TCIA Analysis Results

To enhance the value of TCIA collections for future research we encourage the research community to publish analysis datasets to augment our primary datasets. Potential data types of interest include analysis results such as tumor segmentations, radiomics features, derived/reprocessed images, and radiologist assessments.

If your analysis results include voxel-based segmentations, parametric maps (e.g., maps of DCE or DWI MRI model parameter fits), or measurements derived from the segmented regions (e.g., radiomics features), you may consider using the dcmqi library (github link) to convert your dataset into standard DICOM representation.

Submitting a request to publish analysis results

In order to publish analysis results you must first identify the subset of TCIA data that you analyzed. This is done by creating a shared list using TCIA’s Data Portal (see “Creating a Shared List”). Once a shared list is created you can send a request to publish your dataset to TCIA’s help desk providing the following information:

- **Shared List Name** – The name of the TCIA shared list that identifies the data you have analyzed. (required – See Creating a Shared List for assistance)
- **Title** – The title of your dataset.
- **Authors** – The names of the authors who helped generate the dataset in the order you would like them to appear in the citation.
- **Abstract** – A brief abstract of the data. It should include how you selected the image data, how any analyses were generated/collected, and what the potential value of this data is for other TCIA users.
- **Special Instructions** – Any guidance about the timing of when we publish the DOI (e.g. it should not be listed until a related manuscript is published) or other questions/concerns.

Once we process your request your dataset will be published in our Analysis Results directory and will be assigned a unique/persistent digital object identifier (DOI). This DOI can be used to cite your dataset and also provides a web link to easily direct people to your data.

Analysis Results Directory

A listing of published analysis results data sets based upon TCIA-hosted data (sorted from newest to oldest):

- Tumor-Infiltrating Lymphocytes Maps from TCGA H&E Whole Slide Pathology Images
- Standardized representation of the TCIA LIDC-IDRI annotations using DICOM
- DICOM-SEG Conversions for TCGA-LGG and TCGA-GBM Segmentation Datasets
- Crowds Cure Cancer: Data collected at the RSNA 2017 annual meeting
- Data from Head and Neck Cancer CT Atlas
- Segmentation Labels and Radiomic Features for the Pre-operative Scans of the TCGA-GBM collection
- Segmentation Labels and Radiomic Features for the Pre-operative Scans of the TCGA-LGG collection
- Image Data Used in the Simulations of “The Role of Image Compression Standards in Medical Imaging: Current Status and Future Trends”
- NSCLC Radiogenomics: Initial Stanford Study of 26 Cases
- Imaging Features, and Correlations with Genomic and Clinical Data from the TCGA Ovarian Radiology Research Group
- Long and Short Survival in Adenocarcinoma Lung CTS
- ROI Masks Defining Low-Grade Glioma Tumor Regions In the TCGA-LGG Image Collection
- NCI-ISBI 2013 Challenge: Automated Segmentation of Prostate Structures
- Spatial Habitat Features derived from Multiparametric Magnetic Resonance Imaging data from Glioblastoma Multiforme cases
- QIN multi-site collection of Lung CT data with Nodule Segmentations
- Glioblastoma multiforme: exploratory radiogenomic analysis by using quantitative image features
- Segmentation of Pulmonary Nodules in Computed Tomography Using a Regression Neural Network Approach and its Application to the Lung Image Database Consortium and Image Database Resource Initiative Dataset
- Radiogenomic Analysis of Breast Cancer: Luminal B Molecular Subtype Is Associated with Enhancement Dynamics at MR Imaging
- Outcome Prediction in Patients with Glioblastoma by Using Imaging, Clinical, and Genomic Biomarkers: Focus on the Nonenhancing Component of the Tumor
- MR Imaging Predictors of Molecular Profile and Survival: Multi-institutional Study of the TCGA Glioblastoma Data Set
- Glioblastoma: Imaging Genomic Mapping Reveals Sex-specific Oncogenic Associations of Cell Death
- Decoding tumour phenotype by noninvasive imaging using a quantitative radiomics approach
- Data from: Quantitative computed tomographic descriptors associate tumor shape complexity and intratumor heterogeneity with prognosis in lung adenocarcinoma