

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 or other inquiries relating to this data set, please [contact the TCIA Helpdesk](#).

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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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

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> <p>(Requires the NBIA Data Retriever .)</p> |
| DICOM Metadata Digest (CSV) |  |