CPTAC-PDA

Summary

This collection contains subjects from the National Cancer Institute's [Clinical Proteomic Tumor Analysis Consortium](#) Pancreatic Ductal Adenocarcinoma (CPTAC-PDA) cohort. CPTAC is a national effort to accelerate the understanding of the molecular basis of cancer through the application of large-scale proteome and genome analysis, or proteogenomics. Radiology and pathology images from CPTAC patients are being collected and made publicly available by The Cancer Imaging Archive to enable researchers to investigate cancer phenotypes which may correlate to corresponding proteomic, genomic and clinical data.

Imaging from each cancer type will be contained in its own TCIA Collection, with the collection name "CPTAC-*cancertype*", and is being made available on a release schedule that is coordinated with the CPTAC program releases of proteomic and genomic data. A summary of CPTAC imaging efforts can be found on the [CPTAC Imaging Proteomics](#) page.

Radiology imaging is collected from standard of care imaging performed on patients immediately before the pathological diagnosis, and from follow-up scans where available. For this reason the radiology image data sets are heterogeneous in terms of scanner modalities, manufacturers and acquisition protocols. Pathology imaging is collected as part of the CPTAC qualification workflow.

CPTAC Imaging Special Interest Group

You can join the [CPTAC Imaging Special Interest Group](#) to be notified of webinars & data releases, collaborate on common data wrangling tasks and seek out partners to explore research hypotheses! Artifacts from previous webinars such as slide decks and video recordings can be found on the [CPTAC SIG Webinars](#) page.

Acknowledgements

We would like to acknowledge the individuals and institutions that have provided data for this collection:

- Beaumont Health System, Royal Oak, MI - Special thanks to **George D. Wilson, PhD** from the Department of Radiation Oncology Research, **Barbara Pruetz** of the Biobank, **Debra Kapczynski, MHSA, CIIP, RT(R) (CT)** and **Rachel Deyer** from the Department of Diagnostic Radiology.
- Boston Medical Center, Boston, MA - Special thanks to **Chris D. Andry M.Phil, PhD** from the Department of Pathology and Laboratory Medicine, **Margaret Lavoye, Artem Kaliaev**, **Wilson Chavez**, **Stephan Anderson**, **Jorge Soto**, and **Mitchell Horn** from the Department of Radiology, **Elizabeth Duffy, MA** and **Cheryl Spencer, MA** of the Biobank.
- International Institute for Molecular Oncology, Pozna, Poland - Special thanks to **Maciej Wiznerowicz MD, PhD** and **Jan Lubiski MD PhD**, **Marek Durlik MD, PhD**, and **Magdalena Derejska MD**, **PhD**. from Central

Clinical Hospital of the Ministry of Interior in Warsaw; and **Katarzyna Kunierz MD, PhD**, **Sergiusz Nawrocki MD, PhD** and **Pawel Lampe MD, PhD** from University Clinical Center in Katowice, Poland

- St. Joseph's Hospital and Medical Center, Phoenix, AZ - Special thanks to **Jennifer Eschbacher, MD** from the Department of Neuropathology, **Catherine Seiler, PhD**, **Rosy Singh** and **Beth Hermes** from the Biobank Core Facility, and **Victor Sisneros**, RT(R)(CT), CPSA.

- University of Calgary, Alberta, Canada - Special thanks to **Oliver Bathe, MD, FRCS(C)** from the Departments of Surgery/Oncology, **Marina Salluzzi, PhD** and **Nicole Blenkin** from the Department of Radiology, Calgary Image Processing and Analysis Centre (CIPAC), and **Jennifer Koziak** from the Department of Surgery.

- Cureline, Inc. team and clinical network, Brisbane, CA - Special thanks to **Olga Potapova, Ph.D.**, **Vladislav Golubkov, Ph.D.**, **Victoria Fulidou, M.D.**, **Alexander Sviridov**, **Dmitry Belyaev, M.D.**, **Oxana Paklina, M.D., Dr.Sc.**, **Galiya Setdikova, M.D., Ph.D.**, **Denis Golbin, M.D., Ph.D.**.

Data Access

Data Access

Data Type	Download all or Query/Filter
Images (DICOM, 50.8 GB)	*Download* *Search* (Download requires the NBIA Data Retriever)
Tissue Slide Images (SVS, 88 GB)	*Download* *Search*
Clinical Data API (JSON - more info)	*Download*
Discovery Study	- Proteomic Data Commons - Genomic Data Commons - Pathology - Radiology

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:

- Crowds Cure Cancer: Data collected at the RSNA 2018 annual meeting (Crowds-Cure-2018)

Detailed Description

Detailed Description

	Radiology Image Statistics	Pathology Image Statistics
Modalities	CR, CT, MR, PT, RF, US, XA	Pathology
Number of Participants	98	168
Number of Studies	130	N/A
Number of Series	966	N/A
Number of Images	105,546	557
Images Size (GB)	50.79	88

A Note about TCIA and CPTAC Subject Identifiers and Dates

Subject Identifiers:

A subject with radiology and pathology images stored in TCIA is identified with a de-identified project Patient ID that is identical to the Patient ID of the same subject with clinical, proteomic, and/or genomic data stored in other CPTAC databases and web sites.

