

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 or scientific inquiries please [contact the TCIA Helpdesk](#).

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 \(ISBI-MR-Prostate-2013\)](#)

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 [TCIA Data Usage Policy](#) and 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 2 (Current): Updated 2021/08/09:

A database mismatch in 4 series of PatientID **ProstateDx-01-0035** was updated so that PatientName, PatientID, and the image are now correct. No changes were made to UID, zips or Excel files.

Version 1: Updated 2013/01/30

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| NCI ISBI Challenge - Segmentations of central gland and the peripheral zone (zip) |  Download |
| Seminal vesicles (SV) and neurovascular bundle (NVB) Segmentations (zip) |  Download |