

Brain-Tumor-Progression

Summary

This collection includes datasets from 20 subjects with primary newly diagnosed glioblastoma who were treated with surgery and standard concomitant chemo-radiation therapy (CRT) followed by adjuvant chemotherapy. Two MRI exams are included for each patient: within 90 days following CRT completion and at progression (determined clinically, and based on a combination of clinical performance and/or imaging findings, and punctuated by a change in treatment or intervention).

All image sets are in DICOM format and contain T1w (pre and post-contrast agent), FLAIR, T2w, ADC, normalized cerebral blood flow, normalized relative cerebral blood volume, standardized relative cerebral blood volume, and binary tumor masks (generated using T1w images). The perfusion images were generated from dynamic susceptibility contrast (GRE-EPI DSC) imaging following a preload of contrast agent. All of the series are co-registered with the T1+C images. The intent of this dataset is for assessing deep learning algorithm performance to predict tumor progression.

Data Access

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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, 3.2GB) | <div style="display: flex; justify-content: space-around; align-items: center;"> <div style="background-color: #007bff; color: white; padding: 5px 10px; border-radius: 3px; display: flex; align-items: center;"> ↓ Download </div> <div style="background-color: #ffc107; color: white; padding: 5px 10px; border-radius: 3px; display: flex; align-items: center;"> Q Search </div> </div> <p style="text-align: center; margin-top: 5px;">(Download requires NBIA Data Retriever)</p> |

Click the Versions tab for more info about data releases.

Detailed Description

Detailed Description

| Collection Statistics | |
|------------------------|------|
| Modalities | MR |
| Number of Participants | 20 |
| Number of Studies | 40 |
| Number of Series | 383 |
| Number of Images | 8798 |
| Image Size (GB) | 3.2 |

Citations & Data Usage Policy

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Users of this data must abide by the [TCIA Data Usage Policy](#) and the [Creative Commons Attribution 3.0 Unported License](#) under which it has been published. Attribution should include references to the following citations:

Data Citation

Schmainda KM, Prah M (2018). **Data from Brain-Tumor-Progression**. The Cancer Imaging Archive. <http://doi.org/10.7937/K9/TCIA.2018.15quzvnb>

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. **The Cancer Imaging Archive (TCIA): Maintaining and Operating a Public Information Repository**, Journal of Digital Imaging, Volume 26, Number 6, December, 2013, pp 1045-1057. ([paper](#))

Other Publications Using This Data

TCIA maintains [a list of publications](#) which leverage our data, including this Collection. If you have a publication you'd like to add please [contact the TCIA Helpdesk](#).

Versions

Version 1 (Current): Updated 2018/01/31.

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|-----------------------|---|
| Images (DICOM, 3.2GB) | <div style="display: flex; justify-content: center; gap: 10px;">   </div> <p>(Download requires NBIA Data Retriever.)</p> |