I. Summary of Available Tables that can be queried using the NLST Query Tool

1. Demographics Table					
One observation per participant enrolled in NLST. Randomized ineligibles are included and are identified by the ELIG variable. Rows available for viewing: 53,452. Rows are Unique by: (1) PID Variable for merging as primary key: PID Variable for merging as foreign key: PID					
Demographic (p. 14): PID CTIL_ID RNDGROUP STUDY AGE CEN GENDER RACE ETHNIC MARITAL EDUCAT WEIGHT HEIGHT ELIG INELIGIBLE					

2. Lung Cancer Diagnosis Table

One observation per participant enrolled in NLST.
Rows available for viewing: 53,452.
Rows are Unique by: (1) PID
Variable for merging as primary key: PID
Variable for merging as foreign key: PID

Lung Cancer Diagnosis (p. 17):	PROCLC				
PID	BIOPLC				
CTIL_ID	INVASLC				
CONFLC	MEDCOMPLC				
CANDX_DAYS	TREATLC				
CANCYR	CANC_FREE_DAYS				
CAN_SCR	CANC_RPT_LINK				
DE_STAG	CANC_RPT_SOURCE				
DE_GRADE					
DE_TYPE					
LOCRUP					
LOCRMID					
LOCRLOW					
LOCLUP					
LOCLIN					
LOCLLOW					
LOCRHIL					
LOCLHIL					
LOCRMSB					
LOCLMSB					
LOCCAR					
LOCMED					
LOCOTH					
LOCUNK					
LESIONSIZE					

3. Smoking History Table					
One observation per participant enrolled in NLST. Rows available for viewing: 53,452. Rows are Unique by: (1) PID Variable for merging as primary key: PID Variable for merging as foreign key: PID					
Smoking History (p. 21): PID CTIL_ID CIGSMOK PKYR SMOKEYR SMOKEDAY SMOKEAGE AGE_QUIT CIGAR PIPE SMOKELIVE SMOKEWORK					

4. Death Last Contact EVP Table					
One observation per <u>participant</u> enrolled in NLST. Rows available for viewing: 53,452. Rows are Unique by: (1) PID Variable for merging as primary key: PID Variable for merging as foreign key: PID					
<u>Death / Last Contact / EVP (p. 24):</u> PID CTIL_ID FINALDEATHLC DCFDEATHLC DCFICD DEATH_DAYS FUP_DAYS DEATHSTAT DEATHCUTOFF HASDCF CONTACTSTATUS WDLOST EVPSEL EVP_REVR EVPSENT EVPCERT EVPDEATH EVPDIRECT EVPINCOMPLETE NDICD					

5. Medical History Table

One observation per participant enrolled in NLST. Randomized ineligibles are included and are identified by the ELIG variable.
Rows available for viewing: 53,452.
Rows are Unique by: (1) PID
Variable for merging as primary key: PID
Variable for merging as foreign key: PID

Medical History (p. 29):					
PID	AGEASBE	CANCBLAD	AGEBLAD		
CTIL_ID	AGEADAS	CANCBREA	AGEBREA		
DIAGASBE	AGECHAS	CANCCERV	AGECERV		
DIAGADAS	AGEBRON	CANCCOLO	AGECOLO		
DIAGCHAS	AGECHRO	CANCESOP	AGEESOP		
DIAGBRON	AGECOPD	CANCKIDN	AGEKIDN		
DIAGCHRO	AGEDIAB	CANCLARY	AGELARY		
DIAGCOPD	AGEEMPH	CANCLUNG	AGELUNG		
DIAGDIAB	AGEFIBR	CANCORAL	AGEORAL		
DIAGEMPH	AGEHEAR	CANCNASA	AGENASA		
DIAGFIBR	AGEPNEU	CANCPANC	AGEPANC		
DIAGHEAR	AGESARC	CANCPHAR	AGEPHAR		
DIAGPNEU	AGESILI	CANCSTOM	AGESTOM		
DIAGSARC	AGETUBE	CANCTHYR	AGETHYR		
DIAGSILI	AGEHYPE	CANCTRAN	AGETRAN		
DIAGTUBE	AGESTRO				
DIAGHYPE					
DIAGSTRO					

6. Family Lung Cancer History Table					
One observation per participant enrolled in NLST. Rows available for viewing: 53,452. Rows are Unique by: (1) PID Variable for merging as primary key: PID Variable for merging as foreign key: PID					
Family Lung Cancer History (p. 33): PID CTIL_ID FAMFATHER FAMMOTHER FAMBROTHER FAMSISTER FAMCHILD					

7. Alcohol History Table					
One observation per participant enrolled in NLST. Rows available for viewing: 53,452. Rows are Unique by: (1) PID Variable for merging as primary key: PID Variable for merging as foreign key: PID					
Alcohol History (p. 34): PID CTIL_ID LSS_ALCOHOL_FREQ LSS_ALCOHOL_NUM ACRIN_ALC_EVER ACRIN_ALC_CURR ACRIN_LASTDRINK ACRIN_DRINKYRS_FORM ACRIN_DRINKNUM_FORM ACRIN_DRINKYRS_CURR ACRIN_DRINKNUM_CURR ACRIN_DRINK24HR					

8. Work History Table

One observation per participant enrolled in NLST.
Rows available for viewing: 53,452.
Rows are Unique by: (1) PID
Variable for merging as primary key: PID
Variable for merging as foreign key: PID

Work History (p. 37):					
PID	YRSASBE	RESASBE			
CTIL_ID	YRSBAKI	RESBAKI			
WRKASBE	YRSBUTC	RESBUTC			
WRKBAKI	YRSCHEM	RESCHEM			
WRKBUTC	YRSCOAL	RESCOAL			
WRKCHEM	YRSCOTT	RESCOTT			
WRKCOAL	YRSFARM	RESFARM			
WRKCOTT	YRSFIRE	RESFIRE			
WRKFARM	YRSFLOU	RESFLOU			
WRKFIRE	YRSFOUN	RESFOUN			
WRKFLOU	YRSHARD	RESHARD			
WRKFOUN	YRSPAIN	RESPAIN			
WRKHARD	YRSSAND	RESSAND			
WRKPAIN	YRSWELD	RESWELD			
WRKSAND					
WRKWELD					

9. IMS Derived Person Variables Table

One observation per participant enrolled in NLST.
Rows available for viewing: 53,452.
Rows are Unique by: (1) PID
Variable for merging as primary key: PID
Variable for merging as foreign key: PID

IMS Derived Person Variables (p. 40):					
PID					
CTIL_ID					
SCT_IMAGE_HAS_LSS					
SCT_IMAGE_YEARS_LSS					
NUM_SCREENS					
NUM_POS_SCREENS					
NUM_NEG_SCREENS					
NUM_FALSE_POS_SCR					
YEARS_SCR_TO_DX					
LAST_SCREEN_RESULT					
LAST_SCREEN_STUDYYR					
LSTSCR_LARGEST_NODULE_DIAM					
LSTSCR_NUM_NODULE					
ANYSCR_HAS_NODULE					
ANYSCR_LARGEST_NODULE_DIAM					
ANYSCR_HAS_MICRONODULE					
ANYSCR_HAS_CALC_NODULE					
ANYSCR_HAS_ATELEC					
ANYSCR_HAS_THICKEN					
ANYSCR_HAS_ADENO					
ANYSCR_HAS_WALLABN					
ANYSCR_HAS_CONSOL					
ANYSCR_HAS_EMPHYS					
ANYSCR_HAS_CARDIO					
ANYSCR_HAS_RETICU					
ANYSCR_HAS_6NODULES					
ANYSCR_HAS_ABOVEDIAM					
ANYSCR_HAS_BELOWDIAM					
ANYSCR_HAS_MINOR					

10. Screening Results Table					
One observation per study year enrolled in NLST. Rows available for viewing: 160,356. Rows are Unique by: (1) PID, (2) STUDY_YR Variable for merging as primary key: either PID for a table with PID as being unique or PID and Study_YR for tables with PID and Study_YR as being unique. Variable for merging as foreign key: either PID for a table with PID as being unique or PID and Study_YR for tables with PID and Study_YR as being unique.					
Screening Results (p. 43): PID CTIL_ID STUDY_YR SCR_DAYS SCR_RES SCR_ISO SCR_LAT					

11. Positive Screen Followup Procedures Table					
One observation per participant per study year enrolled in NLST. Rows available for viewing: 160,356. Rows are Unique by: (1) PID, (2) STUDY_YR Variable for merging as primary key: either PID for a table with PID as being unique or PID and Study_YR for tables with PID and Study_YR as being unique. Variable for merging as foreign key: either PID for a table with PID as being unique or PID and Study_YR for tables with PID and Study_YR as being unique.					
Positive Screen Follow-Up Procedures (p. 46): PID CTIL_ID STUDY_YR MRA_STAT NO_PROC_REAS PROC BIOP INVAS MEDCOMP					

12. IMS Derived Spiral CT Screening Variables Table

One observation per participant per study yr enrolled in NLST.
Rows available for viewing: 80,166.
Rows are Unique by: (1) PID, (2) STUDY_YR
Variable for merging as primary key: either PID for a table with PID as being unique or PID and Study_YR for tables with PID and Study_YR as being unique.
Variable for merging as foreign key: either PID for a table with PID as being unique or PID and Study_YR for tables with PID and Study_YR as being unique.

