FDA–approved CGP test with pan-cancer companion diagnostics (CDx) claims, Trusight Oncology Comprehensive is helping democratize access to potentially life-saving diagnostic testing. With a pathway to expanded reimbursement, including coverage under National Coverage Determination (NCD) 90.2^{13, 14}, more patients may become eligible for testing.



The biomarker content
of TruSight Oncology
Comprehensive covers¹⁵:



53

Clinical practice guidelines



67

FDA-approved drug labels



~820

US clinical trials

Enabling precision medicine for better patient outcomes

TruSight Oncology Comprehensive content includes critical biomarkers with known cancer associations as indicated in FDA-approved drug labels, major US clinical guidelines, and clinical trials for multiple solid tumor types.¹⁵ The results of TruSight Oncology Comprehensive can help inform therapy decisions according to clinical guidelines.

In addition, TruSight Oncology Comprehensive is indicated as a CDx test to identify cancer patients with solid tumors who are positive for *NTRK1*, *NTRK2*, or *NTRK3* gene fusions for treatment with VITRAKVI® (larotrectinib) and cancer patients with non-small cell lung cancer (NSCLC) who are positive for *RET* gene fusions for treatment with RETEVMO® (selpercatinib) in accordance with the approved therapeutic labeling.^{16,17} A pipeline of additional tumor profiling and CDx claims is under development.¹⁶⁻¹⁸



One test for multiple solid tumor types

Key actionable biomarkers covered for multiple solid tumor types.*

Genes listed are tumor type-specific biomarkers of clinical significance (based on presence in FDA-approved drug labels and clinical guidelines).

Pan-tumor



BRAF
NTRK1

NTRK2
NTRK3

RET
TMB

Non-small cell lung cancer



EGFR
KRAS

RET

Uterine



POLE

Breast



AKT1
BRCA1

BRCA2
ESR1

PIK3CA
PTEN

Melanoma



KIT
NRAS

Colorectal



KRAS
NRAS

POLD1
POLE

Ovarian



BRCA1
BRCA2

Prostate



ATM
ATR
BARD1
BRCA1
BRCA2
BRIP1

CDK12
CHEK1
CHEK2
FANCL
MRE11
NBN

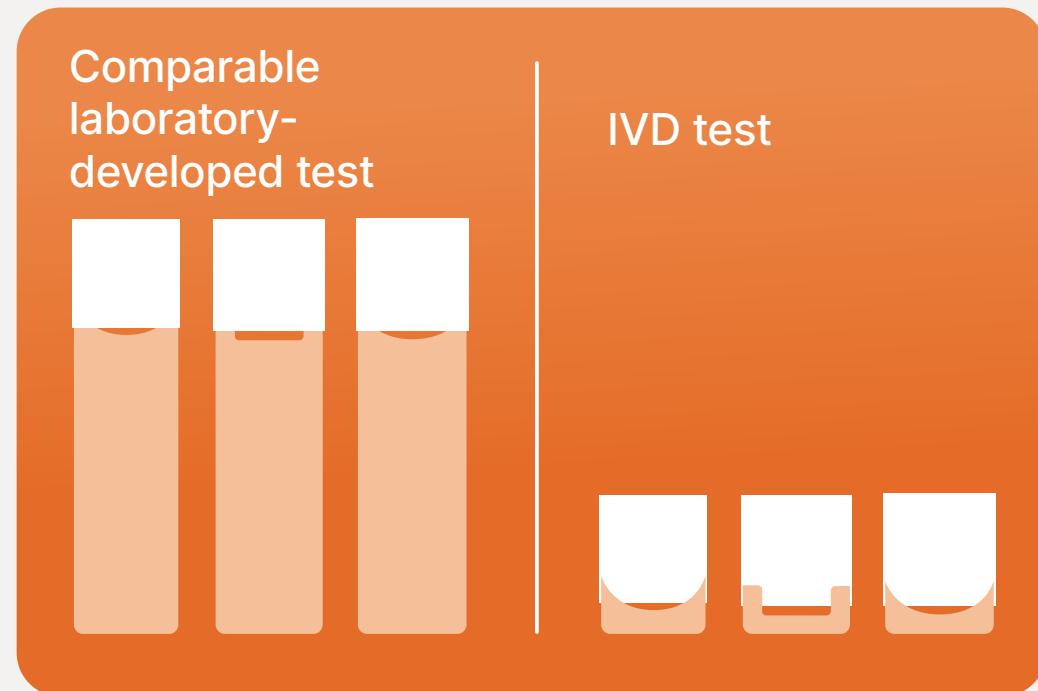
PALB2
RAD51B
RAD51C
RAD51D
RAD54L

* The TruSight Oncology Comprehensive panel includes over 500 genes. To see the full gene list, view the product data sheet at [TruSight Oncology Comprehensive](#).
TMB, tumor mutational burden.

