

QIN multi-site collection of Lung CT data with Nodule Segmentations

Description




This dataset (also known as the “moist run” among QIN sites) contains CT images (41 total scans) of non-small cell lung cancer from: the Reference Image Database to Evaluate Therapy Response (RIDER), the Lung Image Database Consortium (LIDC), patients from Stanford University Medical Center and the Moffitt Cancer Center, and the Columbia University/FDA Phantom. In addition, 3 academic institutions (Columbia, Stanford, Moffitt-USF) each ran their own segmentation algorithm on a total of 52 tumor volumes. Segmentations were performed 3 different times with different initial conditions, resulting in 9 segmentations formatted as DICOM Segmentation Objects (DSOs) for each tumor volume, for a total of 468 segmentations. This collection may be useful for designing and comparing competing segmentation algorithms, for establishing acceptable ranges of variability in volume and segmentation borders, and for developing algorithms for creating cancer biomarkers from features computed from the segmented tumors and their environments.

Note: In December 2018 it was discovered that an update to [NSCLC Radiogenomics](#) mistakenly resulted in the deletion of the segmentation data from this analysis set. As a result, the 10 affected patients and related segmentations are no longer included in the download section below.

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](#).

| Data Type | Download all or Query/Filter |
|---------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| CT Images - 31 series (DICOM) |  |
| Segmentations - 378 series (DICOM) |  |
| CT Images & Segmentations Combined - 409 series (DICOM) |  |
| Nodule Location Documentation (spreadsheets) | <ul style="list-style-type: none">• Lung Phantom Nodule Locations• QIN Lung Nodule Locations• RIDER Lung CT Nodule Locations• LIDC-IDRI Nodule Locations |

Please contact help@cancerimagingarchive.net with any questions regarding usage.

Detailed Description

Detailed Description

Previous version spreadsheets:

- Nodule Location Documentation (spreadsheets)
 - [Lung Phantom Nodule Locations](#)
 - [QIN Lung Nodule Locations](#)
 - [RIDER Lung CT Nodule Locations](#)
 - [NSCLC Radiogenomics Nodule Locations](#)
 - [LIDC-IDRI Nodule Locations](#)

For more information on versioning, please refer to the Versions tab.

Citations & Data Usage Policy

Citations & Data Usage Policy

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

Jayashree Kalpathy-Cramer, Sandy Napel, Dmitry Goldgof, Binsheng Zhao. (2015). **Multi-site collection of Lung CT data with Nodule Segmentations**. The Cancer Imaging Archive. DOI: [10.7937/K9/TCIA.2015.1BUVFJR7](https://doi.org/10.7937/K9/TCIA.2015.1BUVFJR7)

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. (2013) **The Cancer Imaging Archive (TCIA): Maintaining and Operating a Public Information Repository**, Journal of Digital Imaging, Volume 26, Number 6 pp 1045-1057. DOI: [10.1007/s10278-013-9622-7](https://doi.org/10.1007/s10278-013-9622-7)

In addition to the dataset citation above, please be sure to cite the following if you utilize these data in your research:

Publication Citation




Kalpathy-Cramer, J., Zhao, B., Goldgof, D., Gu, Y., Wang, X., Yang, H., ... Napel, S. (2016, February 3). **A Comparison of Lung Nodule Segmentation Algorithms: Methods and Results from a Multi-institutional Study**. Journal of Digital Imaging. Springer Nature. DOI: [10.1007/s10278-016-9859-z](https://doi.org/10.1007/s10278-016-9859-z)

Other Publications Using This Data

TCIA maintains [a list of publications](#) that leverage TCIA data. If you have a manuscript you'd like to add please [contact the TCIA Helpdesk](#).

Versions

Version 3 (Current): 2018/12/18

| Data Type | Download all or Query/Filter |
|--------------------------------------------------------|------------------------------------------------------------------------------------|
| CT Images - 31 series (DICOM) |  |
| Segmentations - 378 series (DICOM) |  |
| CT Images & Segmetations Combined - 409 series (DICOM) |  |

Note: In December 2018 it was discovered that an update to [NSCLC Radiogenomics](#) mistakenly resulted in the deletion of the segmentation data for this analysis set. As a result, version 3 excludes the Stanford NSCLC Radiogenomics subset of the analyses.

Version 2: 2015/12/21

On 9/14/2015 this DOI was updated to resolve problems with 9 of the segmentations being incorrectly labeled. The Series Instance UIDs in the original data set which have since been deleted from TCIA are:

1.2.276.0.7230010.3.1.3.0.34323.1424694723.968333
1.2.276.0.7230010.3.1.3.0.34343.1424694769.748096
1.2.276.0.7230010.3.1.3.0.32279.1424660367.640148
1.2.276.0.7230010.3.1.3.0.3373.1415292738.832393
1.2.276.0.7230010.3.1.3.0.32259.1424660332.352116
1.2.276.0.7230010.3.1.3.0.32238.1424660298.604243
1.2.276.0.7230010.3.1.3.0.3306.1415292638.342990
1.2.276.0.7230010.3.1.3.0.3345.1415292685.22320
1.2.276.0.7230010.3.1.3.0.34303.1424694693.127541

These have been replaced with the following new segmentation series:

1.2.276.0.7230010.3.1.3.0.21757.1437749726.319319
1.2.276.0.7230010.3.1.3.0.21734.1437749686.271681
1.2.276.0.7230010.3.1.3.0.21713.1437749624.694944
1.2.276.0.7230010.3.1.3.0.95052.1441388220.839236
1.2.276.0.7230010.3.1.3.0.95027.1441388189.267094
1.2.276.0.7230010.3.1.3.0.95003.1441388142.544126
1.2.276.0.7230010.3.1.3.0.3233.1437599346.502866

Version 1: 2015/09/15

Original release of dataset.