IMS Derived Person Variables (p. 48):					
PID	HAS_MICRONODULE				
CTIL_ID	HAS_CALC_NODULE				
STUDY_YR	HAS_ATELEC				
IMAGE_HAS_LSS	HAS_THICKEN				
CANCER_SEEN	HAS_ADENO				
YEARS_SCR_TO_DX	HAS_WALLABN				
FALSE_POS_SCR	HAS_CONSOL				
POS_SCREEN	HAS_EMPHYS				
IS_LAST_SCREEN	HAS_CARDIO				
SCREEN_ORDER	HAS_RETICU				
LARGEST_NODULE_DIAM	HAS_6NODULES				
NUM_NODULE	HAS_ABOVEDIAM				
HAS_SOFT_TISSUE_NODULE	HAS_BELOWDIAM				
HAS_GROUND_GLASS_NODULE	HAS_MINOR				
HAS_MIXED_NODULE					
HAS_FLUID_NODULE					
HAS_FAT_NODULE					
NODULE_GREW					
NODULE_ATTEN_CHANGE					

13. SCT Image Info Table

One observation per participant per study_yr per series_uid enrolled in NLST.
Rows available for viewing: 139,517.
Rows are Unique by: (1) SERIAL_NUMBER
Variable for merging as primary key: The primary key for this table cannot be used to merge with other tables since no other tables contain these numbers.
Variable for merging as foreign key: either PID for table with PID as being unique or PID and Study_YR for tables with PID and Study_YR as being unique.

SCT Image Info (p. 51):					
PID					
SERIAL_NUMBER					
CTIL_ID					
STUDY_YR					
VISIT					
STUDY_SERIALNO					
SERIESDESCRIPTION					
IMAGETYPE					
KVP					
MAS					
EFFMAS					
PITCH					
TABLEROTATION					
RECONTHICKNESS					
RECONINTERVAL					
RECONFILTER					
RECONSTRUCTION_DIAMETER					
MANUFACTURER					
MANUFACTURERS_MODEL_NAME					
SCANNERCODE					
SOFTWAREVERSION					
SERIESINSTANCEUIDS					
STUDYUID					
NUMBERIMAGES					
IMAGESSIZE					

II. Detailed Variable Definitions for each of the above tables

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
1. Demographics Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
RNDGROUP	Study arm	1	Spiral CT
		2	X-ray
STUDY	Trial component (LSS or ACRIN)	1	LSS
		2	ACRIN biomarkers
		3	ACRIN no biomarkers
AGE	Age at randomization	Numeric	43-79
CEN	Screening Center (masked) Some ACRIN participants switched institutions during the screening phase of the trial. The institution given in CEN is their institution at the end of the trial. For LSS, the institution at randomization is provided in CEN.		AA - BG
GENDER	Gender	1	Male
		2	Female
RACE	Race	1	White
		2	Black or African-American
		3	Asian
		4	American Indian or Alaskan Native
		5	Native Hawaiian or Other Pacific Islander
		6	More than one race
		7	Participant refused to answer
		95	Missing data form - form is not expected to ever be completed

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		96	Missing - no response
		97	Missing - form not submitted
		98	Missing - form was submitted and the answer was left blank
		99	Unknown/ declined to answer
ETHNIC	Ethnicity	1	Hispanic or Latino
		2	Neither Hispanic nor Latino
		7	Participant refused to answer
		95	Missing data form - form is not expected to ever be completed
		97	Missing - form not submitted
		98	Missing - form was submitted and the answer was left blank
		99	Unknown/ declined to answer
MARITAL	Marital Status *Collected at baseline* *LSS question (MHQ form): What is your current marital status?* *ACRIN question (DP form): Indicate your marital status*	1 2 3 4 5 7 9 .M	Never married Married or living as married Widowed Separated Divorced Participant refused to answer Not Ascertained Missing
EDUCAT	Highest level of education completed	1	8^{th} grade or less
		2	9^{th}-11^{th} grade
		3	High school graduate/GED
		4	Post high school training, excluding college
		5	Associate degree/ some college
		6	Bachelors Degree
		7	Graduate School
		8	Other

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		95	Missing data form - form is not expected to ever be completed
		97	Missing - form not submitted
		98	Missing - form was submitted and the answer was left blank
		99	Unknown/ decline to answer
WEIGHT	Weight in pounds (self-report) *Collected at baseline* *LSS question (MHQ form): What is your current weight?* *ACRIN question (DP form): What is your current weight?*	Numeric .M	Numeric (75 to 446) Missing
HEIGHT	Height in inches (self-report) *Collected at baseline* *LSS question (MHQ form): How tall are you? (With a space provided for feet and inches.)* *ACRIN question (DP form): How tall are you? (With a space provided for feet and inches.)*	Numeric .M	Numeric (32 to 87) Missing
ELIG	Does participant meet eligibility criteria?	0	Ineligible Participant Randomized
		2	Eligible Participant
INELIGIBLE	Reason for ineligibility *Discovered after randomization* *LSS question (PHVF): Reason for ineligibility* *ACRIN question (PR form): Reason for ineligibility* Both the ACRIN and LSS data forms allowed multiple reasons for ineligibility. A small number of ACRIN participants had multiple reasons recorded. For these ACRIN participants, a hierarchy equivalent to the list on the right (smaller values take priority over larger values) was used.] No LSS participants had multiple reasons for ineligibility recorded.	1 2 3 4 5 6 7 8 9 10 11 12 13 14 .N	Age <55 or >74 yrs Non-smoker or quit > 15 years Insufficient pack years CT within 18 months enrollment Ppt in another ca screening trial Ppt in another ca prevention trial Previous LC Portion of lung removed Cancer within past 5 years Physical impairments to screening Metallic implants Home oxygen Unexplained weight loss or Hemoptysis Recent antibiotics use Not ineligible

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
2. Lung Cancer Diagnosis Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
CONFLC	Outcome of lung cancer report	0	No Report
		1	Follow-up collected - Confirmed Lung Cancer
		2	Follow-up Collected - Confirmed Not Lung Cancer
		3	Medical Records cannot be obtained
		4	Pending
CANDX_DAYS	Number of days from randomization to first diagnosis of lung cancer	Numeric	Numeric (0 to 2618)
		.N	No diagnosis date on record
CANCYR	Study year associated with first confirmed lung cancer.	0	T0
		1	T1
		2	T2
		3	T3
		4-7	T4-T7
		.N	Not Applicable
CAN_SCR	Result of screen associated with the first confirmed lung cancer diagnosis	0	No Cancer
		1	Positive Screen
		2	Negative Screen
		3	Missed Screen
		4	Post Screening
DE_STAG	Lung cancer stage (AJCC 6)	3	Stage IA
		4	Stage IB
		5	Stage II

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		6	Stage IIA
		7	Stage IIB
		8	Stage IIIA
		9	Stage IIIB
		10	Stage IV
		11	Occult Carcinoma
		94	Carcinoid, cannot be assessed
		96	Cannot be assessed
		98	TNM not available
		99	Missing TNM
		.N	Not Applicable
DE_GRADE	Lung cancer grade	1	Grade Cannot Be Assessed (GX)
		2	Well Differentiated (G1)
		3	Moderately Differentiated (G2)
		4	Poorly Differentiated (G3)
		5	Undifferentiated (G4)
		6	Unspecified in Pathology Report
		8	Unknown
		9	Missing
		.N	Not Applicable
DE_TYPE	Lung cancer type from ICD-O-3 morphology	.N	Not Applicable
		.M	Missing

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
LOCXXX	Location(s) of primary tumor A single tumor may be in multiple locations. These are binary variables, coded 0=no 1=yes .N=Not Applicable.	0 1 .N	No Yes Not Applicable
LOCRUP	Right upper lobe		
LOCRMID	Right middle lobe		
LOCRLOW	Right lower lobe		
LOCLUP	Left upper lobe		
LOCLIN	Lingula		
LOCLLOW	Left lower lobe		
LOCRHIL	Right Hilum		
LOCLHIL	Left Hilum		
LOCRMSB	Right main stem bronchus		
LOCLMSB	Left main stem bronchus		
LOCCAR	Carina		
LOCMED	Mediastinum		
LOCOTH	Other		
LOCUNK	Unknown		
LESIONSIZE	Tumor Size (mm) For LSS, the size comes from pathology. For ACRIN, the size may come either from pathology or from clinical sources.	Numeric .M .N	Numeric (1 to 260) Missing Not Applicable
PROCLC	Had any procedure related to lung cancer?	0 1	No Yes
BIOPLC	Had a biopsy related to lung cancer? proc_num in (1,2,3,4,8,9,10,29,43,46,50,52,53,58,59)	0 1	No Yes
INVASLC	Had an invasive procedure related to lung cancer? proc_num in (1,2,3,4,8,9,10,29,30,43,45,46,47,49,50,52,53,54,58,59)	0 1	No Yes