Become a precision medicine provider by offering CGP testing in your institution

Bring CGP testing into your lab with TruSight Oncology Comprehensive. Offering NGS testing in your institution allows you to manage sample logistics better, keep data internally for future studies, optimize sample QC success rates, and, ultimately, increase the rate of biomarker-informed cases.¹⁹

TruSight Oncology Comprehensive is a US FDA-approved IVD solution that is validated by Illumina. It requires performance verification,[†] which is less resource-intensive than the validation required by a laboratory-developed test (LDT).



[†] Per guidelines set in 42 CFR 493.1253.

[‡] Illustrative example; not meant to provide a precise comparison of time and resources.

Time and resources to implement test[‡]



Benefits of offering TruSight Oncology Comprehensive in your institution



Maximize sample and data stewardship



Have more meaningful discussions with oncologists



Participate more actively in Molecular Tumor Boards



Improve test success rate



Increase number of biomarker informed cases



Optimize time to go-live



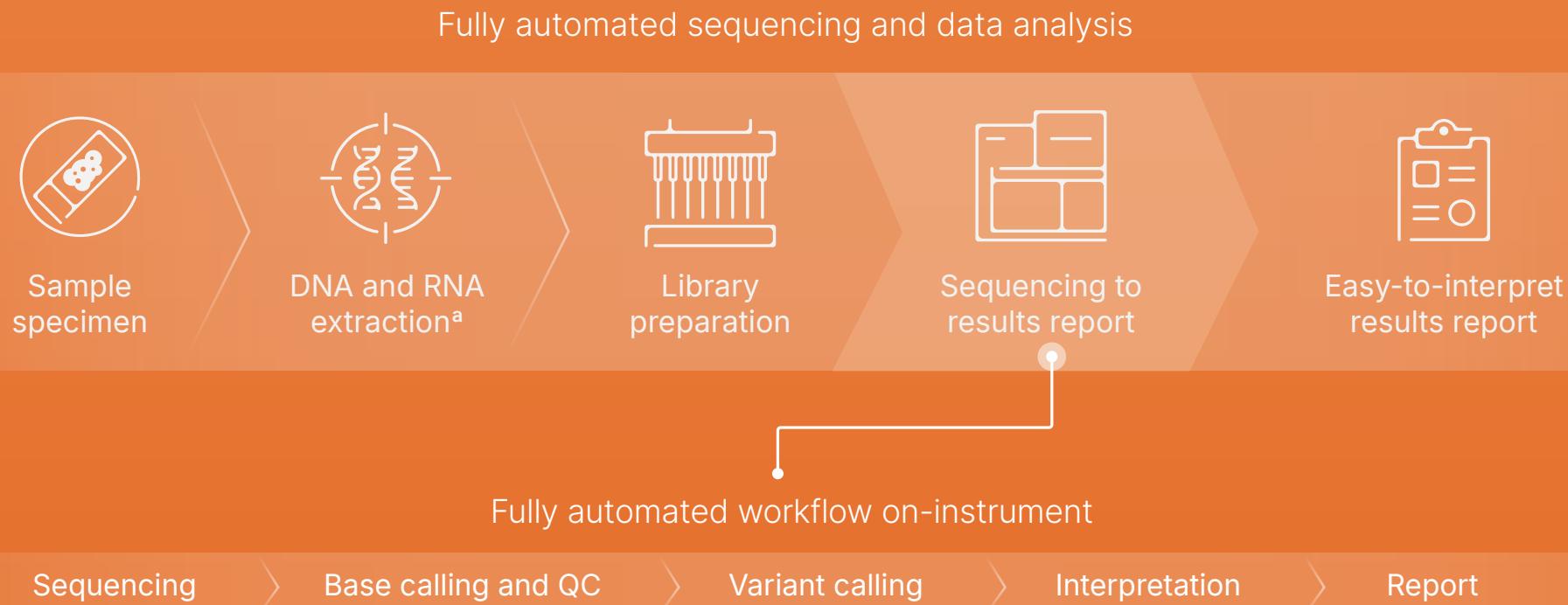
Prepare for evolving regulatory landscape



Expand access to testing

From sample to report in just 4 to 5 days

Rely on a US FDA–approved sample-to-result solution that can be implemented easier than an LDT, optimizing your time to go-live and empowering you to generate test results quickly and accurately.



