

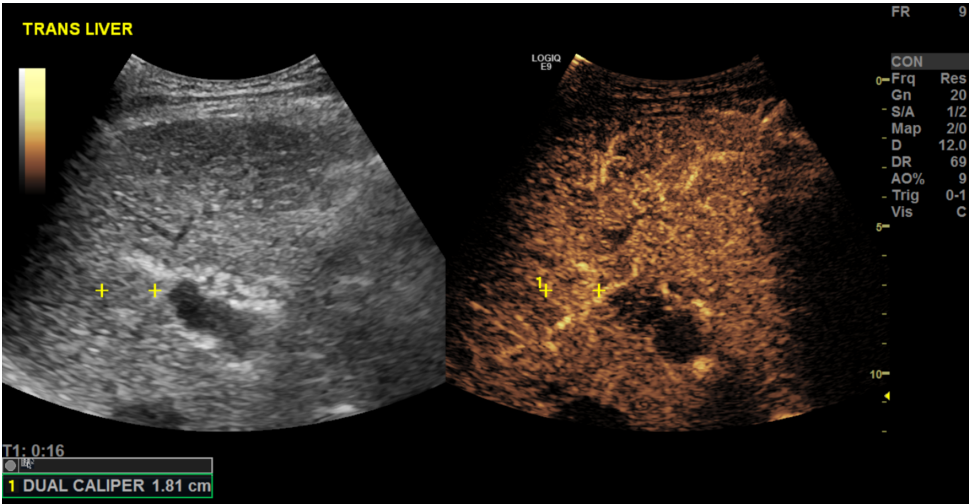
Ultrasound data of a variety of liver masses (B-mode-and-CEUS-Liver)

Redirection Notice

This page will redirect to <https://www.cancerimagingarchive.net/collection/b-mode-and-ceus-liver/> in about 5 seconds.

Summary

Data were generated as part of two ongoing clinical trials investigating the use of contrast-enhanced ultrasound to a) characterize indeterminate liver lesions and b) monitor treatment response to loco regional therapy. Ultrasound data was obtained on a variety of state of the art ultrasound scanners with curvilinear probes. Gain, dynamic range, focus position and depth were optimized for image quality



by the performing sonographer. Images of the mass in both sagittal and transverse planes were obtained and saved in DICOM format. Full cine-loops of the contrast enhanced ultrasound are also saved in DICOM format. The reference standard used for lesion characterization included tissue pathology and contrast-enhanced cross-sectional imaging within 1 month of the ultrasound exam. The initial treatment response to transarterial chemoembolization is also available for many hepatocellular carcinoma (HCC) cases and uses pathology, retreatment angiography, or longer-term tumor response on cross-sectional imaging as a reference standard.

We expect these images can be used in a wide variety of image processing application. We are currently exploring a variety of automated intelligence algorithms for AI-based lesion characterization. Algorithms for object detection and segmentation may also be of interest. As the studies that have generated this data are also ongoing, it is expected that we can add volumetric data, contrast-enhanced ultrasound cine loops, and longer-term treatment response data to this data set in the future.

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Data Access

Data Access

Data Type	Download all or Query/Filter	License
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Images (DICOM, 253 GB)	Download Search (Download requires NBIA Data Retriever)	CC BY 4.0
Clinical data (XLSX, 24 kB)	Download	CC BY 4.0

Additional Resources for this Dataset

The NCI Cancer Research Data Commons (CRDC) provides access to additional data and a cloud-based data science infrastructure that connects data sets with analytics tools to allow users to share, integrate, analyze, and visualize cancer research data.

- [Imaging Data Commons \(IDC\)](#) (Imaging Data)

Detailed Description

Detailed Description

Image Statistics	
Modalities	US
Number of Participants	120
Number of Studies	120
Number of Series	120
Number of Images	1859
Images Size (GB)	253

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

Eisenbrey, J., Lyshchik, A., & Wessner, C. (2021). **Ultrasound data of a variety of liver masses** [Data set]. The Cancer Imaging Archive. DOI: <https://doi.org/10.7937/TCIA.2021.v4z7-tc39>

TCIA Citation

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Other Publications Using This Data

TCIA maintains [a list of publications](#) which leverage TCIA data. If you have a manuscript you'd like to add please [contact the TCIA Helpdesk](#).

Versions

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Data Type	Download all or Query/Filter
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Added 45 new participants and a new spreadsheet version.

Version 1: Updated 2021/08/04

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7/28/21 Added new participants.

8/4/21 Added spreadsheet.