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
MEDCOMPLC	Had any complications related to lung cancer?	0	No
		1	Yes
TREATLC	Had treatment for lung cancer?	1	Confirmed treatment
		2	Confirmed no treatment
		3	Treatment data incomplete
		.N	Not Applicable
CANC_FREE_DAYS	Number of days from randomization to date when participant was last known to be free from lung cancer For confirmed lung cancers, ACRIN uses diagnosis date as date last known cancer free, while LSS uses date of previous ASU form.	Numeric	Numeric (0 to 2983)
CANC_RPT_LINK	Is the reported lung cancer linked to a positive screen?	0	No
		1	Yes
CANC_RPT_SOURCE	Source of lung cancer report	0	No Report
		1	ASU or F1/F2
		2	Death Certificate
		3	CC/CNF
		4	EVP
		5	Medical Records Abstraction
		7	NDI

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
3. Smoking History Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
CIGSMOK	Smoking status at baseline	0	Former
		1	Current
PKYR	Pack year history at baseline Calculated as: (SMOKEYR x SMOKEDAY / 20)	Numeric	Numeric (15 to 567.60) Allow 2 significant digits
SMOKEYR	Total years of smoking *Collected at baseline* *ACRIN question (E1 form): For how many years total have you smoked cigarettes?* *LSS questions (EVF form):* *At what age did you begin to smoke?* *At what age did you quit smoking for the last time?* *In the years you have smoked, was there ever a period of one or more years in which you did not smoke cigarettes?* *(Current smokers) Between when you started smoking and now, for how many years in total did you not smoke cigarettes?* *(Former smokers) Between when you started smoking and finally quit smoking, for how many years in total did you not smoke cigarettes?* For LSS former smokers, smokeyr = age_quit - smokeage - years not smoked For LSS current smokers, smokeyr = age at randomization - smokeage - years not smoked	Numeric	Numeric (10 to 68)
SMOKEDAY	Average number of cigarettes smoked per day *Collected at baseline ACRIN question (E1 form): How many cigarettes smoked per day (on average)?* *LSS question (EVF form): During the times that you've smoked, how many cigarettes did you usually smoke per day?*	Numeric	Numeric (10 to 258)

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
SMOKEAGE	Age began smoking *Collected at baseline* *ACRIN question (E1 form): At what age did you start smoking cigarettes?* *LSS question (EVF form): At what age did you begin to smoke?*	Numeric .M	Numeric (2 to 56) Missing
AGE_QUIT	Age at smoking cessation *Collected at baseline* *ACRIN question (SS form): How old were you when you stopped smoking cigarettes for good?* Note: Some participants who reported that they were current smokers answered this question. For these participants, age_quit is provided even though this conflicts with their baseline smoking status. *LSS question (EVF form): At what age did you quit smoking for the last time?*	Numeric .N	Numeric (11 to 74) No age given
CIGAR	Participant smokes/smoked cigars *Collected at baseline* *LSS question (MHQ form): Has there ever been a time in your life when you regularly smoked at least one cigar a month?* *ACRIN question (SS form): What forms of tobacco did/do you smoke?: Cigar*	0 1 .M	No Yes Missing
PIPE	Participant smokes/smoked a pipe *Collected at baseline* *LSS question (MHQ form): Has there ever been a time in your life when you regularly smoked at least one pipeful of tobacco a month?* *ACRIN question (SS form): What forms of tobacco did/do you smoke?: Pipe*	0 1 .M	No Yes Missing
SMOKELIVE	Participant lives/lived with smoker *Collected at baseline* *LSS question (MHQ form): Have you ever lived with a smoker?* *ACRIN question (SS form): Have you ever lived with someone who smoked in your home?*	0 1 .M	No Yes Missing

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
SMOKEWORK	Participant works/worked with exposure to smokers *Collected at baseline* *LSS question (MHQ form): Have you ever worked in a room or closed space where people were often smoking?* *ACRIN question (SS form): Have you ever worked in a place where you were exposed to other people's smoking?*	0 1 .M	No Yes Missing

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
4. Death Last Contact EVP Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
FINALDEATHLC	Final lung cancer death (Combined best information: EVP supplemented with DCF)	0	Death not due to lung cancer
		1	Death due to lung cancer or work-up of suspected lung cancer
		.M	Death Reported, cause of death unknown
		.N	No death reported
DCFDEATHLC	Is lung cancer the death certificate underlying cause of death?	0	Death not due to lung cancer
		1	Death due to lung cancer
		.M	Death Reported, DC cause of death unknown
		.N	No death reported
DCFICD	Underlying cause of death from death certificate (ICD-10)		Letter with 2 or 3 digit code
DEATH_DAYS	Number of days from randomization to death The date of death is taken from the most definitive source available.	Numeric	Numeric (0 to 2624)
		.N	No date of death on record

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
FUP_DAYS	Number of days from randomization to date last known alive End date for last self-reported follow-up period for the participant. For LSS, this is calculated as follows: 1. Death date from death certificate 2. Withdrawal date 3. Latest ASU date 4. Latest screen/randomization date For ACRIN, this must be combined from various sources: 1. Death date from death certificate (D1) 2. Death date reported on FC 3. Withdrawal date 4. Latest interval date on F1/FC 5. Latest screen/randomization date	0-2983	Numeric (0-2983)
DEATHSTAT	Death status Deathstat = 1 consists of the following types of deceased participants: a) Has death certificate and was selected for and completed the Endpoint Verification Process (EVP). b) Has death certificate and was not selected for EVP. c) No death certificate but was selected for and completed EVP. A small number of participants with no death certificate were run through EVP near the time of study closeout.	0	No report of death
		1	EVP certified
		2	Death Certificate coded
		3	Death Certificate received but not coded
		4	Death reported, DC expected to be obtained
		5	Death reported, DC cannot be obtained
		6	NDI Exact match, DC not obtained
		7	NDI Probable match, DC not obtained
DEATHCUTOFF	Death before the cutoff date for lung cancer mortality analysis?	0	No death or no date of death
		1	Death Included
		2	Death Not Included
HASDCF	Has death certificate?	1	DC was obtained and coded

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
	If hasdcf=0, then dcficd is missing.	0	Alive or DC was not both obtained and coded
CONTACTSTATUS	Status of participant at the end of the study (12/31/2009) Note that a small subset (< 1%) of participants who are "Alive and Actively Participating" have a last follow-up date before 12/31/2009. Some of them were considerably earlier than 12/31/2009.	1	Alive and Actively Participating
		2	Deceased
		3	Randomized but never participated
		4	Withdrawn or lost contact from Study
WDLOST	Reason why participant withdrew from study or lost contact	0	Not withdrawn or Lost Contact
		1	Participant withdrew consent
		2	Participant refused further participation for non-medical reasons
		3	Participant refused further participation due to physical illness/cognitive impairment
		4	Lost Contact/Cannot Locate/No active contact with participant
		5	Administrative withdrawal
EVPSEL	Death selected for Endpoint Verification Process (EVP)?	0	Run through algorithm and not selected for EVP
		1	Selected for EVP
		2	Late algorithm run (near study closeout date); not selected for EVP
		.N	No death certificate coded (or not dead)
EVP_REVR	Highest level of EVP completed (CDQ = Cause of Death Questionnaire, the form completed by EVP team members)	0	No chair-level CDQ completed (includes if only CDQ received says chair unblinded or needs more information)
		1	Chair-level CDQ completed (includes if chair was unblinded and a member completed the chair-level review)

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		2	Member-level CDQ completed
		3	Team CDQ completed
		4	No CDQ completed , no records available
		.N	No death certificate coded (or not deceased)
EVPSENT	Did death undergo EVP review?	0	Records not sent to EVP
		1	Records sent to EVP
		.N	No records available
EVPCERT	Was death EVP certified?	0	Not Certified
		1	Certified (with or without review)
		.N	No death certificate coded (or not dead)
EVPDEATH	Cause of death according to EVP	1	Death due to lung cancer
		2	Other cancer
		3	Not cancer
		4	Death due to diagnostic evaluation for a suspected lung cancer
		.N	Not Certified or Not Selected
EVPDIRECT	For EVP certified deaths from lung cancer (EVPDEATH in 1, 4), is death the DIRECT, INDIRECT, or DIRECT AND INDIRECT result of lung cancer?	1	Direct, result of lung cancer
		2	Indirect, result of diagnostic evaluation
		3	Indirect, result of treatment
		4	Indirect, result of diagnostic evaluation and treatment
		5	Direct and indirect, result of lung cancer and diagnostic evaluation
		6	Direct and indirect, result of lung cancer and treatment
		7	Direct and indirect, results of lung cancer, diagnostic evaluation, and treatment
		8	None of the above/Incomplete

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		.N	Death NOT due to lung cancer or no death (EVPDEATH in 2,3,.N)
EVPINCOMPLETE	Reason why EVP Review could not be completed.	1	Reviewer is unblinded
		2	Reviewer requires additional documentation(ADR)
		3	Reviewer requires pathology and/or radiology review (PRR)
		4	Reviewer requires both ADR and PRR
		5	Medical records do not exist
		6	Medical records cannot be obtained
		7	Medical records are inadequate and additional documentation cannot be obtained
		8	No resolution was reached before the study was locked.
		.N	Not Applicable
NDICD	Underlying cause of death from final NDI+ search (ICD-10) This variable is only populated if deathstat in (6,7)		Letter with 3 digit code.

