

Tumor-Infiltrating Lymphocytes Maps from TCGA H&E Whole Slide Pathology Images (TIL-WSI-TCGA)

Summary

Mappings of tumor-infiltrating lymphocytes (TILs), based on H&E images from 13 of [The Cancer Genome Atlas \(TCGA\)](#) tumor types are available here. These TIL maps are derived through computational staining, using a convolutional neural network trained to classify patches of images. In addition to the TIL Maps, the analysis codes and the software used to extract TILs are also available. The accompanying paper contains detailed information about our methods and our findings. The source histopathology, molecular correlates and clinical data used in this study can be found on the [Genomic Data Commons](#). More information about the tools used to generate these results can be found on the [QuIP Software Stack](#) and [TIL Classification Software](#) pages. Answers to commonly asked questions about these data are contained in this [FAQs](#) document.

TCGA Tumor Types Used in this Study

1. BLCA Bladder urothelial carcinoma
2. BRCA Breast invasive carcinoma
3. CESC Cervical squamous cell carcinoma and endocervical adenocarcinoma
4. COAD Colon adenocarcinoma
5. LUAD Lung adenocarcinoma
6. LUSC Lung squamous cell carcinoma
7. PAAD Pancreatic adenocarcinoma
8. PRAD Prostate adenocarcinoma
9. READ Rectum adenocarcinoma
10. SKCM Skin Cutaneous Melanoma
11. STAD Stomach adenocarcinoma
12. UCEC Uterine Corpus Endometrial Carcinoma
13. UVM Uveal Melanoma

Data Access

Data Access

Data Type	Download all or Query/Filter	License
Histopathology TIL Maps	Search	CC BY 3.0

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Additional Resources for this Dataset

The NCI Cancer Research Data Commons (CRDC) provides access to additional data and a cloud-based data science infrastructure that connects data sets with analytics tools to allow users to share, integrate, analyze, and visualize cancer research data.

- Genomic Data Commons: ([Genomic data](#), [H&E Images](#), [Clinical](#), and [molecular correlate Data](#))

Additional resources:

The following external resources have been made available by the data submitters. These are not hosted or supported by TCIA, but may be useful to researchers utilizing this collection.

- Software: [QuIP Software Stack](#)
- Software: [TIL Classification Software](#)
- [TIL Maps](#)

Collections Used in this Third Party Analysis

Below is a list of TCIA Collections used in these analyses:

- [TCGA-BLCA](#),
- [TCGA-BRCA](#),
- [TCGA-CESC](#),
- [TCGA-COAD](#),
- [TCGA-LUAD](#),
- [TCGA-LUSC](#),
- [TCGA-PAAD](#),
- [TCGA-PRAD](#),
- [TCGA-READ](#),
- [TCGA-SKCM](#),
- [TCGA-STAD](#),
- [TCGA-UCEC](#),

- TCGA-UVM

Detailed Description

Detailed Description

Please contact help@cancerimagingarchive.net with any questions regarding usage.

Citations & Data Usage Policy

Citations & Data Usage Policy

Users must abide by the [TCIA Data Usage Policy and Restrictions](#). Attribution should include references to the following citations:



Data Citation

Saltz, J., Gupta, R., Hou, L., Kurc, T., Singh, P., Nguyen, V., Samaras, D., Shroyer, K. R., Zhao, T., Batiste, R., Van Arnam, J., The Cancer Genome Atlas Research Network, Shmulevich, I., Rao, A. U. K., Lazar, A. J., Sharma, A., & Thorsson, V. (2018). **Tumor-Infiltrating Lymphocytes Maps from TCGA H&E Whole Slide Pathology Images [Data set]**. The Cancer Imaging Archive. <https://doi.org/10.7937/K9/TCIA.2018.Y75F9W1>



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TCIA Citation

Clark, K., Vendt, B., Smith, K., Freymann, J., Kirby, J., Koppel, P., Moore, S., Phillips, S., Maffitt, D., Pringle, M., Tarbox, L., & Prior, F. (2013). **The Cancer Imaging Archive (TCIA): Maintaining and Operating a Public Information Repository**. Journal of Digital Imaging, 26(6), 1045–1057. <https://doi.org/10.1007/s10278-013-9622-7>

Other Publications Using This Data

TCIA maintains [a list of publications](#) which leverage TCIA data. If you have a publication you'd like to add please [contact TCIA's Helpdesk](#).

Versions

Version 1 (Current): 2018/12/17

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