A new era for better patient outcomes

Introducing
TruSight™ Oncology
Comprehensive (EU)

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Imagine a better oncology

diagnostic environment

Current oncology patient care relies on multiple biomarker tests. This requires strict 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 (EU) (TSO Comprehensive (EU)) is a comprehensive genomic profiling (CGP) solution that consolidates numerous individual tests into a single panel, minimizing the amount of sample needed and maximizing the ability to potentially identify an actionable alteration for better patient outcomes.

Comprehensive coverage Clinical confidence

Conventional oncology testing approaches supply limited information that does not address all biomarkers in approved and emerging targeted therapies and immunotherapies. When a positive biomarker is not identified, patients end up receiving standard, nonmatched regimens due to a lack of better options. With TruSight Oncology Comprehensive (EU), patients can receive a CGP test that may increase their chances of being genomically 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. CGP enables detection of DNA plus RNA variants and complex biomarker signatures, such as tumor mutational burden (TMB) and microsatellite instability (MSI), generating a comprehensive genomic profile of the patient's tumor and increasing confidence in ensuring the right treatment decisions.



Help inform targeted therapies for better patient outcomes

TruSight Oncology Comprehensive (EU) content includes critical biomarkers with known cancer associations as indicated in drug labels, European Society For Medical Oncology (ESMO) recommendations, and clinical trials for multiple solid tumor types.¹³ The results of TruSight Oncology Comprehensive (EU) can help inform therapy decisions according to clinical guidelines.

In addition, an extensive pipeline of companion diagnostic indications that will help identify patients responsive to specific targeted and immunotherapies is under development.¹⁴⁻¹⁷



One test for multiple solid tumor types

Key actionable biomarkers covered for multiple solid tumor types.*

Genes listed contain biomarkers of clinical significance. Numbers indicate additional genes in TSO Comprehensive (EU) with biomarkers of potential clinical significance.



^{*} The TruSight Oncology Comprehensive (EU) panel includes over 500 genes. To see the full gene list, view the product data sheet on www.illumina.com/tsocomprehensive



CNS[†]

ATRX BRAF EGFR H3F3A HIST1H3B IDH1 IDH2 PTCH1 TERT TP53



Prostate

ATM PALB2 BARD1 PPP2R2A BRCA1 RAD51B BRCA2 RAD51C BRIP1 RAD51D CDK12 RAD54L CHEK2 **FANCL** FGFR2 FGFR3 99



Thyroid

BRAF HRAS KRAS NRAS RET TERT

68



Uterine and cervical

ERBB2 ESR1 FOXO1 NCOA3 PAX3 PAX7 SMARCA4 SUZ12

112



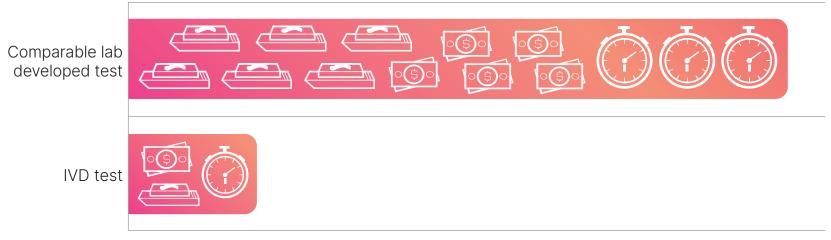
Other solid tumors

ERBB2 IDH1 PAX7 ALK APC ERG KIT **PDGFRA BCOR** ETV1 KRAS RANBP2 **BRAF** ETV4 MDM2 **SDHB** BRCA1 ETV6 MYOD1 SMARCB1 BRCA2 NAB2 TFE3 EWSR1 CDK4 FGFR2 NTRK1 WT1 CIC FGFR3 NTRK2 YAP1 CTNNB1 FOXO1 NTRK3 DNAJB1 GLI1 PAX3

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Become a precision medicine provider Offer CGP testing in your institution

Bring CGP testing into your lab with TSO Comprehensive (EU) and enjoy the benefits of being a precision medicine provider. Offering the test in your institution allows you to better manage the sample logistics, keep the data internally for future studies, affect success rates, and, ultimately, the rate of biomarker-informed cases.



Time and resources to implement test*

TSO Comprehensive is a CE-marked IVD solution heavily tested by Illumina. It requires ISO 15189 performance verification, which is less burdensome than the validation required by a test developed in the lab.