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
5. Medical History Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
DIAGXXXX	Diagnosed with xxxx?	0	No
ASBE	Asbestosis	1	Yes
ADAS	Asthma as an adult	.M	Missing
CHAS	Asthma as a child		
BRON	Bronchiectasis		
CHRO	Chronic bronchitis		
COPD	COPD		
DIAB	Diabetes		
EMPH	Emphysema		
FIBR	Fibrosis of the lung		
HEAR	Heart disease or heart attack		
PNEU	Pneumonia		
SARC	Sarcoidosis		
SILI	Silicosis		
TUBE	Tuberculosis		
HYPE	Hypertension		
STRO	Stroke		
	Collected at baseline		
	ACRIN question (DP form): Has a doctor ever told you that you have any of the conditions or illnesses listed below?		
	LSS question (MHQ form): Has a doctor ever told you that you had or have any of the conditions or illnesses listed below?		

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
AGEXXXX	Age at diagnosis with xxxx?	###	0-97 years
ASBE	Asbestosis	.M	Missing
ADAS	Asthma as an adult	.N	Not Applicable
CHAS	Asthma as a child		
BRON	Bronchiectasis		
CHRO	Chronic bronchitis		
COPD	COPD		
DIAB	Diabetes		
EMPH	Emphysema		
FIBR	Fibrosis of the lung		
HEAR	Heart disease or heart attack		
PNEU	Pneumonia		
SARC	Sarcoidosis		
SILI	Silicosis		
TUBE	Tuberculosis		
HYPE	Hypertension		
STRO	Stroke		
	Collected at baseline		
	ACRIN question (DP form): If yes, age at first diagnosis:		
	LSS question (MHQ form): Age at diagnosis		

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
CANCXXXX	Diagnosed with xxxx?	0	No
BLAD	Bladder Cancer	1	Yes
BREA	Breast Cancer	.M	Missing
CERV	Cervical Cancer		
COLO	Colorectal Cancer		
ESOP	Esophageal Cancer		
KIDN	Kidney Cancer		
LARY	Larynx Cancer		
ORAL	Oral Cancer		
NASA	Nasal Cancer		
PHAR	Pharynx Cancer		
LUNG	Lung Cancer		
PANC	Pancreatic Cancer		
STOM	Stomach Cancer		
THYR	Thyroid Cancer		
TRAN	Transitional Cell Cancer		
	Collected at baseline		
	ACRIN question (DP form): Has a doctor ever told you that you have any of the cancers listed below?		
	LSS question (MHQ form): Have you ever been diagnosed as having any of the cancers listed below?		

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
AGEXXXX	Age at first diagnosis of xxxx	###	9-76 years
BLAD	Bladder Cancer	.M	Missing
BREA	Breast Cancer	.N	Not Applicable
CERV	Cervical Cancer		
COLO	Colorectal Cancer		
ESOP	Esophageal Cancer		
KIDN	Kidney Cancer		
LARY	Larynx Cancer		
ORAL	Oral Cancer		
NASA	Nasal Cancer		
PHAR	Pharynx Cancer		
LUNG	Lung Cancer		
PANC	Pancreatic Cancer		
STOM	Stomach Cancer		
THYR	Thyroid Cancer		
TRAN	Transitional Cell Cancer		
	Collected at baseline		
	ACRIN question (DP form): If yes, age at diagnosis:		
	LSS question (MHQ form): Age at diagnosis		

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
6. Family Lung Cancer History Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
FAMXXXX FATHER MOTHER SISTER BROTHER CHILD	Has xxxx ever had lung cancer? Father Mother One or more sister(s), including half-sisters One or more brother(s), including half-brothers Child (biological) *Collected at baseline* *ACRIN question (DP form): Have any of the following blood relatives ever had lung cancer?* *LSS question (MHQ form): Have any of the following blood relatives ever had lung cancer?*	0 1 .M	No Yes Missing

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
7. Alcohol History Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
LSS_ALCOHOL_FREQ	How often do you have a drink containing alcohol? *Collected at baseline* *LSS only*	1	Never
		2	Monthly or less often
		3	Two to four times a month
		4	Two to three times a week
		5	Four or more times a week
		.M	Missing
		.N	Not applicable (ACRIN participant)
LSS_ALCOHOL_NUM	Number of alcoholic drinks on typical day when drinking *Collected at baseline* *LSS only*	1	1
		2	2-3
		3	4
		4	5-7
		5	8 or more
		.M	Missing
		.N	Not applicable (ACRIN participant or non-drinker)
ACRIN_ALC_CURR	Do you presently drink alcoholic beverages? *Collected at baseline* *ACRIN only* Note: Participants were not supposed to answer this if they said 'no' to the variable ACRIN_ALC_EVER, but some did answer this question anyway. For these participants that did provide an answer, their answer was used to populate this variable. Otherwise, their value is coded as .N.	1	No
		2	Yes
		.M	Missing
		.R	Participant Refused to Answer
		.N	Not Applicable (LSS participant or never drinker)
ACRIN_ALC_EVER	Have you ever consumed alcoholic beverages? *Collected at baseline*	1	No
		2	Yes

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
	ACRIN only	.M	Missing
		.R	Participant Refused to Answer
		.N	Not applicable (LSS participant)
ACRIN_LASTDRINK	How long has it been since you last had an alcoholic drink? *Collected at baseline* *ACRIN only* Note: Participants were only supposed to answer this question if they said 'no' to the variable ACRIN_ALC_CURR, but some other participants provided an answer this question. For these participants that did provide an answer, their answer was used to populate this variable. Otherwise, their value is coded as .N.	1	Less than 1 year
		2	1 year to 2 years
		3	More than 2 years
		.M	Missing
		.R	Participant Refused to Answer
		.N	Not Applicable (LSS participant or not a former drinker)
ACRIN_DRINKYRS_FORM	For how many years did you drink alcoholic beverages? *Collected at baseline* *ACRIN only* Note: Participants were only supposed to answer this question if they said 'no' to the variable ACRIN_ALC_CURR, but some other participants provided an answer this question. For these participants that did provide an answer, their answer was used to populate this variable. Otherwise, their value is coded as .N.	0-70	Numeric (0-70)
		.M	Missing
		.R	Participant Refused to Answer
		.N	Not Applicable (LSS participant or not a former drinker)
ACRIN_DRINKNUM_FORM	What was the usual number of drinks you had per week before you stopped drinking alcoholic beverages? (one drink means 1 beer or 1 glass of wine or 1 shot of liquor, record 0 if less than 1 drink per week). *Collected at baseline* *ACRIN only* Note: Participants were only supposed to answer this question if they said 'no' to the variable ACRIN_ALC_CURR, but some other participants provided an answer this question. For these participants that did provide an answer, their answer was used to populate this variable. Otherwise, their value is coded as .N.	0-200	Numeric (0-200)
		.M	Missing
		.R	Participant Refused to Answer
		.N	Not Applicable (LSS participant or not a former drinker)
ACRIN_DRINKYRS_CURR	For how many years have you been drinking alcoholic beverages? *Collected at baseline*	0-70	Numeric (0-70)
		.M	Missing

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
	ACRIN only Note: Participants were only supposed to answer this question if they said 'yes' to the variable ACRIN_ALC_CURR, but some other participants provided an answer this question. For these participants that did provide an answer, their answer was used to populate this variable. Otherwise, their value is coded as .N.	.R	Participant Refused to Answer
		.N	Not Applicable (LSS participant or not a current drinker)
ACRIN_DRINKNUM_CURR	What is the usual number of drinks you have per week? (one drink means 1 beer or 1 glass of wine or 1 shot of liquor, record 0 if less than 1 drink per week). *Collected at baseline* *ACRIN only* Note: Participants were only supposed to answer this question if they said 'yes' to the variable ACRIN_ALC_CURR, but some other participants provided an answer this question. For these participants that did provide an answer, their answer was used to populate this variable. Otherwise, their value is coded as .N.	0-90	Numeric (0-90)
		.M	Missing
		.R	Participant Refused to Answer
		.N	Not Applicable (LSS participant or not a current drinker)
ACRIN_DRINK24HR	During the past 24 hours, how many drinks have you had? *Collected at baseline* *ACRIN only* Note: Participants were only supposed to answer this question if they said 'yes' to the variable ACRIN_ALC_CURR, but some other participants provided an answer this question. For these participants that did provide an answer, their answer was used to populate this variable. Otherwise, their value is coded as .N.	0-50	Numeric (0-50)
		.M	Missing
		.R	Participant Refused to Answer
		.N	Not Applicable (LSS participant or not a current drinker)

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
8. Work History Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
WRKXXXX	Has ever worked for 1 year or more with xxxx?	0	No
ASBE	Asbestos	1	Yes
BAKI	Baking	.M	Missing
BUTC	Butchering/meat packing		
CHEM	Chemicals/plastics manufacturing		
COAL	Coal Mining		
COTT	Cotton/jute processing		
FARM	Farming		
FIRE	Fire fighting		
FLOU	Flour/feed or grain milling		
FOUN	Foundry/steel milling		
HARD	Hard rock mining		
PAIN	Painting		
SAND	Sandblasting		
WELD	Welding		
	Collected at baseline		
	ACRIN question (DP form): Have you ever worked for 1 year or more at any of the occupations listed below?		
	LSS question (MHQ form): Do you or did you work in this industry or occupation for 12 months or more?		

