

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 T₂-weighted MRI, a RF-spoiled gradient-echo sequence was used to acquire sagittal DCE-MRI images covering the entire tumor, with 10° 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

This is a **limited access** data set. To request access, please contact help@cancerimagingarchive.net. Once access is granted, 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, 10.29GB) |   |

Click the Versions tab for more info about data releases.

Detailed Description

Detailed Description

| Collection Statistics | |
|------------------------|----|
| Modalities | MR |
| Number of Participants | 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

This is a **limited access** data set. Upon receiving access you may only use it for the purposes outlined in your request to the data provider. You are not allowed to redistribute the data or use it for other purposes. See TCIA's [Data Usage Policies and Restrictions](#) for additional details. Questions may be directed to help@cancerimagingarchive.net.

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:

***i* Data Citation**

Huang, Wei, Ryan, Christopher, Beckett, Brooke, Tudorica, Alina, Mansoor, Atiya, Afzal, Aneela, ... Aston, Torrie. (2016). Data From QIN-SARCOMA. The Cancer Imaging Archive. <http://doi.org/10.7937/K9/TCIA.2016.fXL9sESs>

***i* Publication Citation**

Meyer JM, Perlewitz KS, Hayden JB, Doung YC, Hung AY, Vetto JT, Pommier RF, Mansoor A, Beckett BR, Tudorica A, Mori M, Holtorf ML, Afzal A, Woodward WJ, Rodler ET, Jones RL, Huang W, Ryan CW. Phase I trial of preoperative chemoradiation plus Sorafenib for high risk extremity soft tissue sarcoma with dynamic contrast-enhanced magnetic resonance imaging correlates. Clin Cancer Res 2013 Dec;19(24):6902-6911. PubMed PMID: 2413292; PubMed Central PMCID: PMC3869565 ([link](#))

***i* 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](#) that leverage our data. At this time we are not aware of any additional publications based on this data. If you have a publication you'd like to add, please [contact the TCIA Helpdesk](#).

Versions

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

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