

# TCGA-GBM

## Summary

The Cancer Genome Atlas Glioblastoma Multiforme (TCGA-GBM) data collection is part of a larger effort to build a research community focused on connecting cancer phenotypes to genotypes by providing clinical images matched to subjects from [The Cancer Genome Atlas \(TCGA\)](#). Clinical, genetic, and pathological data resides in the [Genomic Data Commons \(GDC\) Data Portal](#) while the radiological data is stored on The Cancer Imaging Archive (TCIA).

Matched TCGA patient identifiers allow researchers to explore the TCGA/TCIA databases for correlations between tissue genotype, radiological phenotype and patient outcomes. Tissues for TCGA were collected from many sites all over the world in order to reach their accrual targets, usually around 500 specimens per cancer type. For this reason the image data sets are also extremely heterogeneous in terms of scanner modalities, manufacturers and acquisition protocols. In most cases the images were acquired as part of routine care and not as part of a controlled research study or clinical trial.

## CIP TCGA Radiology Initiative

Imaging Source Site (ISS) Groups are being populated and governed by participants from institutions that have provided imaging data to the archive for a given cancer type. Modeled after TCGA analysis groups, ISS groups are given the opportunity to publish a marker paper for a given cancer type per the guidelines in the table above. This opportunity will generate increased participation in building these multi-institutional data sets as they become an open community resource. Learn more about the [TCGA Glioma Phenotype Research Group](#).






## Acknowledgements

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## Data Access

Click the **Download** button to save a ".tcia" manifest file to your computer, which you must open with the [NBIA Data Retriever](#). Click the **Search** button to open our Data Portal, where you can browse the data collection and/or download a subset of its contents.

Data Type	Download all or Query/Filter
Images (DICOM, 73.5GB)	 
Tissue Slide Images (web)	
Clinical Data (TXT)	
Genomics (web)	

Click the Versions tab for more info about data releases.

### Third Party Analyses of this Dataset

TCIA encourages the community to [publish your analyses of our datasets](#). Below is a list of such third party analyses published using this Collection:

- [Segmentation Labels and Radiomic Features for the Pre-operative Scans of the TCGA-GBM collection](#)
- [DICOM-SEG Conversions for TCGA-LGG and TCGA-GBM Segmentation Datasets](#)
- [MR Imaging Predictors of Molecular Profile and Survival: Multi-institutional Study of the TCGA Glioblastoma Data Set](#)
- [Outcome Prediction in Patients with Glioblastoma by Using Imaging, Clinical, and Genomic Biomarkers: Focus on the Nonenhancing Component of the Tumor](#)
- [Glioblastoma multiforme: exploratory radiogenomic analysis by using quantitative image features](#)
- [Image Data Used in the Simulations of "The Role of Image Compression Standards in Medical Imaging: Current Status and Future Trends"](#)
- [Glioblastoma: Imaging Genomic Mapping Reveals Sex-specific Oncogenic Associations of Cell Death](#)
- [Spatial Habitat Features derived from Multiparametric Magnetic Resonance Imaging data from Glioblastoma Multiforme cases](#)