Resource Summary Report

Generated by RRID on Sep 10, 2026

3D Slicer

RRID:SCR_005619
Type: Tool

Proper Citation

3D Slicer (RRID:SCR_005619)

Resource Information

URL: http://slicer.org/

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Description: A free, open source software package for visualization and image analysis including registration, segmentation, and quantification of medical image data. Slicer provides a graphical user interface to a powerful set of tools so they can be used by end-user clinicians and researchers alike. 3D Slicer is natively designed to be available on multiple platforms, including Windows, Linux and Mac Os X. Slicer is based on VTK (http://public.kitware.com/vtk) and has a modular architecture for easy addition of new functionality. It uses an XML-based file format called MRML - Medical Reality Markup Language which can be used as an interchange format among medical imaging applications. Slicer is primarily written in C++ and Tcl.

Abbreviations: Slicer

Synonyms: Slicer, 3D Slicer: A multi-platform free and open source software package for visualization and medical image computing, 3D Slicer, 3DSlicer

Resource Type: data processing software, data visualization software, image analysis software, software application, software resource

Keywords: birn, diffusion, functional, na-mic (ncbc), nifti-1 support, registration, segmentation, visualization, volume, warping

Funding: NIH ;
NCRR ;
NIBIB ;
NCI ;
US Army ;
Telemedicine and Advanced Technology Research Center

Availability: 3D Slicer License

Resource Name: 3D Slicer

Resource ID: SCR_005619

Alternate IDs: nif-0000-00256

Alternate URLs: http://www.nitrc.org/projects/slicer

Record Creation Time: 20220129T080231+0000

Record Last Update: 20260905T132538+0000

Ratings and Alerts

No rating or validation information has been found for 3D Slicer.

No alerts have been found for 3D Slicer.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 3187 mentions in open access literature.

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

David MA, et al. (2026) Demystifying machine learning approaches in digital bone imaging using microCT and HRpQCT. Bone reports, 29, 101911.

Stoiber S, et al. (2026) [18F]FDG PET/CT multiomics identifies Hedgehog-driven HPV-negative head and neck squamous cell carcinoma. Molecular cancer, 25(1).

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Kwon Y, et al. (2026) Enhancing cancer prognostics with group penalty models: a comparative study on radiomics feature selection in lung adenocarcinomas and meningiomas. Quantitative imaging in medicine and surgery, 16(2), 118.

Yoshida SY, et al. (2026) Whole-organ and whole-body 3D atlases enable cellome-wide profiling. Cell, 189(6), 1836.

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Xu G, et al. (2026) Altered Dynamic Functional Network Connectivity in Post-Stroke Aphasia. Annals of clinical and translational neurology, 13(1), 97.

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Zhang PQ, et al. (2026) Neural representations of beliefs in a multi-dimensional inference task. bioRxiv : the preprint server for biology.

Li Y, et al. (2026) A One-Dimensional (1D) Computational Fluid Dynamics Study of Fontan-Associated Liver Disease (FALD). International journal for numerical methods in biomedical engineering, 42(1), e70128.

Koguchi K, et al. (2026) Observation of the internal structure of the mandible related to implant placement in the mandibular anterior region. Anatomy & cell biology, 59(2), 287.

Pan X, et al. (2026) CT-based radiomics nomogram for preoperative prediction of Ki-67 in lung neuroendocrine neoplasms: a multicenter study. BMC medical imaging, 26(1), 93.

Wang JH, et al. (2026) Peritumoural adipose tissue drives immune evasion in colorectal cancer via adipose-mesenchymal transformation. Nature cell biology, 28(3), 581.

Duenweg SR, et al. (2026) Radio-pathomic maps of histo-morphometric features trained with whole mount prostate histology distinguish prostate cancer on MP-MRI. medRxiv : the preprint server for health sciences.

Shi L, et al. (2026) Clinical-Radiomics Signature Predicts Pathologic Complete Response After Neoadjuvant Therapy in Oesophageal Squamous Cell Carcinoma. Interdisciplinary cardiovascular and thoracic surgery, 41(2).