

Pancreas-CT

Summary




The National Institutes of Health Clinical Center performed 82 abdominal contrast enhanced 3D CT scans (~70 seconds after intravenous contrast injection in portal-venous) from 53 male and 27 female subjects. Seventeen of the subjects are healthy kidney donors scanned prior to nephrectomy. The remaining 65 patients were selected by a radiologist from patients who neither had major abdominal pathologies nor pancreatic cancer lesions. Subjects' ages range from 18 to 76 years with a mean age of 46.8 ± 16.7 . The CT scans have resolutions of 512x512 pixels with varying pixel sizes and slice thickness between 1.5 2.5 mm, acquired on Philips and Siemens MDCT scanners (120 kVp tube voltage).

A medical student manually performed slice-by-slice segmentations of the pancreas as ground-truth and these were verified/modified by an experienced radiologist.

Data Access

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, 10.2 GB) |   |
| Manual Annotations |  |

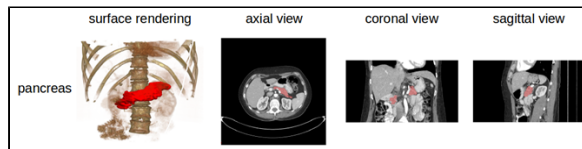
Click the Versions tab for more info about data releases.

Detailed Description

Detailed Description

| Collection Statistics | |
|------------------------|--------|
| Modalities | CT |
| Number of Participants | 82 |
| Number of Studies | 82 |
| Number of Series | 82 |
| Number of Images | 19,328 |
| Image Size (GB) | 10.2 |

Data Example



Note

The DICOM files were created from anonymized volumetric images (Analyze and Nifti) using this from ITK: http://www.itk.org/Doxygen/html/Examples_2IO_2ImageReadDicomSeriesWrite_8cxx-example.html.

Citations & Data Usage Policy

Citations & Data Usage Policy

This collection is freely available to browse, download, and use for commercial, scientific and educational purposes as outlined in the [Creative Commons Attribution 3.0 Unported License](#). 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 if you use this data set:

i Data Citation

Holger R. Roth, Amal Farag, Evrim B. Turkbey, Le Lu, Jiamin Liu, and Ronald M. Summers. (2016). Data From Pancreas-CT. The Cancer Imaging Archive. <http://doi.org/10.7937/K9/TCIA.2016.tNB1kqBU>

i Publication Citation

Roth HR, Lu L, Farag A, Shin H-C, Liu J, Turkbey EB, Summers RM. **DeepOrgan: Multi-level Deep Convolutional Networks for Automated Pancreas Segmentation**. N. Navab et al. (Eds.): MICCAI 2015, Part I, LNCS 9349, pp. 556–564, 2015. ([paper](#))

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

If you have a publication you'd like to add, please [contact the TCIA Helpdesk](#).

Versions

Version 1 (Current): Updated 20151229

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| Images (DICOM, 10.2 GB) |   (Requires the NBIA Data Retriever .) |
| Manual Annotations |  |