

PROSTATE-DIAGNOSIS






Summary

Prostate cancer T1- and T2-weighted magnetic resonance images (MRIs) were acquired on a 1.5 T Philips Achieva by combined surface and endorectal coil, including dynamic contrast-enhanced images obtained prior to, during and after I.V. administration of 0.1 mmol/kg body weight of Gadolinium-DTPA (pentetic acid). For general inquiries please contact TCIA helpdesk help@cancerimagingarchive.net and for scientific inquiries relating to the data-set, please contact Dr. Nicolas Bloch (nicolas.bloch@bmc.org).

Data Access

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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, 5.6GB)	  (Download requires the NBIA Data Retriever .)
Clinical Metadata (XLS)	
Multi-component NRRD Segmentations (zip)	
Seminal vesicles (SV) and neurovascular bundle (NVB) Segmentations (zip)	

Click the Versions tab for more info about data releases.

Third Party Analyses of this Dataset

TCIA encourages the community to [publish your analyses of our datasets](#). Below is a list of such third party analyses published using this Collection:

- [NCI-ISBI 2013 Challenge: Automated Segmentation of Prostate Structures](#)

Detailed Description

Detailed Description

Collection Statistics	
Modalities	MR (T1, T2, and DCE sequences)
Number of Participants	92
Number of Studies	92

Number of Series	368
Number of Images	32,537
Image Size (GB)	5.6

Metadata

Corresponding clinical metadata (XLS format) and 3D segmentation files (NRRD format) are offered as a supplement to this image collection.

- [Prostate-Diagnosis metadata](#) (updated 2012-05-07) - The XLS file contains pathology biopsy and excised gland tissue reports and the MRI radiology report for most subjects.
- NRRD 3D segmentations (2 separate sets of segmentations available)
 - [NRRD segmentations](#) (updated 2012-05-07)- The software used to generate the NRRD files on the MR T2W_TSE_AX image sequences was [3DSlicer](#). The 3DSlicer NRRD files allow visualization and downstream analysis of the following prostate components: prostate gland boundary; internal capsule; central gland, peripheral zone; seminal vesicles; urethra; cancer – dominant nodule; neurovascular bundle; penile bulb; ejaculatory duct; veru-montanum; and rectum. Presently, there are available mark-ups of 5 cases (case extension #'s 0006, 0014, 0019, 0021, 0048). These markups are made public courtesy (and copyrighted by) Dr. Nicolas Bloch as portions of his forthcoming online prostate cancer image atlas.
 - [NCI-ISBI_Challenge-ProstateDx_Training_Segmentations.zip](#)- This file contains segmentations for 30 Prostate-Diagnosis subjects in NRRD format which mark the boundaries of the central gland and peripheral zone. This data was provided as part of the [NCI-ISBI 2013 Challenge - Automated Segmentation of Prostate Structures](#).
 - [ProstateDx_1.5T_Training_Segmentations.zip](#) - Segmentations of the neurovascular bundle and seminal vessicles are available as MHA files. These were provided as part of a planned follow up competition that did not materialize.
 - **Note:** see our tutorial on [Using 3D Slicer with the Prostate-Diagnosis data](#) if you are not familiar with using this kind of data.

Citations & Data Usage Policy

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Users of this data must abide by the [Creative Commons Attribution 3.0 Unported License](#) under which it has been published. Attribution should include references to the following citations:

Data Citation

Bloch, B. Nicolas, Jain, Ashali, & Jaffe, C. Carl. (2015). Data From PROSTATE-DIAGNOSIS. The Cancer Imaging Archive. <http://doi.org/10.7937/K9/TCIA.2015.FOQEUJVT>

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](#) which leverage our data. At this time we are not aware of any 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 2013/01/30

Data Type	Download all or Query/Filter
Images (DICOM, 5.6GB)	<div data-bbox="980 489 1175 548">Download</div> <div data-bbox="1190 489 1352 548">Search</div> <p>(Download requires the NBIA Data Retriever .)</p>
Clinical Metadata (XLS)	<div data-bbox="980 684 1175 743">Download</div>
Multi-component NRRD Segmentations (zip)	<div data-bbox="980 781 1175 840">Download</div>
NCI ISBI Challenge - Segmentations of central gland and the peripheral zone (zip)	<div data-bbox="980 877 1175 936">Download</div>
Seminal vesicles (SV) and neurovascular bundle (NVB) Segmentations (zip)	<div data-bbox="980 974 1175 1033">Download</div>