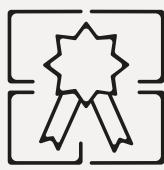
a. Extraction kits must be purchased separately.

360-degree support from day one

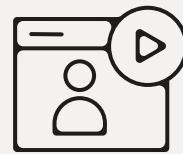
Rest assured that you will receive our full support with TruSight Oncology Comprehensive:



Onboarding
plans



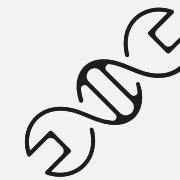
Training and
certification



Marketing and
educational tools
through our CGP
Lighthouse VIP portal



Verification
guidance



Ongoing
technical
support



CGP Lighthouse portal

Easily find resources to help educate your customers
on the benefits of comprehensive genomic profiling.

cgplighthouse.illumina.com

TruSight Oncology Comprehensive: A sample-to-report solution



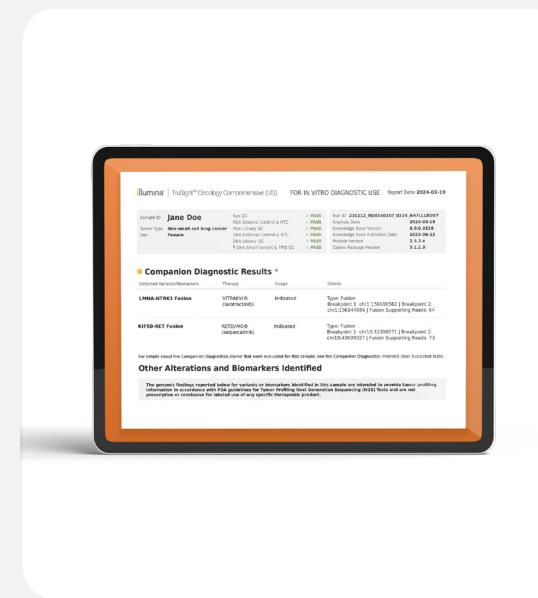
Library prep reagents

US FDA-approved IVD reagents in a kitted format for simple test implementation and reliable results.



NextSeq™ 550Dx System

An IVD instrument that delivers the consistency and reliability clinical labs need.



Results report

Actionable biomarker findings are displayed in an easy-to-interpret results report.

