Resource Summary Report

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pVACtools

RRID:SCR_025435
Type: Tool

Proper Citation

pVACtools (RRID:SCR_025435)

Resource Information

URL: https://pvactools.readthedocs.io/en/latest/

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Description: Software toolkit to identify and visualize cancer neoantigens. Cancer immunotherapy tools suite consisting of following tools: pVACseq as cancer immunotherapy pipeline for identifying and prioritizing neoantigens from VCF file; pVACbind as cancer immunotherapy pipeline for identifying and prioritizing neoantigens from FASTA file; pVACfuse as tool for detecting neoantigens resulting from gene fusions; pVACvector as tool designed to aid specifically in construction of DNA-based cancer vaccines; pVACview as application based on R Shiny that assists users in reviewing, exploring and prioritizing neoantigens from results of pVACtools processes for personalized cancer vaccine design.

Resource Type: software resource, software toolkit

Defining Citation: PMID:31907209

Keywords: Cancer immunotherapy tools, identify and visualize cancer neoantigens,

Funding: NCI U01CA209936;
NCI U01CA231844;
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Availability: Free, Freely available

Resource Name: pVACtools

Resource ID: SCR_025435

Record Creation Time: 20240628T053249+0000

Record Last Update: 20260725T191500+0000

Ratings and Alerts

No rating or validation information has been found for pVACtools.

No alerts have been found for pVACtools.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 27 mentions in open access literature.

Listed below are recent publications. The full list is available at nidm-terms .

Ferreira I, et al. (2025) The molecular cartography of malignant and benign sebaceous tumours. Nature communications, 17(1), 14.

Laplante P, et al. (2025) Effect of MisMatch repair deficiency on metastasis occurrence in a syngeneic mouse model. Neoplasia (New York, N.Y.), 62, 101145.

Huber F, et al. (2025) A comprehensive proteogenomic pipeline for neoantigen discovery to advance personalized cancer immunotherapy. Nature biotechnology, 43(8), 1360.

Trivedi V, et al. (2024) mRNA-based precision targeting of neoantigens and tumor-associated antigens in malignant brain tumors. Genome medicine, 16(1), 17.

Zhang X, et al. (2024) Neoantigen DNA vaccines are safe, feasible, and induce neoantigen-specific immune responses in triple-negative breast cancer patients. Genome medicine, 16(1), 131.

Roussot N, et al. (2024) Case report: Immune response characterization of a pseudoprogression in a PD-L1-negative, TMB-low, KEAP1/STK11 co-mutated metastatic NSCLC. Frontiers in immunology, 15, 1437961.

Liu J, et al. (2024) Single-cell landscape reveals the immune heterogeneity of bone marrow involvement in peripheral T-cell lymphoma. Cancer science, 115(8), 2540.

Pham TMQ, et al. (2024) The T cell receptor ?? chain repertoire of tumor infiltrating lymphocytes improves neoantigen prediction and prioritization. eLife, 13.

Zeverijn LJ, et al. (2024) The Innate Immune Landscape of dMMR/MSI Cancers Predicts the Outcome of Nivolumab Treatment: Results from the Drug Rediscovery Protocol. Clinical cancer research : an official journal of the American Association for Cancer Research, 30(19), 4339.

Panni UY, et al. (2023) Induction of cancer neoantigens facilitates development of clinically relevant models for the study of pancreatic cancer immunobiology. Cancer immunology, immunotherapy : CII, 72(8), 2813.

Dalens L, et al. (2023) Exome-Based Genomic Markers Could Improve Prediction of Checkpoint Inhibitor Efficacy Independently of Tumor Type. International journal of molecular sciences, 24(8).

Garcia-Recio S, et al. (2023) Multiomics in primary and metastatic breast tumors from the AURORA US network finds microenvironment and epigenetic drivers of metastasis. Nature cancer, 4(1), 128.

Iorgulescu JB, et al. (2023) Antigen presentation deficiency, mesenchymal differentiation, and resistance to immunotherapy in the murine syngeneic CT2A tumor model. Frontiers in immunology, 14, 1297932.

Calsina B, et al. (2023) Genomic and immune landscape Of metastatic pheochromocytoma and paraganglioma. Nature communications, 14(1), 1122.

Thibaudin M, et al. (2023) First-line durvalumab and tremelimumab with chemotherapy in RAS-mutated metastatic colorectal cancer: a phase 1b/2 trial. Nature medicine, 29(8), 2087.

Mensah MA, et al. (2023) Aberrant phase separation and nucleolar dysfunction in rare genetic diseases. Nature, 614(7948), 564.

Yang K, et al. (2023) Mutational pattern off homologous recombination repair (HRR)-related genes in upper tract urothelial carcinoma. Cancer medicine, 12(14), 15304.

Roelands J, et al. (2023) An integrated tumor, immune and microbiome atlas of colon cancer. Nature medicine, 29(5), 1273.

Stockton JD, et al. (2021) Complete response to neoadjuvant chemoradiotherapy in rectal cancer is associated with RAS/AKT mutations and high tumour mutational burden. Radiation oncology (London, England), 16(1), 129.

Trincado JL, et al. (2021) ISOTOPE: ISOform-guided prediction of epiTOPEs in cancer. PLoS computational biology, 17(9), e1009411.