Resource Summary Report

Generated by ASWG on May 2, 2025

COSMIC - Catalogue Of Somatic Mutations In Cancer

RRID:SCR_002260
Type: Tool

Proper Citation

COSMIC - Catalogue Of Somatic Mutations In Cancer (RRID:SCR_002260)

Resource Information

URL: http://cancer.sanger.ac.uk/cancergenome/projects/cosmic/

Proper Citation: COSMIC - Catalogue Of Somatic Mutations In Cancer (RRID:SCR_002260)

Description: Database to store and display somatic mutation information and related details and contains information relating to human cancers. The mutation data and associated information is extracted from the primary literature. In order to provide a consistent view of the data a histology and tissue ontology has been created and all mutations are mapped to a single version of each gene. The data can be queried by tissue, histology or gene and displayed as a graph, as a table or exported in various formats.
Some key features of COSMIC are:
* Contains information on publications, samples and mutations. Includes samples which have been found to be negative for mutations during screening therefore enabling frequency data to be calculated for mutations in different genes in different cancer types.
* Samples entered include benign neoplasms and other benign proliferations, in situ and invasive tumours, recurrences, metastases and cancer cell lines.

Abbreviations: COSMIC

Synonyms: Catalogue Of Somatic Mutations In Cancer

Resource Type: data or information resource, database

Defining Citation: PMID:20952405

Keywords: cancer, mutation, somatic mutation, tumor, cancer genome, genome, gene, dna, tissue, histology, bio.tools, FASEB list

Related Condition: Cancer

Funding: Wellcome Trust 077012/Z/05/Z

Availability: Free

Resource Name: COSMIC - Catalogue Of Somatic Mutations In Cancer

Resource ID: SCR_002260

Alternate IDs: nif-0000-02690, biotools:cosmic, OMICS_00082

Alternate URLs: http://www.sanger.ac.uk/perl/CGP/cosmic, https://bio.tools/cosmic

Record Creation Time: 20220129T080212+0000

Record Last Update: 20250502T055320+0000

Ratings and Alerts

No rating or validation information has been found for COSMIC - Catalogue Of Somatic Mutations In Cancer.

No alerts have been found for COSMIC - Catalogue Of Somatic Mutations In Cancer.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3978 mentions in open access literature.

Listed below are recent publications. The full list is available at ASWG.

He J, et al. (2025) Enhancing disease risk gene discovery by integrating transcription factor-linked trans-variants into transcriptome-wide association analyses. Nucleic acids research, 53(1).

Pulcini S, et al. (2025) The clinical impact of EGFR alterations in elderly glioblastoma patients: results from a real-life cohort. Journal of neuro-oncology, 171(3), 619.

Yang C, et al. (2025) stSNV: a comprehensive resource of SNVs in spatial transcriptome. Nucleic acids research, 53(D1), D1224.

He Y, et al. (2025) RPS 2.0: an updated database of RNAs involved in liquid-liquid phase

separation. Nucleic acids research, 53(D1), D299.

Nguyen THH, et al. (2025) Combination of Hotspot Mutations With Methylation and Fragmentomic Profiles to Enhance Multi-Cancer Early Detection. Cancer medicine, 14(1), e70575.

Rajeeve AD, et al. (2025) Elucidating the potential of EGFR mutated NSCLC and identifying its multitargeted inhibitors. Scientific reports, 15(1), 3649.

Moore J, et al. (2025) Safety and tolerability of intramuscular sotrovimab administered at different injection sites: results from the Phase 1 COSMIC study. mAbs, 17(1), 2456467.

Yang ZZ, et al. (2025) DCAF13-mediated K63-linked ubiquitination of RNA polymerase I promotes uncontrolled proliferation in Breast Cancer. Nature communications, 16(1), 557.

Yu YZ, et al. (2025) Identification of pyrimidine metabolism-based molecular subtypes and prognostic signature to predict immune landscape and guide clinical treatment in prostate cancer. Annals of medicine, 57(1), 2449584.

Wang G, et al. (2025) Comparative genomic analysis unveiling the mutational landscape associated with premalignant lesions and early-stage gastric cardia cancer. Medicine, 104(2), e40332.

Kerle IA, et al. (2025) Translational and clinical comparison of whole genome and transcriptome to panel sequencing in precision oncology. NPJ precision oncology, 9(1), 9.

Wells JN, et al. (2025) Reconstitution of human DNA licensing and the structural and functional analysis of key intermediates. Nature communications, 16(1), 478.

Liu X, et al. (2025) Systematic assessment of structural variant annotation tools for genomic interpretation. Life science alliance, 8(3).

Xi Z, et al. (2025) Clonal hematopoiesis of indeterminate potential is a risk factor of gastric cancer: A Prospective Cohort in UK Biobank study. Translational oncology, 52, 102242.

Xiong Y-R, et al. (2025) Patterns of spontaneous and induced genomic alterations in Yarrowia lipolytica. Applied and environmental microbiology, 91(1), e0167824.

Liao R, et al. (2025) Characterization of the genomic landscape in liver oligometastatic NSCLC. BMC cancer, 25(1), 93.

Xu H, et al. (2025) Landscape of human protein-coding somatic mutations across tissues and individuals. bioRxiv : the preprint server for biology.

Chen YC, et al. (2025) Multiomics Analysis Reveals Molecular Changes during Early Progression of Precancerous Lesions to Lung Adenocarcinoma in Never-Smokers. Cancer research, 85(3), 602.

Huang Y, et al. (2025) RMVar 2.0: an updated database of functional variants in RNA

modifications. Nucleic acids research, 53(D1), D275.

Zhang X, et al. (2025) Tumour heterogeneity and personalized treatment screening based on single-cell transcriptomics. Computational and structural biotechnology journal, 27, 307.