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
YRSXXXX	Number of years working with xxxx ?	###	0-70 years
ASBE	Asbestos	.N	Not Applicable
BAKI	Baking	.M	Missing
BUTC	Butchering/meat packing		
CHEM	Chemicals/plastics manufacturing		
COAL	Coal Mining		
COTT	Cotton/jute processing		
FARM	Farming		
FIRE	Fire fighting		
FLOU	Flour/feed or grain milling		
FOUN	Foundry/steel milling		
HARD	Hard rock mining		
PAIN	Painting		
SAND	Sandblasting		
WELD	Welding		
	Collected at baseline		
	ACRIN question (DP form): No. of years worked		
	LSS question (MHQ form): No. of years		

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
RESXXXX ASBE BAKI BUTC CHEM COAL COTT FARM FIRE FLOU FOUN HARD PAIN SAND WELD	When working with xxxx, was mask or other equipment to protect the lungs worn? Asbestos Baking Butchering/meat packing Chemicals/plastics manufacturing Coal Mining Cotton/jute processing Farming Fire fighting Flour/feed or grain milling Foundry/steel milling Hard rock mining Painting Sandblasting Welding *Collected at baseline* *ACRIN question (DP form): Did you wear a respirator?* *LSS question (MHQ form): Do you or did you usually wear a facemask or other equipment to protect your lungs while working?* **Note: Option 2 'Sometimes' was only available on the LSS form.*	0 1 2 .N .M	No Yes Sometimes Not Applicable Missing

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
9. IMS Derived Person Vars Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
sct_image_has_lss	Has an SCT screening image for any study year (LSS only)	0 1 -99992	No Yes Not Applicable
sct_image_ years_lss	Number of years with an SCT screening image (LSS only)	0-3	Numeric (0-3)
num_screens	Count of screening rounds completed	0-3	Numeric (0-3)
num_pos_screens	Count of screening rounds with a positive result	0-3	Numeric (0-3)
num_neg_screens	Count of screening rounds with a negative result	0-3	Numeric (0-3)
num_false_pos_scr	Number of false positive screens	0-3	Numeric (0-3)
years_scr_to_dx	Number of years from last screen to diagnosis	0-6	Numeric (0-6)
last_screen_result	Result of the last screening exam	0	Never screened
		1	Negative screen
		2	Positive stability unknown
		3	Positive stable
		4	Positive other (compared and not noted to be stable)
last_screen_studyyr	Study year of the last screening exam		No Screen
		0	Study year 0
		1	Study year 1
		2	Study year 2
lstscr_largest_nodule_diam	Diameter of largest non-calcified nodule/mass >=4mm (51) from the last screen	3-130	Numeric (3-130)

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
lstscr_num_nodule	Number of non-calcified nodules/masses >=4mm (51) found on the last screen	0-10	Numeric (0-10)
anyscr_has_nodule	Was a non-calcified nodule/mass >=4mm (51) found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_largest_nodule_diam	Diameter of the largest non-calcified nodule/mass >=4mm (abnormality 51) from any screen.	0 1 -99992	No Yes Not Applicable
anyscr_has_micronodule	Was a non-calcified nodule <4mm found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_calc_nodule	Was a benign lung nodule (benign calcification) found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_atelec	Was atelectasis, segmental or greater, found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_thicken	Was pleural thickening or effusion found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_adeno	Was a non-calcified hilar/mediastinal adenopathy or mass (>= 10 mm on short axis) found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_wallabn	Was a chest wall abnormality found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_consol	Was consolidation found on any screen?	0 1 -99992	No Yes Not Applicable

Tables with one record per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
anyscr_has_emphys	Was emphysema found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_cardio	Was a significant cardiovascular abnormality found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_reticu	Was a reticular/reticulonodular opacity, honeycombing, fibrosis, or scar found on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_6nodules	Were 6 or more nodules, not suspicious for cancer (opacity >=4mm) found on any one screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_abovediam	Was any other potentially significant abnormality found above the diaphragm on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_belowdiam	Was any other potentially significant abnormality found below the diaphragm on any screen?	0 1 -99992	No Yes Not Applicable
anyscr_has_minor	Was any other minor abnormality noted on any screen?	0 1 -99992	No Yes Not Applicable

Tables with one record per study year of screening			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
10. Screening Results Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
STUDY_YR	Year of screen	0-2	0-2
SCR_DAYS	Number of days from randomization to screening exam	-4 to 1502	Numeric (-4 to 1502)
		.E	Screen date after lung cancer diagnosis
		.W	Wrong Screen Administered
		.N	No screen date on record
SCR_RES	Final result of screening exam (after comparison with historical images) This is the result recorded after comparing the image just obtained with prior images (including previous NLST screening exams).	1	Negative screen, no significant abnormalities
		2	Negative screen, minor abnormalities not suspicious for lung cancer
		3	Negative screen, significant abnormalities not suspicious for lung cancer
		4	Positive, Change Unspecified, nodule(s) ≥ 4 mm or enlarging nodule(s), mass(es), other non-specific abnormalities suspicious for lung cancer
		5	Positive, No Significant Change, stable abnormalities potentially related to lung cancer, no significant change since prior screening exam.
		6	Positive, other
		10	Inadequate Image
		11	Not Compliant - Left Study
		13	Not Expected - Cancer before screening window
		14	Not Expected - Death before screening window
		15	Not Compliant - Refused a screen

Tables with one record per study year of screening			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		17	Not Compliant - Wrong Screen
		23	Not Expected - Cancer in screening window
		24	Not Expected - Death in screening window
		95	Not Compliant - Erroneous Report of Lung Cancer Before Screen (LSS Only)
		97	Not Compliant - Form Not Submitted, Window Closed
SCR_ISO	Preliminary result of screening exam (in isolation, before comparison with historical images) This is the result recorded after looking at the image in isolation, i.e. with no comparison to any prior image.	1	Negative screen, no significant abnormalities
		2	Negative screen, minor abnormalities not suspicious for lung cancer
		3	Negative screen, significant abnormalities not suspicious for lung cancer
		4	Positive, Change Unspecified, nodule(s) ≥ 4 mm or enlarging nodule(s), mass(es), other non-specific abnormalities suspicious for lung cancer
		10	Inadequate Image
		11	Not Compliant - Left Study
		13	Not Expected - Cancer before screening window
		14	Not Expected - Death before screening window
		15	Not Compliant - Refused a screen
		17	Not Compliant - Wrong Screen
		23	Not Expected - Cancer in screening window
		24	Not Expected - Death in screening window
		95	Not Compliant - Erroneous Report of Lung Cancer Before Screen (LSS Only)

Tables with one record per study year of screening			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		97	Not Compliant - Form Not Submitted, Window Closed
SCR_LAT	Received lateral Chest X-Ray? (Note: Receipt of a lateral chest x-ray is considered a protocol violation.	0	Did not receive lateral view chest x-ray (includes CT, X-Ray without lateral, no screen, etc)
		1	Received lateral view chest x-ray

Tables with one record per study year of screening			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
11. Positive Screen Followup Procedures Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
STUDY_YR	Year of screen	0-2	0-2
MRA_STAT	Positive screen follow-up status by study year (from Medical Records Abstraction)	0	No Expectation
		1	MRA Complete with Diagnostic Procedures
		2	MRA Complete with clinical evaluation/radiograph-comparison with historical images only
		3	MRA Complete with no procedures
		4	MRA Complete, procedures indeterminate
		5	Conflicting Data
NO_PROC_REAS	Reason for no procedures when follow-up was expected	0	No Expectation
		1	Provider/Radiologist did not recommend follow-up
		2	Participant declined to undergo follow-up
		3	No follow-up for other reasons
		4	No follow-up and reason unknown
PROC	Had a procedure related to positive screen?	0	No
		1	Yes

