QIN-SARCOMA

Summary

This collection of soft-tissue sarcoma dynamic contrast-enhanced (DCE) MRI data contains images from a longitudinal study to assess soft-tissue sarcoma response to preoperative chemoradiation treatment. Images were acquired at three time points: prior to the start of treatment (Visit 1, V1), after the first cycle of chemotherapy (Visit 2, V2), and after ~ 8 more weeks of chemoradiation (prior to surgery) (Visit 3, V3). Not every patient was able to complete all three MRI studies. The value of this collection is to provide clinical imaging data for the development and validation of quantitative imaging methods for assessment of soft-tissue sarcoma response to preoperative treatment. Initial findings of this study have been published and the data is provided by Oregon Health & Science University, PI Dr. Wei Huang.

The MRI data consist of DCE-MRI images only, which were acquired using a Siemens 3T TIM Trio system with the body coil as the transmitter and a body matrix phased array (combined with a spine matrix phased array) coil as the receiver. Following scout and axial T_2-weighted MRI, a RF-spoiled gradient-echo sequence was used to acquire sagittal DCE-MRI images covering the entire tumor, with 10^0 flip angle, TE/TR = 1.5/6.0 ms, 24-26 cm field of view (FOV), and 5 mm slice thickness with 1 mm gap. A parallel imaging acceleration factor of 2 was used for DCE-MRI, resulting in 7-16 s temporal resolutions depending on tumor size. The total DCE acquisition time was approximately 10 min with gadolinium contrast agent (Prohance$^®$) IV injection (0.1 mmol/kg at 2 mL/s) carried out following acquisition of five baseline image volumes, followed by a 20-mL saline flush.

Data Access
Data Access

When you have a TCIA account, please email to help@cancerimagingarchive.net to request access to these data.

Data Type	Download all or Query/Filter	License
Images (DICOM, 10.29GB)	*Download Search* (Download requires the NBIA Data Retriever)	TCIA Restricted

Detailed Description
Detailed Description

Collection Statistics	Radiology Imaging Statistics
Modalities	MR
Number of Patients	15
Number of Studies	38
Number of Series	2,168
Number of Images	46,614

Image Size (GB)	10.29

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**
>
> Huang, W., Ryan, C., Beckett, B., Tudorica, A., Mansoor, A., Afzal, A., Holtorf, M., & Aston, T. (2016). **QIN-SARCOMA [Data set]**. The Cancer Imaging Archive. https://doi.org/10.7937/K9/TCIA.2016.fXL9sESs

> ⓘ **Acknowledgement**
>
> Please be sure to include the following citations in your work and acknowledge the award that supported collection and sharing of these data sets (U01 CA154602, PI: Wei Huang) if you use this data set.

> ⓘ **Publication Citation**
>
> Meyer, J. M., Perlewitz, K. S., Hayden, J. B., Doung, Y.-C., Hung, A. Y., Vetto, J. T., Pommier, R. F., Mansoor, A., Beckett, B. R., Tudorica, A., Mori, M., Holtorf, M. L., Afzal, A., Woodward, W. J., Rodler, E. T., Jones, R. L., Huang, W., & Ryan, C. W. (2013). **Phase I Trial of Preoperative Chemoradiation plus Sorafenib for High-Risk Extremity Soft Tissue Sarcomas with Dynamic Contrast-Enhanced MRI Correlates.** In Clinical Cancer Research (Vol. 19, Issue 24, pp. 6902–6911). American Association for Cancer Research (AACR). https://doi.org/10.1158/1078-0432.ccr-13-1594 PMCID: PMC3869565

> ⓘ **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.** In Journal of Digital Imaging (Vol. 26, Issue 6, pp. 1045–1057). Springer Science and Business Media LLC. https://doi.org/10.1007/s10278-013-9622-7 PMCID: PMC3824915

Other Publications Using This Data

TCIA maintains a list of publications which leverage our data. If you have a publication you'd like to add, please contact TCIA's Helpdesk.

Versions

Version 1 (Current): Updated 2014/09/04

Data Type	Download all or Query/Filter
Images (DICOM, 10.29GB)	*Download Search* (Download requires the NBIA Data Retriever.)