Maximize sample and data



Have more meaningful discussions with the oncologist



Participate more actively in Molecular Tumor Boards



Improve test success rate

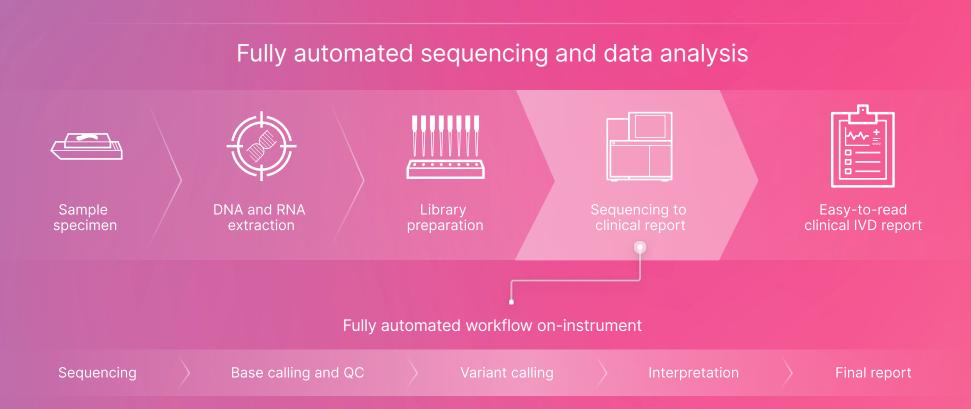


Increase number of biomarker-informed cases



From sample to report in just 4 to 5 days

Rely on a CE-marked, IVD, sample-to-answer solution that can be implemented easily, empowering you to generate test results quickly and accurately.



360 degree support from day one

Rest assured that you will receive our comprehensive level of support with TruSight Oncology Comprehensive (EU):



Onboarding plans



Training and certification



Marketing and educational tools brough our VIP porta



Verification protocols



Ongoing technical support

Illumina Lighthouse VIP portal

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

cgplighthouse.illumina.com

TruSight Oncology Comprehensive (EU) A sample-to-answer solution



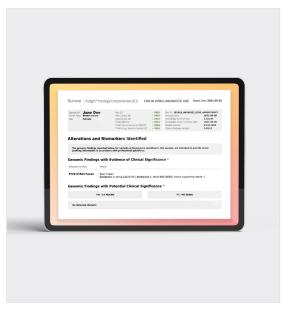
Library prep reagents

CE-marked IVD reagents in a kitted format for simple test implementation and reliable results.



NextSeq 550Dx System

A CE-marked IVD instrument that delivers the consistency and reliability clinical labs need.



Clinical IVD report

Actionable biomarker findings displayed in an easy-to-read IVD report.

References

- 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 [published correction appears in JAMA. 2020 Feb 4;323(5):480]. JAMA. 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. Published 2020 Oct 2. 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 [published correction appears in Nat Med. 2017 Aug 4;23 (8):1004]. 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. Published 2019 Mar 8. 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. Analysis provided by PierianDx based on the TruSight Oncology Comprehensive software knowledge base. Current as of September 2021.
- 14. Illumina and Loxo Oncology to Partner on Developing Next-Generation Sequencing-Based Pan-Cancer Companion Diagnostics. 2018. Available at https://www.businesswire.com/news/home/20180410005649/en/. Accessed February 22, 2021.
- 15. As Lilly deal closes, Bayer secures full rights to Loxo's Vitrakvi. 2019. Available at https://www.biopharmadive.com/news/as-lilly-deal-closes-bayer-secures-full-rights-to-loxos-vit-rakvi/548584/. Accessed February 22, 2021.
- 16. Roche, Illumina Partner on Next-Generation Sequencing IVD, CDx Development, Marketing. 2020. Available at https://www.genomeweb.com/business-news/roche-illumi-na-part-ner-next-generation-sequencing-ivd-cdx-development-mar-keting#.Xla-RqhKjlU. Accessed February 22, 2021.
- 17. Illumina Announces New and Expanded Oncology Partnerships with Bristol Myers Squibb, Kura Oncology, Myriad Genetics, and Merck to Advance Comprehensive Genomic Profiling. 2021. Available at https://www.illumina.com/company/news-center/press-releases/press-release-details.html?newsid=c8606ce8-c9ec-4c7f-9659-270952ae7bba. Accessed February 22, 2021.

Intended use

TruSight Oncology Comprehensive (EU) is an *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™ 550Dx instrument. The test can be used to detect single nucleotide variants, multinucleotide variants, insertions, deletions and gene amplifications from DNA, and gene fusions and splice variants from RNA. The test also reports a Tumor Mutational Burden (TMB) score and Microsatellite Instability (MSI) status.

The test is intended to provide tumor profiling information for use by qualified healthcare professionals in accordance with professional guidelines and is not conclusive or prescriptive for labeled use of any specific therapeutic product.

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

www.illumina.com/tsocomprehensive

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

