

NaF Prostate

Summary

This is a collection of F-18 NaF positron emission tomography/computed tomography (PET/CT) images in patients with prostate cancer, with suspected or known bone involvement.

Imaging was performed on a Phillips Gemini TF PET/CT scanner based on 4x4x22mm LYSO (lutetium yttrium orthosilicate) crystal detection elements covering 18cm axial field of view (FOV) and 57cm imaging transaxial FOV. The time of flight resolution is 585ps. The scanner achieves a spatial resolution of 4.8 mm at the center of the FOV. Data were reconstructed using the RAMLA iterative OSEM algorithm using 3 iterations and 33 subsets. The scanner uses CT based attenuation correction, along with randoms, normalization, dead time, and a model based scatter correction. The CT component of the scanner is a 16 slice helical CT. The CT images were generated using a low X-ray dose of 120KV, 60mAs setting.

The prescribed injected dose was 3mCi IV. Some of the patients had 2 baseline studies within 14 days of each other (with no intervening interventions). Many have follow-up PET/CT imaging performed following therapy (varied) at 6 +/- 2months and 12 +/- 2 months. For scientific inquiries relating to this data set, please contact Drs. Karen Kurdziel (karen.kurdziel@nih.gov) or Liza Lindenberg (liza.lindenberg@mail.nih.gov).

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 (12.9GB)	 
DICOM Metadata Digest (CSV)	

Click the Versions tab for more info about data releases.

Detailed Description

Detailed Description

Collection Statistics	Updated 4/23/2013
Modalities	PET/CT
Number of Participants	9
Number of Studies	44

Number of Series	214
Number of Images	64,535
Image Size (GB)	12.9

Citations & Data Usage Policy

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Data Citation

Kurdziel, Karen A, Apolo, Andrea B., Lindenberg, Liza, Mena, Esther, McKinney, Yolanda Y., Adler, Stephen S., ... Choyke, Peter L. (2015). Data From NaF_PROSTATE. The Cancer Imaging Archive. <http://doi.org/10.7937/K9/TCIA.2015.ISOQTHKO>

Publication Citation

Kurdziel, K. A., Shih, J. H., Apolo, A. B., Lindenberg, L., Mena, E., McKinney, Y. Y., ... Choyke, P. L. (2012, June 22). The Kinetics and Reproducibility of 18F-Sodium Fluoride for Oncology Using Current PET Camera Technology. *Journal of Nuclear Medicine*. Society of Nuclear Medicine. <http://doi.org/10.2967/jnumed.111.100883>

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](#) that 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 2013/4/23

Data Type	Download all or Query/Filter
Images (48.8GB)	<div style="display: flex; gap: 10px;"> <div style="background-color: #0070C0; color: white; padding: 5px 10px; border-radius: 3px;"> Download</div> <div style="background-color: #FFA500; color: white; padding: 5px 10px; border-radius: 3px;"> Search</div> </div> <p>(Requires the NBIA Data Retriever .)</p>
DICOM Metadata Digest (CSV)	<div style="background-color: #0070C0; color: white; padding: 5px 10px; border-radius: 3px;"> Download</div>