

Publications about TCIA Authored by the TCIA team

1. Freymann JB, Kirby JS, Perry JH, Clunie DA, Jaffe CC. **Image data sharing for biomedical research—meeting HIPAA requirements for de-identification.** Journal of Digital Imaging. 2012;25(1):14-24. doi: [10.1007/s10278-011-9422-x](https://doi.org/10.1007/s10278-011-9422-x)
2. Levy MA, Freymann JB, Kirby JS, Fedorov A, Fennessy FM, Eschrich SA, Berglund AE, Fenstermacher DA, Tan Y, Guo X. **Informatics methods to enable sharing of quantitative imaging research data.** Magnetic Resonance Imaging. 2012. doi: [10.1016/j.mri.2012.04.007](https://doi.org/10.1016/j.mri.2012.04.007)
3. Jaffe CC. **Imaging and Genomics: is there a synergy?** Radiology. 2012;264(2):329-31. doi: [10.1148/radiol.12120871](https://doi.org/10.1148/radiol.12120871)
4. Prior FW, Clark K, Commean P, Freymann J, Jaffe C, Kirby J, Moore S, Smith K, Tarbox L, Vendt B, editors. **TCIA: an information resource to enable open science.** Engineering in Medicine and Biology Society (EMBC), 2013 35th Annual International Conference of the IEEE; 2013: IEEE. doi: [10.1109/EMBC.2013.6609742](https://doi.org/10.1109/EMBC.2013.6609742)
5. Clark K, Vendt B, Smith K, Freymann J, Kirby J, Koppel P, Moore S, Phillips S, Maffitt D, Pringle M. **The Cancer Imaging Archive (TCIA): maintaining and operating a public information repository.** Journal of Digital Imaging. 2013;26(6):1045-57. doi: [10.1007/s10278-013-9622-7](https://doi.org/10.1007/s10278-013-9622-7)
6. Kalpathy-Cramer J, Freymann JB, Kirby JS, Kinahan PE, Prior FW. **Quantitative Imaging Network: Data Sharing and Competitive Algorithm Validation Leveraging The Cancer Imaging Archive.** Translational Oncology. 2014;7(1):147-52. [PMC3998686](https://pubmed.ncbi.nlm.nih.gov/23998686/)
7. Mayo C, Deasy J, Chera B, Freymann J, Kirby J, Hardenbergh P. **How can we effect culture change toward data driven medicine?** International Journal of Radiation Oncology* Biology* Physics. 2015. doi: [10.1016/j.ijrobp.2015.12.355](https://doi.org/10.1016/j.ijrobp.2015.12.355)
8. Commean PK, Rathmell JM, Clark KW, Maffitt DR, Prior FW. **A Query Tool for Investigator Access to the Data and Images of the National Lung Screening Trial.** Journal of Digital Imaging. 2015:1-9. doi: [10.1007/s10278-015-9785-5](https://doi.org/10.1007/s10278-015-9785-5)
9. Moore SM, Maffitt DR, Smith KE, Kirby JS, Clark KW, Freymann JB, Vendt BA, Tarbox LR, Prior FW. **De-identification of Medical Images with Retention of Scientific Research Value.** RadioGraphics. 2015;35(3):727-35. doi: [10.1148/rg.2015140244](https://doi.org/10.1148/rg.2015140244)
10. Rosenstein BS, Capala J, Efstathiou JA, Hammerbacher J, Kerns SL, Ostrer H, Prior FW, Vikram B, Wong J, Xiao Y. **How will big data improve clinical and basic research in radiation therapy?** International Journal of Radiation Oncology* Biology* Physics. 2016;95(3):895-904. doi: [10.1016/j.ijrobp.2015.11.009](https://doi.org/10.1016/j.ijrobp.2015.11.009)
11. Chennubhotla C, Clarke L, Fedorov A, Foran D, Harris G, Helton E, Nordstrom R, Prior F, Rubin D, Saltz J. **An Assessment of Imaging Informatics for Precision Medicine in Cancer.** Yearbook of Medical Informatics. 2017;26(01):110-9. doi: [10.15265/IY-2017-041](https://doi.org/10.15265/IY-2017-041)
12. Prior F, Smith K, Sharma A, Kirby J, Tarbox L, Clark K, Bennett W, Nolan T, Freymann J. **The public cancer radiology imaging collections of The Cancer Imaging Archive.** Nature Scientific Data, 2017:4. doi: [10.1038/sdata.2017.124](https://doi.org/10.1038/sdata.2017.124)
13. Bennett W, Smith K, Jarosz Q, Nolan T, Bosch W. **Reengineering Workflow for Curation of DICOM Datasets .** Journal of Digital Imaging. 2018:1-9. doi: [10.1007/s10278-018-0097-4](https://doi.org/10.1007/s10278-018-0097-4)
14. Kathiravelu, P., Sharma, A., Galhardas, H., Van Roy, P., & Veiga, L. **On-demand big data integration.** In Distributed and Parallel Databases (Vol. 37, Issue 2, pp. 273–295). (2018). doi: [10.1007/s10619-018-7248-y](https://doi.org/10.1007/s10619-018-7248-y)
15. Prior F, Almeida J, Kathiravelu P, Kurc T, Smith K, Fitzgerald TJ, Saltz J. **Open access image repositories: high-quality data to enable machine learning research.** Clinical Radiology. 2019. doi: [10.1016/j.crad.2019.04.002](https://doi.org/10.1016/j.crad.2019.04.002)
16. FitzGerald TJ, Bishop-Jodoin M, Laurie F, Hanusik R, Iandoli M, Karolczuk K, Kessel S, Prior F, Saltz J, Sharma A. **Imaging and Neuro-Oncology Clinical Trials of the National Clinical Trials Network (NCTN).** In: Zhou Y, editor. Neuroimaging. London, UK: IntechOpen; 2019. doi: <https://dx.doi.org/10.5772/intechopen.89065>

