

# 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 scientific inquiries relating to the data-set, please contact Drs. C. Carl Jaffe ([carl.jaffe@bmc.org](mailto:carl.jaffe@bmc.org)) or Nicolas Bloch ([nicolas.bloch@bmc.org](mailto:nicolas.bloch@bmc.org)).

### 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, 5.6GB)  | <div style="display: flex; gap: 10px;"> <span> Download</span> <span> Search</span> </div> <p>(Download requires the <a href="#">NBIA Data Retriever</a>.)</p> |
| Clinical Metadata (XLS)  | <span> Download</span>  |
| Multi-component NRRD Segmentations (zip)                                 | <span> Download</span>  |
| Seminal vesicles (SV) and neurovascular bundle (NVB) Segmentations (zip) | <span> Download</span>  |

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 Patients    | 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 vesicles 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

## 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](mailto:help@cancerimagingarchive.net).

**[Please be sure to include the following citations in your work if you use this data set:](#)**

#### 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="987 411 1182 470">Download</div> <div data-bbox="1188 411 1351 470">Search</div> <p data-bbox="987 512 1367 571">(Download requires the <a href="#">NBIA Data Retriever</a>.)</p> |
| Clinical Metadata (XLS)   | <div data-bbox="987 606 1182 665">Download</div>  |
| Multi-component NRRD Segmentations (zip)  | <div data-bbox="987 705 1182 764">Download</div>  |
| NCI ISBI Challenge - Segmentations of central gland and the peripheral zone (zip) | <div data-bbox="987 804 1182 863">Download</div>  |
| Seminal vesicles (SV) and neurovascular bundle (NVB) Segmentations (zip)          | <div data-bbox="987 903 1182 961">Download</div>  |