

TCIA Analysis Results

To enhance the value of TCIA collections for future research we encourage the research community to publish their analyses of existing [TCIA image collections](#). Examples of this kind of data includes radiologist or pathologist annotations, image classifications, segmentations, radiomics features, or derived/reprocessed images. Similar to submitting new image collections, these data are reviewed by the TCIA Advisory Group for relevance and curated using our normal processes to assure data are de-identified. However, TCIA does not certify the quality of the analyses themselves (e.g. accuracy of segmentation on a given scan). Researchers should always carefully review the data and any related publications before deciding whether these analyses could be useful in their work.

Note: Column headers can be clicked to sort the table.

Title	Cancer Type	Location	Subjects	Collections Analyzed	Analysis Artifacts on TCIA	Updated
Thoracic Volume and Pleural Effusion Segmentations in Diseased Lungs for Benchmarking Chest CT Processing Pipelines	Lung	Lung	402	NSCLC-Radiomics	Thoracic segmentations, pleural effusion segmentations, image features	2020-04-08
Decoding tumour phenotype by noninvasive imaging using a quantitative radiomics approach	Lung, Head-Neck	Lung, Head-Neck	701	NSCLC-Radiomics , NSCLC-Radiomics-Genomics , Head-Neck-Radiomics-HN1 , NSCLC-Radiomics-Interobserver1 , RIDER Lung CT	Tumor segmentations and radiomic features	2020-03-23
Glioblastoma: Imaging Genomic Mapping Reveals Sex-specific Oncogenic Associations of Cell Death	Glioblastoma	Brain	99	TCGA-GBM	N/A	2016-08-02
MR Imaging Predictors of Molecular Profile and Survival: Multi-institutional Study of the TCGA Glioblastoma Data Set	Glioblastoma	Brain	75	TCGA-GBM	Radiologist assessments of image features	2014-11-12
Outcome Prediction in Patients with Glioblastoma by Using Imaging, Clinical, and Genomic Biomarkers: Focus on the Nonenhancing Component of the Tumor	Glioblastoma	Brain	45	TCGA-GBM	Radiologist assessments of image features and hemodynamic parameters	2014-07-24
Radiogenomic Analysis of Breast Cancer: Luminal B Molecular Subtype Is Associated with Enhancement Dynamics at MR Imaging	Breast	Breast	48	TCGA-BRCA	N/A	2014-11-12
Radiogenomics of Clear Cell Renal Cell Carcinoma: Preliminary Findings of The Cancer Genome Atlas-Renal Cell Carcinoma (TCGA-RCC) Research Group	Renal Clear Cell Carcinoma	Kidney	103	TCGA-KIRC	Radiologist assessments of image features	2015-05-28
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	Lung	Chest	102	LIDC-IDRI	N/A	2015-02-24
Glioblastoma multiforme: exploratory radiogenomic analysis by using quantitative image features	Glioblastoma	Brain	55	TCGA-GBM	Tumor segmentations	2014-11-05
Spatial Habitat Features derived from Multiparametric Magnetic Resonance Imaging data from Glioblastoma Multiforme cases	Glioblastoma	Brain	74	TCGA-GBM	N/A	2015-08-20
NCI-ISBI 2013 Challenge: Automated Segmentation of Prostate Structures	Prostate	Prostate	80	PROSTATE-DIAGNOSIS , Prostate-3T	Prostate structure segmentations	2015-08-20
NSCLC Radiogenomics: Initial Stanford Study of 26 Cases	Lung	Chest	26	NSCLC Radiogenomics	N/A	2013-03-01
Data from Head and Neck Cancer CT Atlas	Head and Neck Squamous Cell Carcinoma	Head-Neck	215	HNSCC	Radiation Therapy Structures	2019-07-11
Crowds Cure Cancer: Data collected at the RSNA 2017 annual meeting	Lung Adenocarcinoma, Renal Clear Cell, Liver, Ovarian	Chest, Kidney, Liver, Ovary	352	TCGA-LUAD , TCGA-KIRC , TCGA-LIHC , TCG A-OV	Lesion measurements	2018-05-17
Image Data Used in the Simulations of "The Role of Image Compression Standards in Medical Imaging: Current Status and Future Trends"	Colon, Lung, Breast, Glioblastoma	Colon, Chest, Breast, Brain	40	CT COLONOGRAPHY , LIDC-IDRI , TCGA-BRCA , TCGA-GBM	N/A	2016-12-08