Dates:

The radiology imaging data is in DICOM format. To provide temporal context information aligned with events in the clinical data set for each patient, TCIA has inserted information in DICOM tag (0012,0050) *Clinical Trial Time Point ID*. This DICOM tag contains the number of days from the _date the patient was initially diagnosed pathologically with the disease_ to the date of the scan. E.g. a scan acquired 3 days before the diagnosis would contain the value -3. A follow up scan acquired 90 days after diagnosis would contain the value 90.

The DICOM date tags (i.e. birth dates, imaging study dates, etc.) are modified per TCIA's standard process which offsets them by a random number of days. The offset is a number of days between 3 and 10 years prior to the real date that is consistent for each TCIA image-submitting site and collection, but that varies among sites and among collections from the same site. Thus, the number of days between a subject's longitudinal imaging studies are accurately preserved when more than one study has been archived while still meeting HIPAA requirements.

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. CPTAC proteomic and genomic data use must also comply with the **CPTAC Data Use Agreement**. Questions may be directed to help@cancerimagingarchive.net. Attribution should include references to the following citations:

ⓘ **Data Citation**

National Cancer Institute Clinical Proteomic Tumor Analysis Consortium (CPTAC). (2018). **Radiology Data from the Clinical Proteomic Tumor Analysis Consortium Pancreatic Ductal Adenocarcinoma [CPTAC-PDA] Collection [Data set]**. The Cancer Imaging Archive. 10.7937/k9/tcia.2018.sc20fo18

ⓘ **Acknowledgement**

The CPTAC program requests that publications using data from this program include the following statement: "**Data used in this publication were generated by the National Cancer Institute Clinical Proteomic Tumor Analysis Consortium (CPTAC).**"

ⓘ **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. DOI: 10.1007/s10278-013-9622-7

Other Publications Using This Data

TCIA maintains a list of publications which leverage TCIA data. If you have a manuscript you'd like to add please contact the TCIA Helpdesk.

Versions

Version 11: 2021/02/04

Data Type	Download all or Query/Filter
Images (DICOM, 50.8 GB)	Download / Search
Tissue Slide Images (SVS, 88 GB)	Download / Search

Clinical Data API (JSON - more info)	**⊙ Download**
Proteomics (web)	**Q Search**

Version 10 : 2020/09/03

Data Type	Download all or Query/Filter
Images (DICOM, 37 GB)	**⊙ Download**
Tissue Slide Images (SVS, 88 GB)	**⊙ Download** **Q Search**
Clinical Data API (JSON - more info)	**⊙ Download**
Proteomics (web)	**Q Search**

Changed to new Aspera download link for histopathology slides.

Version 9: Updated 2020/03/31

Data Type	Download all or Query/Filter
Images (DICOM, 37 GB)	**⊙ Download** **Q Search**
Tissue Slide Images (SVS, 88 GB)	**⊙ Download** **Q Search**
Clinical Data API (JSON - more info)	**⊙ Download**
Proteomics (web)	**Q Search**

Added 6 radiology subjects

Version 8: Updated 2019/12/16

Data Type	Download all or Query/Filter
Images (DICOM, 33.5 GB)	**⊙ Download** (Requires NBIA Data Retriever .)
Tissue Slide Images (SVS, 88 GB)	**⊙ Download** **Q Search**
Clinical Data (web)	Coming soon
Proteomics (web)	**Q Search**

Added 1 pathology and 6 new radiology subjects

Version 7 : Updated 2019/09/30

Data Type	Download all or Query/Filter
Images (DICOM, 31.8 GB)	**⊙ Download** (Requires NBIA Data Retriever .)
Tissue Slide Images (SVS, 88 GB)	**⊙ Download**
Clinical Data (web)	Coming soon
Proteomics (web)	**Q Search**

Added new subjects.

Version 6: Updated 2019/06/30

Data Type	Download all or Query/Filter
Images (DICOM, 25.6 GB)	**⊙ Download** (Requires NBIA Data Retriever .)
Tissue Slide Images (SVS, 86.4 GB)	**⊙ Download**

Clinical Data (web)	Coming soon
Proteomics (web)	Q Search

Version 5 : Updated 2019/03/31

Data Type	Download all or Query/Filter
Images (DICOM, 23.8 GB)	O Download (Requires NBIA Data Retriever .)
Tissue Slide Images (web)	Q Search
Clinical Data (web)	Coming soon
Proteomics (web)	Q Search

Added new subjects.

Version 4 : Updated 2018/10/24

Data Type	Download all or Query/Filter
Images (DICOM, 21.8 GB)	O Download (Requires NBIA Data Retriever .)
Tissue Slide Images (web)	Q Search
Proteomics (web)	Q Search

Added new subjects.

Version 3: Updated 2018/06/30

Data Type	Download all or Query/Filter
Images (DICOM, 21.8 GB)	O Download (Requires NBIA Data Retriever .)

Tissue Slide Images (web)	Search
Proteomics (web)	Search
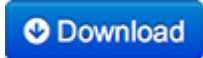
Added new subjects.

Version 2: Updated 2018/04/26

Data Type	Download all or Query/Filter
Images (DICOM, 21.4 GB)	Download (Requires NBIA Data Retriever .)
Tissue Slide Images (web)	Search
Proteomics (web)	Search

Added new subjects.

Version 1: Updated 2018/01/10

Data Type	Download all or Query/Filter
Images (DICOM, 4.38 GB)	Download (Requires NBIA Data Retriever .)
Tissue Slide Images (web)	Search
Proteomics (web)	Search