References

1. Lim C, Tsao MS, Le LW, et al. Biomarker testing and time to treatment decision in patients with advanced nonsmall-cell lung cancer. *Ann Oncol.* 2015;26(7):1415-1421. doi:10.1093/annonc/mdv208
2. Drilon A, Wang L, Arcila ME, et al. Broad, hybrid capture-based next-generation sequencing identifies actionable genomic alterations in lung adenocarcinomas otherwise negative for such alterations by other genomic testing approaches. *Clin Cancer Res.* 2015;21(16):3631-3639. doi:10.1158/1078-0432.CCR-14-2683
3. Yu TM, Morrison C, Gold EJ, Tradonsky A, Layton AJ. Multiple biomarker testing tissue consumption and completion rates with single-gene tests and investigational use of Oncomine Dx target test for advanced non-small-cell lung cancer: A single-center analysis. *Clin Lung Cancer.* 2019;20(1):20-29.e8. doi:10.1016/j.cllc.2018.08.010
4. Soumerai TE, Donoghue MTA, Bandlamudi C, et al. Clinical utility of prospective molecular characterization in advanced endometrial cancer. *Clin Cancer Res.* 2018;24(23):5939-5947. doi:10.1158/1078-0432.CCR-18-0412
5. Gutierrez ME, Choi K, Lanman RB, et al. Genomic profiling of advanced non-small cell Lung cancer in community settings: Gaps and opportunities. *Clin Lung Cancer.* 2017;18(6):651-659. doi:10.1016/j.cllc.2017.04.004.
6. Singal G, Miller PG, Agarwala V, et al. Association of patient characteristics and tumor genomics with clinical outcomes among patients with non-small cell lung cancer using a clinicogenomic database. *2019;321(14):1391-1399.* doi:10.1001/jama.2019.3241
7. Kato S, Kim KH, Lim HJ, et al. Real-world data from a molecular tumor board demonstrates improved outcomes with a precision N-of-One strategy. *Nat Commun.* 2020;11(1):4965. doi:10.1038/s41467-020-18613-3
8. Rozenblum AB, Ilouze M, Dudnik E, et al. Clinical impact of hybrid capture-based next-generation sequencing on changes in treatment decisions in lung cancer. *J Thorac Oncol.* 2017;12(2):258-268. doi:10.1016/j.jtho.2016.10.021
9. Zehir A, Benayed R, Shah RH, et al. Mutational landscape of metastatic cancer revealed from prospective clinical sequencing of 10,000 patients. *Nat Med.* 2017;23(6):703-713. doi:10.1038/nm.4333
10. Reitsma M, Fox J, Borre PV, et al. Effect of a collaboration between a health plan, oncology practice, and comprehensive genomic profiling company from the payer perspective. *J Manag Care Spec Pharm.* 2019;25(5):601-611. doi:10.18553/jmcp.2019.18309
11. Kopetz S, Mills Shaw KR, Lee JJ, et al. Use of a targeted exome next-generation sequencing panel offers therapeutic opportunity and clinical benefit in a subset of patients with advanced cancers. *JCO Precis Oncol.* 2019;3:PO.18.00213. doi:10.1200/PO.18.00213
12. Ali SM, Hensing T, Schrock AB, et al. Comprehensive genomic profiling identifies a subset of crizotinib-responsive ALK-rearranged non-small cell lung cancer not detected by fluorescence in situ hybridization. *Oncologist.* 2016;21(6):762-770. doi:10.1634/theoncologist.2015-0497
13. CMS. National Coverage Determination 90. cms.gov/medicare-coverage-database/view/ncd.aspx?NCDId=372. Accessed October 24, 2025.
14. Policy Reporter. Data pulled in 2023.
15. Analysis provided by Illumina Medical Affairs. Current as of Q3, 2025.
16. Illumina. Illumina and Loxo Oncology to Partner on Developing Next-Generation Sequencing-Based Pan-Cancer Companion Diagnostics. illumina.com/company/news-center/press-releases/2018/2341745.html. Published April 10, 2018. Accessed October 24, 2025.
17. BioPharma Dive. As Lilly deal closes, Bayer secures full rights to Loxo's Vitrakvi. biopharmadive.com/news/as-lilly-deal-closes-bayer-secures-full-rights-to-loxos-vit-rakvi/548584/. Published February 15, 2019. Accessed October 24, 2025.
18. Illumina. Illumina Announces New and Expanded Oncology Partnerships with Bristol Myers Squibb, Kura Oncology, Myriad Genetics, and Merck to Advance Comprehensive Genomic Profiling. 2021. illumina.com/company/news-center/press-releases/press-release-details.html?newsid=c8606ce8-c9ec-4c7f-9659-270952ae7bba. Published January 11, 2021. Accessed October 24, 2025.
19. Smith BF, Hampel KJ, Sidiroopoulos N. Benefits of implementing reflex genomic analysis for nonsmall cell lung cancer. *J Appl Lab Med.* 2024;9(1):28-40. doi:10.1093/jalm/jfad104

Intended use statement

TruSight™ Oncology Comprehensive is a qualitative *in vitro* diagnostic test that uses targeted next-generation sequencing to detect variants in 517 genes using nucleic acids extracted from formalin-fixed, paraffin-embedded (FFPE) tumor tissue samples from cancer patients with solid malignant neoplasms using the Illumina® NextSeq™ 5500Dx Instrument. The test can be used to detect single nucleotide variants, multinucleotide variants, insertions, and deletions from DNA, and fusions in 24 genes and splice variants in one gene from RNA. The test also reports a Tumor Mutational Burden (TMB) score.

The test is intended to be used as a companion diagnostic to identify cancer patients who may benefit from treatment with the targeted therapies listed in Table 1, in accordance with the approved therapeutic product labeling.

In addition, the test is intended to provide tumor profiling information for use by qualified health care professionals in accordance with professional guidelines in oncology for patients with solid malignant neoplasms. Genomic findings other than those listed in Table 1 of the intended use statement are not conclusive or prescriptive for labeled use of any specific therapeutic product.

Table 1: Companion diagnostic indications

Tumor type	Biomarker(s) detected	Therapy
Solid tumors	<i>NTRK1/2/3</i> fusions	VITRAKVI® (larotrectinib)
Non-small cell lung cancer (NSCLC)	<i>RET</i> fusions	RETEVMO® (selpercatinib)

Contact your Illumina sales representative to find out more about TruSight Oncology Comprehensive

Learn more

TruSight Oncology Comprehensive IVD Solutions

illumina®

For *In Vitro* Diagnostic Use.
Not available in all regions and countries.

© 2025 Illumina, Inc. All rights reserved.
M-AMR-01527 v2.0