QIN multi-site collection of Lung CT data with Nodule Segmentations	Lung	Chest	31	Lung Phantom, LIDC-IDRI, QIN LUNG CT, RIDER Lung CT	Tumor segmentations	2018-12-18
ROI Masks Defining Low-Grade Glioma Tumor Regions In the TCGA-LGG Image Collection	Low Grade Glioma	Brain	188	TCGA-LGG	Radiologist assessments of image features, tumor segmentations	2017-03-17
TCGA Breast Phenotype Research Group Data sets	Breast	Breast	84	TCGA-BRCA	Radiologist assessments of image features, lesion segmentations, radiomic features, and multi-gene assays	2018-09-04
Standardized representation of the TCIA LIDC-IDRI annotations using DICOM	Lung	Chest	1,010	LIDC-IDRI	Tumor segmentations, image features	2020-03-26
DICOM-SEG Conversions for TCGA-LGG and TCGA-GBM Segmentation Datasets	Glioblastoma, Low Grade Glioma	Brain	243	TCGA-GBM, TCGA-LGG	Tumor segmentations	2018-11-20
Imaging Features, and Correlations with Genomic and Clinical Data from the TCGA Ovarian Radiology Research Group	High-Grade Serous Ovarian Cancer	Ovary	93	TCGA-OV	Radiologist assessments of image features, genomic subtypes	2016-08-02
Long and Short Survival in Adenocarcinoma Lung CTs	Lung Adenocarcinoma	Chest	40	LungCT-Diagnosis, QIN LUNG CT	Tumor segmentations and radiomic image features	2017-08-11
Tumor-Infiltrating Lymphocytes Maps from TCGA H&E Whole Slide Pathology Images	Various (13 collections)	Various (13 collections)	4,759	Various (13 TCGA collections)	Deep learning based computational stain for staining tumor-infiltrating lymphocytes (TILs)	2018-12-17
Segmentation Labels and Radiomic Features for the Pre-operative Scans of the TCGA-GBM collection	Glioblastoma	Brain	135	TCGA-GBM	Tumor segmentations and radiomic image features	2017-07-17
Segmentation Labels and Radiomic Features for the Pre-operative Scans of the TCGA-LGG collection	Low Grade Glioma	Brain	108	TCGA-LGG	Tumor segmentations and radiomic image features	2017-07-17
SDTM datasets of clinical data and measurements for selected cancer collections to TCIA	Breast, Glioblastoma	Breast, Brain	516	ISPY1, BREAST-DIAGNOSIS, Breast-MRI-NACT-Pilot, TCGA-BRCA, Ivy GAP	Standardized (SDTM format) conversions of clinical and image analysis data	2019-06-21
Crowds Cure Cancer: Data collected at the RSNA 2018 annual meeting	Various (13 collections)	Various (13 collections)	324	Various (13 collections)	Lesion measurements	2019-05-30
RIDER Lung CT Segmentation Labels from: Decoding tumour phenotype by noninvasive imaging using a quantitative radiomics approach	Lung	Chest	31	RIDER Lung CT	Tumor segmentations	2020-02-13
Dataset of Segmented Nuclei in Hematoxylin and Eosin Stained Histopathology Images	Various (14 collections)	Various (14 collections)		Various (14 TCGA collections)	Nuclei segmentations	2020-02-08