

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	

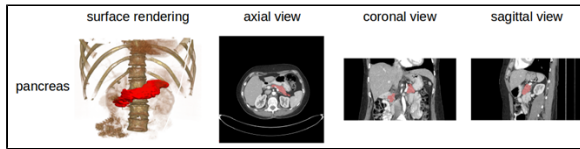
Click the Versions tab for more info about data releases.

Detailed Description

Detailed Description

Collection Statistics	
Modalities	CT
Number of Patients	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

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Versions

Version 1 (Current): Updated 20151229

Data Type	Download all or Query/Filter
Images (DICOM, 10.2 GB)	  (Requires the NBIA Data Retriever .)
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