Long and Short Survival in Adenocarcinoma Lung CTs

Summary

The dataset consists of pre-surgical chest CT images of 40 subjects from the H. Lee Moffitt Cancer Center & Research Institute, Tampa, Florida. The CT images were acquired by standard-of-care, contrast-enhanced CT scans among patients who had non-small cell cancer with biopsy-verified adenocarcinoma with 2 years of follow-up. A region-growing algorithm segmented the tumor with seed points that were chosen by radiologists.

The adenocarcinoma cases are divided into the upper and lower quartiles of survival. Both the lower and upper quartiles have 20 cases. The lower quartile survival timeline is 103 to 498 days while the upper quartile timeline is 1351 to 2163 days. The average survival of the lower and upper quartiles is 288 days and 1569 days respectively. The median survival for the lower and upper quartiles is 289 and 1551 days respectively. The overall mean survival time is 879 days and median survival time is 925 days. Three of these cases, QIN-LSC-0009, QIN-LSC-0014, and QIN-LSC-0064 appear in LungCT-Diagnosis collection, while the remaining 37 cases are from the QIN Lung CT collection.

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

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Detailed Description

Detailed Description

Image data is available in DICOM format. Segmentation data is available in .nii format. Labels are available in .csv format. The first column is subject identification. The second column is survival class. Subsequent columns are computed image features which are described in the following publications.

Citations & Data Usage Policy

Citations & Data Usage Policy

Dataset Citation

Goldgof D., Hall L., Hawkins S.H., Schabath M.B., Stringfield O., Garcia A., Balagurunathan Y., Kim J., Eschrich S., Berglund A.E., Gatenby R., Gillies R.J. (2017) **Long and Short Survival in Adenocarcinoma Lung CTs.** The Cancer Imaging Archive. https://doi.org/10.7937/K9/TCIA.2017.0tv7b9x1

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. T**he Cancer Imaging Archive (TCIA): Maintaining and Operating a Public Information Repository**, Journal of Digital Imaging, Volume 26, Number 6, December, 2013, pp 1045-1057. 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

Paul R., Hawkins S.H. , Balagurunathan Y. , Schabath M.B. , Gillies R.J. , Hall L.O. , Goldgof D.B. . "**Deep Feature Transfer Learning in Combination with Traditional Features Predicts Survival Among Patients with Lung Adenocarcinoma.**" *Tomography: a journal for imaging research* 2, no. 4 (2016): 388. DOI:10.18383/j.tom.2016.00211

Publication Citation

Hawkins S.H., Korecki J.N. , Balagurunathan Y., Gu Y., Kumar V., Basu S., Hall L.O., Goldgof D.B., Gatenby R.A., Gillies R.J.. "**Predicting Outcomes of Nonsmall Cell Lung Cancer using CT Image Features.**" *IEEE Access* 2 (2014): 1418-1426. DOI: 10.1109/ACCESS.2014.2373335

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

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