Tables with one record per study year of screening			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
BIOP	Had a biopsy related to positive screen? proc_num in (1,2,3,4,8,9,10,29,43,46,50,52,53,58,59)	0	No
		1	Yes
INVAS	Had an invasive procedure related to positive screen? proc_num in (1,2,3,4,8,9,10,29,30,43,45,46,47,49,50,52,53,54,58,59)	0	No
		1	Yes
MEDCOMP	Had any complications related to positive screen?	0	No
		1	Yes

Tables with one record per year of screening			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
12. IMS Derived SCT Screen Vars Table			
PID	Participant identifier	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
CTIL_ID	LSS Participant identifier		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
STUDY_YR	Year of screen	0-2	0-2
image_has_lss	Is there an image available for this screen (LSS only)?	0	No
		1	Yes
cancer_seen	Was the cancer likely to have been seen on the screening exam?	-99992	Not Applicable
		1	Probably - cancer linked to screen or in same year as screen
		2	Probably - Negative screen
		3	Maybe - has cancer, but not in same year as screen
		4	No - no cancer
years_scr_to_dx	Number of years from screen to diagnosis	0-7	Numeric (0-7)
false_pos_scr	Is the screen a false positive screen?	-99992	Not Applicable
		0	No
		1	Yes
		3	Maybe, later cancer
		9	Not positive screen
pos_screen	Was the SCT screen determined to be a positive screen?	0	No
		1	Yes
is_last_screen	Is this screen the last screen for this participant?	0	No
		1	Yes
screen_order	Order of this screen among all screens for this participant	-99992	Not Applicable
		1	First Screen

Tables with one record per year of screening			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		2	Second Screen
		3	Third Screen
		4	Only Screen
largest_nodule_diam	Diameter of largest non-calcified nodule/mass >=4mm (51) found on the screen	3-195	Numeric (3-195)
num_nodule	Number of non-calcified nodules/masses >=4mm (51) found on the screen	0-12	Numeric (0-12)
has_soft_tissue_nodule	Has a non-calcified nodule/mass >=4mm (51) with primary attenuation of soft tissue	0	No
		1	Yes
has_ground_glass_nodule	Has a non-calcified nodule/mass >=4mm (51) with predominant attenuation of ground glass.	0	No
		1	Yes
has_mixed_nodule	Has a non-calcified nodule/mass >=4mm (51) with predominant attenuation of mixed	0	No
		1	Yes
has_fluid_nodule	Has a non-calcified nodule/mass >=4mm (51) with predominant attenuation of fluid/water	0	No
		1	Yes
has_fat_nodule	Has a non-calcified nodule/mass >=4mm (51) with predominant attenuation of fat	0	No
		1	Yes
nodule_grew	Was there interval growth of a nodule/mass >=4mm (51)?	0	No
		1	Yes
nodule_atten_change	Was there an interval suspicious change in attenuation of a nodule/mass >=4mm (51)?	0	No
		1	Yes
has_micronodule	Was a non-calcified nodule <4mm found on the screen?	0	No
		1	Yes
has_calc_nodule	Was a benign lung nodule (benign calcification) found on the screen?	0	No
		1	Yes
has_atelec	Was atelectasis, segmental or greater, found on the screen?	0	No
		1	Yes
has_thicken	Was pleural thickening or effusion found on the screen?	0	No

Tables with one record per year of screening			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		1	Yes
has_adeno	Was a non-calcified hilar/mediastinal adenopathy or mass (>= 10 mm on short axis) found on the screen?	0	No
		1	Yes
has_wallabn	Was a chest wall abnormality found on the screen?	0	No
		1	Yes
has_consol	Was consolidation found on the screen?	0	No
		1	Yes
has_emphys	Was emphysema found on the screen?	0	No
		1	Yes
has_cardio	Was a significant cardiovascular abnormality found on the screen?	0	No
		1	Yes
has_reticu	Was a reticular/reticulonodular opacity, honeycombing, fibrosis, or scar found on the screen?	0	No
		1	Yes
has_6nodules	Were 6 or more nodules, not suspicious for cancer (opacity >=4mm) found on this one screen?	0	No
		1	Yes
has_abovediam	Was any other potentially significant abnormality found above the diaphragm on the screen?	0	No
		1	Yes
has_belowdiam	Was any other potentially significant abnormality found below the diaphragm on the screen?	0	No
		1	Yes
has_minor	Was any other minor abnormality noted on the screen?	0	No
		1	Yes

Tables with one record per series per study year per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
13. SCT Image Info Table			
PID	Participant identifier, also called the IMS Global ID	1xx,xxx	LSS Participants (1xxxxx)
		2xx,xxx	ACRIN Participants (2xx,xxx)
SERIAL_NUMBER	Unique identifier for each row in this table (Primary Key)	1 to 159304	Numeric (1 to 159304)
CTIL_ID	Participant identifier associated with images prior to the IMS Global ID		LSS Participants (0xxxxx or 1xxxxx or 2xxxxx or 3xxxxx)
STUDY_YR	Year of screen	0-2	0-2
visit	If during a screening year, the images needed to be repeated because of issues, the subject may have more than one visit.	1 or 2	Numeric (1 or 2)
study_serialno	LSS only; used for CTIL management		Numeric (1 to 53665)
seriesdescription	A description of the series as a list* of values found within or computed from values in the DICOM image headers.		Text
imagetype	Image type (localizer or axial images)		Text
kvp	Kilo Volt peak (kVp) – peak kilo voltage output of the x-ray generator used.		Numeric (80, 90, 100, 110, 120, 130, 135, 140)
mas	Milli-ampere second (mAs) – Exposure expressed as milli-ampere seconds calculated from exposure time and x-ray tube current.		Numeric (0 to 994)
effmas	Effective mAs		Numeric
pitch	Pitch is the table travel per rotation divided by the collimation.		Numeric (0.75, 0.875, 1.25, 1.375, 1.5, 1.75)
tablerotation	Table feed per rotation calculated as the millimeter motion of the table during a complete revolution of the source around the gantry orbit.		Numeric (0-999)
reconthickness	Reconstruction slice thickness		Numeric (0.75-999)
reconinterval	Pixel spacing computed from image position.		Numeric (0-999)
reconfilter	Name of the reconstruction convolution kernel used by the manufacturer to render the spiral computed tomography (SCT) images.		Text (999, A-T20s)

Tables with one record per series per study year per participant			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
reconstruction_diameter	The millimeter diameter of the region from which the data were used in creating the reconstruction of the image.		Numeric (0-1750)
manufacturer	Name of the manufacturer of the spiral computed tomography scanner.		Text (GE Medical Systems, Phillips, Siemens, Toshiba)
manufacturers_model_name	Model name given to the scanner by the manufacturer.		Text (Acquilion to Volume Zoom)
scannercode	Encoded variable unique to physical scanner		Text (DSC to UNK)
softwareversion	Scanner software version at the time of the scan.		Text
seriesinstanceuids	New series instance uid		Text
studyuid	New study instance uid		Text
numberimages	Number of images contained within a series		Numeric
imagessize	Total number of bytes contained within all of the images in a series.		Numeric

* Series Description: a concatenation of 11 comma-separated values (exact or coded) representing:

(1) Screening year
(2) Image Type
(3) Manufacturer
(4) Model
(5) Convolution Kernel
(6) Reconstruction Diameter
(7) Slice Thickness
(8) kVp
(9) mAs
(10) Effective mAs
(11) Pitch

NOTE: The following 14 tables cannot be directly queried from the NLST Query Tool or seen in the Query Tool. The data in these 14 tables are only available through the NLST Portal (https://biometry.nci.nih.gov/nlst). Please contact Information Management Services, Inc. (IMS) if you need access to the NLST data found in these 14 tables. An IMS login is required with the proper permissions to download the data and dictionary. Please contact Information Management Services, Inc., 6110 Executive Boulevard, Suite 310, Rockville, MD 20852, (301) 984-3445 x554, email: cdas@imsweb.com.