17. FitzGerald TJ, Bishop-Jodoin M, Laurie F, Hanusik R, Iandoli M, Karolczuk K, Kessel S, Prior F, Saltz J, Sharma A. **Acquisition and Management of Data for Translational Science in Oncology**. In: Zhou Y, editor. *Translational Research in Cancer*. London, UK: IntechOpen; 2019. doi: [10.5772/intechopen.89700](https://doi.org/10.5772/intechopen.89700)
18. Bekelman JE, Lu H, Pugh S, Baker K, Berg CD, de Gonzalez AB, Braunstein LZ, Bosch W, Chauhan C, Ellenberg S, Fang L, Freedman G, Hahn E, Haffty B, Khan A, Jimenez R, Kesslering C, Ky B, Lee C, Lu H-M, Mishra M, Mullins C, Mutter R, Nagda S, Pankuch M, Powell S, Prior F, Schupak K, Taghian A, Wilkinson J, MacDonald S, Cahlon O, Consortium) RRCE. **Pragmatic randomised clinical trial of proton versus photon therapy for patients with non-metastatic breast cancer: the Radiotherapy Comparative Effectiveness (RadComp) Consortium trial protocol**. *BMJ open*. 2019;9(10):e025556. doi: [10.1136/bmjopen-2018-025556](https://doi.org/10.1136/bmjopen-2018-025556).
19. Basu A, Warzel D, Eftekhari A, Kirby JS, Freymann J, Knable J, Sharma A, Jacobs P. **Call for Data Standardization: Lessons Learned and Recommendations in an Imaging Study**. *JCO Clinical Cancer Informatics*. 2019;3:1-11. doi: [10.1200/CCI.19.00056](https://doi.org/10.1200/CCI.19.00056).
20. Kathiravelu P, Saghar YN, Aggarwal T, Sharma A. **Data Services with Bindaas: RESTful Interfaces for Diverse Data Sources**. arXiv preprint arXiv:[1912.08768](https://arxiv.org/abs/1912.08768). 2019.
21. Bona JP, Prior FW, Zozus MN, Brochhausen M. **Enhancing Clinical Data and Clinical Research Data with Biomedical Ontologies-Insights from the Knowledge Representation Perspective**. *Yearbook of medical informatics*. 2019;28(01):140-51. doi: [10.1055/s-0039-1677912](https://doi.org/10.1055/s-0039-1677912).
22. Desjardins B, Mirsky Y, Ortiz MP, Glozman Z, Tarbox L, Horn R, Horii SC. **DICOM Images Have Been Hacked! Now What?**. *American Journal of Roentgenology*. 2020 Apr;214(4):727-35. doi: [10.2214/AJR.19.21958](https://doi.org/10.2214/AJR.19.21958)
23. Diaz O, Kushibar K, Osuala R, Linardos A, Garrucho L, Igual L, Radeva P, Prior F, Gkontra P, Lekadir K. (2021). **Data preparation for artificial intelligence in medical imaging: A comprehensive guide to open-access platforms and tools**. *Physica Medica*, 83, 25–37. doi: [10.1016/j.ejmp.2021.02.007](https://doi.org/10.1016/j.ejmp.2021.02.007)
24. Bona, J. P., Utecht, J., Bost, S., Brochhausen, M., & Prior, F. (2022). **The PRISM semantic cohort builder: a novel tool to search and access clinical data in TCIA imaging collections**. In *Physics in Medicine & Biology*. doi: [10.1088/1361-6560/ac9d1d](https://doi.org/10.1088/1361-6560/ac9d1d)
25. Koh D-M, Papanikolaou N, Bick U, Illing R, Kahn C, Kalpathy-Cramer J, Martí-Bonmatí L, Matos C, Mun SK, Napel S, Rockall A, Sala E, Strickland N, Prior F. (2022) **Artificial intelligence and machine learning in cancer imaging**, *Nature Communications Medicine* 2, 133. doi: [10.1038/s43856-022-00199-0](https://doi.org/10.1038/s43856-022-00199-0)
26. Samanta, S., Kesaria, A. Z., Kalantari, F., Mian, M., Prior, F. W., Xia, F., & Lewis, G. D. (2023). **Analysis of the Cancer Imaging Archive for Patterns of Locoregional Failure in Relation to the Mucous Membranes among Patients with Head and Neck Squamous Cell Carcinoma: Potential Organ at Risk that can be Spared?** *International Journal of Radiation Oncology*Biophysics*, 117:2, pp. e622–e623 doi: [10.1016/j.ijrobp.2023.06.2008](https://doi.org/10.1016/j.ijrobp.2023.06.2008)