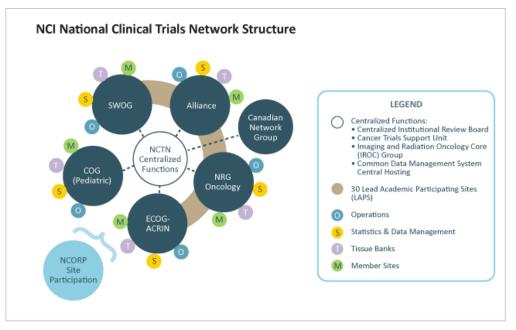
Imaging Clinical Trials

Imaging data from clinical trials provides the opportunity to link imaging characteristics to clinical trial analyses, associated clinical data and patient outcomes. From 2018 to 2023, the NCI Cancer **Imaging Program** Informatics Lab supported an additional TCIA image data collection center focused specifically on clinical trial data. Many clinical trial data sets originate from the NCI National



Clinical Trials Network (NCTN), which is a collection of organizations and clinicians that coordinates and supports cancer clinical trials at more than 3,000 sites across the United States and Canada. The NCTN provides the infrastructure for NCI-funded treatment, screening, and diagnosis trials to improve the lives of patients with cancer. The NCTN explicitly requires data sharing of the patient-level clinical data in https://nctn-data-archive.nci.nih.gov/view-trials, and TCIA serves as the imaging repository for that archive.

Labeled data for tumor detection & segmentation

With the large increase in availability of such publicly available, de-identified datasets there is now an opportunity to substantially increase their value to the cancer imaging research community by curating, segmenting and labeling them to expedite progress in data driven fields such as radiomics and artificial intelligence. Recognizing this fact, NCI has provided funds to retrospectively generate 3d segmentations and seed points to identify tumor locations in additional trial datasets. The resulting data will be made freely available on TCIA, along with supporting documentation and sample code (e.g. Jupyter Notebooks) that will facilitate streamlined analysis on widely used data science platforms. This resource is being developed in a manner that will reduce the barriers for non-radiology researchers to use the data to develop predictive radiomic tools, to help developers of quantitative imaging software and machine learning models for tumor segmentation, detection and total burden estimations to assess response assessment.

Clinical Trial Datasets on TCIA

	Collection Name	ClinicalTrials.	Published on TCIA	Image Annotations
1	EA1141	NCT02933489	2 October 2023	Not available
2	S0819	NCT00946712	30 March 2023	Tumor segmentations and seed points (3rd party analysis)
3	A091105	NCT02066181	10 February 2023	Tumor segmentations and seed points (3rd party analysis)
4	ARAR0331	NCT00274937	21 October 2022	Tumor segmentations and seed points (3rd party analysis)
5	AHOD0831	NCT01026220	8 June 2022	Tumor segmentations and seed points (3rd party analysis)
6	ACRIN-6698	NCT01564368	2 May 2022	Tumor segmentations included in primary dataset
7	I-SPY2 Trial	NCT01042379	2 May 2022	Tumor segmentations included in primary dataset
8	AREN0532	NCT00352534	31 March 2022	Tumor segmentations and seed points (3rd party analysis)
9	AREN0533	NCT00379340	20 January 2022	Tumor segmentations and seed points (3rd party analysis)
10	AREN0534	NCT00945009	8 November 2021	Tumor segmentations and seed points (3rd party analysis)
11	ACNS0332	NCT00392327	4 May 2021	Tumor segmentations and seed points (3rd party analysis)
12	AHEP0731	NCT00980460	30 March 2021	Tumor segmentations and seed points (3rd party analysis)
13	CALGB50303	NCT00118209	30 March 2021	Tumor segmentations and seed points (3rd party analysis)
14	ACRIN-Contralateral-Breast-MR (ACRIN 6667)	NCT00058058	5 March 2021	Not available
15	ACRIN-HNSCC-FDG-PET/CT (ACRIN 6685)	NCT00983697	13 March 2020	Tumor segmentations and seed points (3rd party analysis)
16	ACRIN-DSC-MR-Brain (ACRIN 6677/RTOG 0625)	NCT00433381	7 February 2019	Not available
17	NSCLC-Cetuximab (RTOG-0617)	NCT00533949	15 April 2019	Radiation Therapy Structures included in primary dataset

18	ACRIN-NSCLC-FDG-PET (ACRIN 6668)	NCT00083083	31 December 2018	Not available
19	ACRIN-FMISO-Brain (ACRIN 6684)	NCT00902577	12 February 2018	Not available
20	ACRIN-FLT-Breast (ACRIN 6688)	NCT00572728	11 December 2017	Not available
21	ISPY1 (ACRIN 6657)	NCT00043017	18 June 2015	 Segmentations included in primary dataset Tumor segmentations (3rd party analysis)
22	NRG-1308 (RTOG 1308)	NCT01993810	14 September 2015	Radiation Therapy Structures included in primary dataset
23	National Lung Screening Trial	NCT00047385	1 March 2013	Not available
24	Head-Neck Cetuximab (RTOG 0522)	NCT00265941	14 November 2013	Radiation Therapy Structures included in primary dataset
25	CT Colonography (ACRIN 6664)	NCT00084929	15 November 2013	Not available