1. Spiral CT Screening Dataset (One observation per study year of screening)

1. Spiral CT Screening Dataset (SCTSCREEN; One observation per study year of screening)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
STUDY_YR	Year of screen	0-2	
READER_ID	Unique identifier of radiologist who read the CT images, masked for anonymity	Numeric	
		1xxxx	For LSS
		2xxxx	For ACRIN
SCT_COMPIMAGE1-5	Source of Comparison Image The screening protocol included a comparison by the radiologist of the images obtained at the screening exam with any available historical images. At the T0 screening exam, relatively few participants had comparison images available, but at the T1 and T2 screening exams, almost all participants had comparison images available (i.e. the images from the previous years' NLST screening exams).	0	No Image Available
		1	T0
		2	T1
		3	T2 inadequate scan
		4	CT
		5	CXR
		6	MRI
		7	PET

1. Spiral CT Screening Dataset (SCTSCREEN; One observation per study year of screening)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
SCT_COMP_DAYS1-5	Number of days from randomization to the date of the comparison image	Numeric .M .N	 Missing Not Applicable
REC_XXX	Radiologist's recommendations for follow-up after comparison read (mark all that apply)	1	Yes
		0	No
REC_NO_FOLLOWUP	No diagnostic intervention necessary		
REC_CONTINUE_NLST_CT	Continue NLST screening CT (LSS only)		
REC_COMPARE_IMG	Comparison with historical images		
REC_DIAG_CT	Diagnostic chest CT		
REC_CT_DENSITOMETRY	Contrast-enhanced CT nodule densitometry		
REC_FDG_PET	FDG-PET		
REC_TECH_99M	Tech 99m depreotide scintigraphy		
REC_BIOPSY	Biopsy (percutaneous, thoracoscopic, open, etc.)		
REC_OTHER	Other (specify)		
REC_LD_OR_THIN_CT VARIABLES	Low-dose helical or thin-section CT of chest		
REC_LD_OR_THIN_CT_3MO	3 months from screening exam		
REC_LD_OR_THIN_CT_6MO	6 months from screening exam		
REC_LD_OR_THIN_CT_3_6MO	3-6 months from screening exam		
REC_LD_OR_THIN_CT_12MO	12 months from screening exam		
REC_LD_OR_THIN_CT_24MO	24 months from screening exam		
	Initially, both ACRIN and LSS forms had boxes for thin-section CT but lacked an option for low-dose helical CT. On 7/31/2003, ACRIN introduced a combined question "Thin-section chest CT or repeat low-dose helical chest CT" (see forms revision notice 7-31-2003). On 10/9/2003, LSS replaced the thin-section CT question with "Low dose CT with NLST parameters" (see decision log #9). Also, LSS had a question for recommended focus area of the chest (entire chest vs. limited). See rec_focusarea variable.		
REC_FOCUSAREA	Recommended focus area for follow-up low-dose helical or thin-section CT scans *LSS only* Note that this item was optional prior to 10/9/2003, when the LSS SCT form	0	None Specified or Not Applicable
		1	Limited

1. Spiral CT Screening Dataset (SCTSCREEN; One observation per study year of screening)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
	question switched from thin-section CT to low-dose helical CT. Thereafter, it was mandatory.	2	Entire chest
VISITS	Number of screening visits *LSS Question: Visit Number* *ACRIN Question: Visit Number*	Numeric	
ATTEMPTS	Number of screening attempts on last screening visit this study year *LSS Question: Number of Attempts* *ACRIN Question: Number of Exam Attempts*	Numeric	
		.M	Missing
TECHNICAL PARAMETER VARIABLES	Technical parameters	Numeric	
		.M	Missing
TECHPARA_KVP	kVp (120-140, according to LSS form specs)		
TECHPARA_EFFMAS	Effective mAs (20-60, according to LSS form specs)		
TECHPARA_MA	mA		
TECHPARA_FOV	Display FOV in cm (<100) Note that Effective mAs is missing for > 50% of screens		
CT_RECON_FILTER1-4	CT reconstruction algorithm / filter LSS only allows up to two CT reconstruction algorithms / filters. In LSS, ~ 25% of screening exams had two algorithms specified.	1	GE Bone
		2	GE Standard
		3	GE, other
		4	Phillips D
		5	Phillips C
		6	Phillips, other
		7	Siemens B50F
		8	Siemens B30
		9	Siemens, other
		10	Toshiba FC10
		11	Toshiba FC51
		12	Toshiba, other

1. Spiral CT Screening Dataset (SCTSCREEN; One observation per study year of screening)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		.M	Missing or less than 4 algorithms/filters
CTDXQUAL	Overall diagnostic quality of CT examination *LSS Question: Indicate the overall diagnostic quality of the CT image acquisition sequence* *ACRIN Question: Indicate the overall diagnostic quality of the CT examination*	1	Diagnostic CT
		2	Limited CT, but interpretable
		3	Non-diagnostic CT exam
		4	No image available (LSS only)
		.M	Missing
CTDXQUAL_ REASON VARIABLES	Reason(s) for limited / non-diagnostic CT (if applicable)	0	No
CTDXQUAL_BREATH	Submaximal inspiratory breath-hold	1	Yes
CTDXQUAL_MOTION	Motion artifact	.N	Not Applicable
CTDXQUAL_RESP	Respiratory misregistration		
CTDXQUAL_TECHPARA	Incorrect technical parameter(s)	.M	Missing
CTDXQUAL_INADEQIMG	Lungs not completely imaged		
CTDXQUAL_ARTIFACT	Severe beam hardening artifact		
CTDXQUAL_GRAININESS	Excessive quantum mottle or graininess		
CTDXQUAL_OTHER	Other (specify)		
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

2. Chest X-Ray Screening Dataset (One observation per study year of screening)

2. Chest X-Ray Screening Dataset (XRYSCREEN; One observation per study year of screening)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
STUDY_YR	Study year of screen	0-2	
READER_ID	Unique identifier of radiologist who read the chest x-ray images, masked for anonymity	Numeric	
		1xxxx	For LSS
		2xxxx	For ACRIN
XRY_COMPIMAGE1-5	Source of Comparison Image The screening protocol included a comparison by the radiologist of the images obtained at the screening exam with any available historical images. At the T0 screening exam, relatively few participants had comparison images available, but at the T1 and T2 screening exams, almost all participants had comparison images available (i.e. the images from the previous years' NLST screening exams).	0	No Image Available
		1	T0
		2	T1
		3	T2 inadequate scan
		4	CT
		5	CXR
		6	MRI
		7	PET
XRY_COMP_DAYS1-5	Number of days from randomization to the date of the comparison image	Numeric	
		.M	Missing
		.N	Not Applicable

2. Chest X-Ray Screening Dataset (XRYSCREEN; One observation per study year of screening)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
REC_XXX	Radiologist's recommendations for follow-up after comparison read (mark all that apply)	1	Yes
		0	No
REC_NO_FOLLOWUP	No diagnostic intervention necessary		
REC_COMPARE_IMG	Comparison with historical images		
REC_CXR_CONFIRM	Chest X-ray to confirm that apparent abnormality is a lung abnormality *ACRIN Question (DR/I8 form): Follow-up chest x-ray to better determine whether the finding observed on screening CXR is indeed a lung abnormality and its location.* Note that ACRIN's form has options for additional views to confirm whether abnormality noted at screening is actually an abnormality and located in the lung. LSS does not have this data.		
REC_CHEST_FLUOROSCOPY	Chest fluoroscopy to confirm that apparent abnormality is a lung abnormality		
REC_CXR_LOW_KVP_CALCIF	Low kVp chest X-ray to check for calcification of abnormality		
REC_CXR_3MO	Follow-up chest X-ray in three months		
REC_DIAG_CT	Diagnostic chest CT		
REC_CT_DENSITOMETRY	Contrast-enhanced CT nodule densitometry		
REC_FDG_PET	FDG-PET		
REC_TECH_99M	Tech 99m depreotide scintigraphy		
REC_BIOPSY	Biopsy (percutaneous, thoracoscopic, open, etc.)		
REC_OTHER	Other (specify)		
REC_THINCT	Thin section CT of chest (LSS only, on early form version)		
REC_LDCT	Low-dose helical CT of chest (added 6-17-04 for ACRIN, 10-9-03 for LSS) ACRIN's form has additional options for recommended time period(s) for low-dose spiral CT (as on the spiral CT screening form). LSS does not have this data. Also, LSS had a question for recommended focus area of the chest (entire chest vs. limited). See rec_focusarea variable.		
REC_FOCUSAREA	Recommended focus area for follow-up low-dose helical CT scan (LSS only)	0	None Specified or Not Applicable

2. Chest X-Ray Screening Dataset (XRYSCREEN; One observation per study year of screening)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
	Note that this item became available on 10/9/2003, when the low-dose helical CT option was added to the LSS XRY form.	1	Limited
		2	Entire chest
VISITS	Number of screening visits this study year *LSS Question: Visit Number* *ACRIN Question: Visit Number*	Numeric	
ATTEMPTS	Number of screening attempts on last screening visit this study year *LSS Question: Number of Attempts* *ACRIN Question: Total number of exposures performed to complete Screening CXR exam*	Numeric	
		.M	Missing
TECHNICAL PARAMETER VARIABLES	Technical parameters	Numeric	
TECHPARA_KVP TECHPARA_MAS TECHPARA_MA TECHPARA_TIME TECHPARA_EXPVAL	kVp (100-150) mAs (0.1 - 20; ACRIN DR form says < 10 except for large participants) mA Time in milliseconds (0 - 40) Exposure value (for digital units; S-value or exposure index; depends on manufacturer and model) Note that mA, Time, and Exposure Value are missing for > 90% of screens.	.M	Missing
XRYSYSTEM	CXR system used *LSS Question: CXR system used* *ACRIN Question: How was the CXR obtained?*	1	Screen-Film (SF)
		2	Computed Radiography (CR)
		3	Direct Digital Radiography (DR)
		4	Thoravision (ACRIN only)
		.M	Missing
XRYDXQUAL	Overall diagnostic quality of CXR examination	1	Diagnostic CXR
		2	Limited CXR, but

