Resource Summary Report

Generated by T1D on Jul 31, 2026

DOTS WM tract segmentation

RRID:SCR_009459
Type: Tool

Proper Citation

DOTS WM tract segmentation (RRID:SCR_009459)

Resource Information

URL: http://www.nitrc.org/projects/dots/

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Description: A fast, scalable tool developed at the Johns Hopkins University to automatically segment the major anatomical fiber tracts within the human brain from clinical quality diffusion tensor MR imaging. With an atlas-based Markov Random Field representation, DOTS directly estimates the tract probabilities, bypassing tractography and associated issues. Overlapping and crossing fibers are modeled and DOTS can also handle white matter lesions. DOTS is released as a plug-in for the MIPAV software package and as a module for the JIST pipeline environment. They are therefore cross-platform and compatible with a wide variety of file formats.

Abbreviations: DOTS

Synonyms: Diffusion-Oriented Tract Segmentation White Matter tract segmentation, Diffusion-Oriented Tract Segmentation

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

Defining Citation: PMID:21718790

Keywords: magnetic resonance, diffusion tensor mr imaging, dti, fiber tract, brain

Funding: NIDA K25DA025356

Availability: Free

Resource Name: DOTS WM tract segmentation

Resource ID: SCR_009459

Alternate IDs: nlx_155605

Record Creation Time: 20220129T080253+0000

Record Last Update: 20260731T042822+0000

Ratings and Alerts

No rating or validation information has been found for DOTS WM tract segmentation.

No alerts have been found for DOTS WM tract segmentation.

Data and Source Information

Source: SciCrunch Registry

Usage and Citation Metrics

We found 115 mentions in open access literature.

Listed below are recent publications. The full list is available at T1D .

Keo B, et al. (2025) Measuring trade costs and analyzing the determinants of trade growth between Cambodia and major trading partners: 1993-2019. PloS one, 20(1), e0311754.

Eze C, et al. (2025) Evaluating the impact of social and behavior change communication intervention on improving documentation practices among healthcare workers in southern Nigeria: a before and after study. Frontiers in public health, 13, 1462944.

Lemma Tirore L, et al. (2024) Non-adherence to anti-tuberculosis treatment and associated factors among TB patients in public health facilities of Hossana town, Southern Ethiopia, 2022. Frontiers in medicine, 11, 1360351.

Mori R, et al. (2024) Developing Risk Assessment Items of Treatment Interruption Among Vietnamese Patients with Tuberculosis in Japanese DOTS-A Quantitative and Qualitative Survey Using the Delphi Method. Nursing reports (Pavia, Italy), 14(4), 3310.

Lajore BA, et al. (2024) Exploring health care providers' engagement in prevention and management of multidrug resistant Tuberculosis and its factors in Hadiya Zone health care facilities: qualitative study. BMC health services research, 24(1), 542.

Jonathan J, et al. (2024) Machine Learning for Prediction of Tuberculosis Detection: Case Study of Trained African Giant Pouched Rats. Online journal of public health informatics, 16, e50771.

Amkongo M, et al. (2023) Factors associated with the unsuccessful TB treatment outcomes in the northern regions of Namibia: a mixed methods study. BMC infectious diseases, 23(1), 342.

Bozzani FM, et al. (2023) Cost-effectiveness of tuberculosis infection prevention and control interventions in South African clinics: a model-based economic evaluation informed by complexity science methods. BMJ global health, 8(2).

Mao JJ, et al. (2023) Population-level health and economic impacts of introducing Vaccae vaccination in China: a modelling study. BMJ global health, 8(5).

Saez-Ayala M, et al. (2023) From a drug repositioning to a structure-based drug design approach to tackle acute lymphoblastic leukemia. Nature communications, 14(1), 3079.

Hu Y, et al. (2023) DNA Origami Tension Sensors (DOTS) to study T cell receptor mechanics at membrane junctions. bioRxiv : the preprint server for biology.

Abejew AA, et al. (2022) The Missing Quality of Tuberculosis Care and Treatment Delivered in Public-Health Facilities, Northeast Ethiopia: A Cross-Sectional Study. Clinics and practice, 12(6), 1034.

Adepoju VA, et al. (2022) Knowledge of International Standards for Tuberculosis Care among Private Non-NTP Providers in Lagos, Nigeria: A Cross-Sectional Study. Tropical medicine and infectious disease, 7(8).

Selimin DS, et al. (2021) Tuberculosis Treatment Outcome in Patients with TB-HIV Coinfection in Kuala Lumpur, Malaysia. Journal of tropical medicine, 2021, 9923378.

Arja A, et al. (2021) Patient delay and associated factors among tuberculosis patients in Gamo zone public health facilities, Southern Ethiopia: An institution-based cross-sectional study. PloS one, 16(7), e0255327.

Mitchell EMH, et al. (2021) Hybrid Approach to Estimation of Underreporting of Tuberculosis Case Notification in High-Burden Settings With Weak Surveillance Infrastructure: Design and Implementation of an Inventory Study. JMIR public health and surveillance, 7(3), e22352.

Nymark LS, et al. (2021) Inclusion of Additional Unintended Consequences in Economic Evaluation: A Systematic Review of Immunization and Tuberculosis Cost-Effectiveness Analyses. PharmacoEconomics - open, 5(4), 587.

Gautam N, et al. (2021) Knowledge on tuberculosis and utilization of DOTS service by tuberculosis patients in Lalitpur District, Nepal. PloS one, 16(1), e0245686.

Kirubi B, et al. (2021) Determinants of household catastrophic costs for drug sensitive tuberculosis patients in Kenya. Infectious diseases of poverty, 10(1), 95.

Chowdhury AS, et al. (2021) Estimating Catastrophic Costs due to Pulmonary Tuberculosis in Bangladesh. Journal of epidemiology and global health, 11(1), 83.