2. Chest X-Ray Screening Dataset (XRYSCREEN; One observation per study year of screening)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
	LSS Question: Indicate the overall diagnostic quality of CXR *ACRIN Question: Indicate the overall diagnostic quality of CXR*		interpretable
		3	Non-diagnostic CXR exam
		4	No image available (LSS only)
		.M	Missing
XRYDXQUAL_ REASON VARIABLES	Reason(s) for limited / non-diagnostic CXR (if applicable)	0	No
XRYDXQUAL_LUNGVOL	Low lung volumes	1	Yes
XRYDXQUAL_INADEQIMG	Lungs incompletely imaged	.N	Not Applicable
XRYDXQUAL_POSITION	Poor positioning		
XRYDXQUAL_MOTION	Motion degradation	.M	Missing
XRYDXQUAL_TECHPARA	Incorrect exposure or other technical parameter		
XRYDXQUAL_ARTIFACT	Artifact obscures anatomy		
XRYDXQUAL_ALGORITHM	Incorrect processing algorithm		
XRYDXQUAL_NOISE	High image noise		
XRYDXQUAL_OTHER	Other (specify)		
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

3. Spiral CT Abnormality Dataset (Multiple observations per participant)

3. Spiral CT Abnormality Dataset (SCTABN; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
STUDY_YR	Study year of screen	0	T0
		1	T1
		2	T2
SCT_AB_NUM	Abnormality number (unique identifier)	Numeric	
SCT_AB_DESC	Abnormality code and description Note that the LSS screening forms use a different numbering system than this.	51	Non-calcified nodule or mass (opacity >= 4 mm diameter)
		52	Non-calcified micronodule(s) (opacity < 4 mm diameter)
		53	Benign lung nodule(s) (benign calcification)
		54	Atelectasis, segmental or greater
		55	Pleural thickening or effusion
		56	Non-calcified hilar/mediastinal adenopathy or mass (>= 10 mm on short axis)
		57	Chest wall abnormality (bone destruction, metastasis, etc.)
		58	Consolidation
		59	Emphysema
		60	Significant cardiovascular abnormality
		61	Reticular/reticulonodular opacities, honeycombing, fibrosis, scar
		62	6 or more nodules, not suspicious for cancer (opacity >= 4 mm)
		63	Other potentially significant abnormality above the diaphragm

3. Spiral CT Abnormality Dataset (SCTABN; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		64	Other potentially significant abnormality below the diaphragm
		65	Other minor abnormality noted
SCT_SLICE_NUM	CT slice number containing abnormality's greatest diameter Code 51 abnormalities only	Numeric	
		999	Unknown
		.N	Not Applicable (sct_ab_desc is not 51)
SCT_EPI_LOC	Location of epicenter Code 51 abnormalities only	1	Right Upper Lobe
		2	Right Middle Lobe
		3	Right Lower Lobe
		4	Left Upper Lobe
		5	Lingula
		6	Left Lower Lobe
		8	Other (Specify in comments)
		.N	Not Applicable (sct_ab_desc is not 51)
SCT_LONG_DIA	Longest diameter (in mm) Code 51 abnormalities only	Numeric	
		.S	Unable to determine
		.N	Not applicable (sct_ab_desc is not 51)
SCT_PERP_DIA	Longest perpendicular diameter (same CT slice in mm) Code 51 abnormalities only	Numeric	
		.S	Unable to determine
		.N	Not applicable (sct_ab_desc is not 51)
SCT_MARGINS	Margins Code 51 abnormalities only	1	Spiculated (Stellate)
		2	Smooth
		3	Poorly defined
		9	Unable to determine
		.N	Not applicable (sct_ab_desc is not 51)
SCT_PRE_ATT	Predominant attenuation Code 51 abnormalities only	1	Soft Tissue
		2	Ground glass

3. Spiral CT Abnormality Dataset (SCTABN; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		3	Mixed
		4	Fluid/water
		6	Fat
		7	Other
		9	Unable to determine
		.N	Not applicable (sct_ab_desc is not 51)
		.M	Missing
SCT_FOUND_AFTER_COMP	Identify any abnormalities that were not identified until the comparison with historical images	0	Identified on first look
		1	Found after comparison
		.M	Missing
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

4. Chest X-ray Abnormality Dataset (Multiple observations per participant)

4. Chest X-ray Abnormality Dataset (XRYABN; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
STUDY_YR	Study year of screen	0	T0
		1	T1
		2	T2
XRY_AB_NUM	Abnormality number (unique identifier)	Numeric	
XRY_AB_DESC	Abnormality code Note that the LSS screening forms use a different numbering system than this.	51	Non-calcified nodule or mass
		53	Benign lung nodule(s) (benign calcification)
		54	Atelectasis, segmental or greater
		55	Pleural thickening or effusion
		56	Non-calcified hilar/mediastinal adenopathy or mass (>= 10 mm on short axis)
		57	Chest wall abnormality (bone destruction, metastasis, etc.)
		58	Consolidation
		59	Emphysema
		60	Significant cardiovascular abnormality
		61	Reticular/reticulonodular opacities, honeycombing, fibrosis, scar
		62	6 or more nodules, not suspicious for cancer (opacity >= 4 mm)
		63	Other potentially significant abnormality above the diaphragm
		64	Other potentially significant abnormality below the diaphragm
		65	Other minor abnormality noted

4. Chest X-ray Abnormality Dataset (XRYABN; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
XRY_EPI_LOC	Location of epicenter Code 51 abnormalities only	1	Right upper zone
		2	Right middle zone
		3	Right lower zone
		4	Left upper zone
		5	Left middle zone
		6	Left lower zone
		8	Other (Specify in comments)
		.N	Not Applicable (xry_ab_desc is not 51)
XRY_LONG_DIA	Longest diameter (in mm) Code 51 abnormalities only	Numeric	
		.N	Not Applicable (xry_ab_desc is not 51)
		.S	Unable to determine
XRY_PERP_DIA	Longest perpendicular diameter (in mm) Code 51 abnormalities only	Numeric	
		.N	Not Applicable (xry_ab_desc is not 51)
		.S	Unable to determine
XRY_MARGINS	Nodule/mass margins Code 51 abnormalities only	1	Spiculated (Stellate)
		2	Smooth
		3	Poorly defined
		9	Unable to determine
		.N	Not Applicable (xry_ab_desc is not 51)
XRY_FOUND_AFTER_COMP	Identify any abnormalities that were not identified until the comparison with historical images	0	Identified on first look
		1	Found after comparison
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

5. Comparison Info for CT Screening Abnormalities (Multiple observations per participant)

5. Comparison Info for CT Screening Abnormalities Dataset (SCTABNC; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
STUDY_YR	Study Year of Screen	0	T0
		1	T1
		2	T2
SCT_AB_NUM	Abnormality number (unique identifier) This will match up with the sct_ab_num in the Abnormality dataset.	Numeric	
SCT_AB_CODE	Abnormality code number from the Spiral CT Abnormality dataset Note that the LSS screening forms use a different numbering system than this.	51	Non-calcified nodule or mass (opacity >= 4 mm diameter)
		52	Non-calcified micronodule(s) (opacity < 4 mm diameter)
		53	Benign lung nodule(s) (benign calcification)
		54	Atelectasis, segmental or greater
		55	Pleural thickening or effusion
		56	Non-calcified hilar/mediastinal adenopathy or mass (>= 10 mm on short axis)
		57	Chest wall abnormality (bone destruction, metastasis, etc.)
		58	Consolidation
		59	Emphysema
		60	Significant cardiovascular abnormality
		61	Reticular/reticulonodular opacities, honeycombing, fibrosis, scar
		62	6 or more nodules, not suspicious for cancer (opacity >= 4 mm)
		63	Other potentially significant

5. Comparison Info for CT Screening Abnormalities Dataset (SCTABNC; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
			abnormality above the diaphragm
		64	Other potentially significant abnormality below the diaphragm
		65	Other minor abnormality noted
SCT_AB_PREEXIST	Was abnormality pre-existing?	1	No
		2	Yes
		9	Unable to determine
VISIBLE_DAYS	Number of days from randomization to the earliest date the abnormality was visible Pre-existing abnormalities only	Numeric	
		.M	Missing
		.N	Not applicable
SCT_AB_GWTH	Interval growth of abnormality Code 51 abnormalities only	1	No
		2	Yes
		9	Unable to determine
		.M	Missing
		.N	Not applicable
SCT_AB_ATTN	Interval suspicious change in attenuation Code 51 abnormalities only	1	No
		2	Yes
		9	Unable to determine
		.M	Missing
		.N	Not applicable
SCT_AB_INVG	Interval change warrants further investigation Code 51 abnormalities only	1	No
		2	Yes
		9	Unable to determine
		.M	Missing
		.N	Not applicable
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

6. Comparison Info for CXR Screening Abnormalities (Multiple observations per participant)

6. Comparison Info for CXR Screening Abnormalities Dataset (XRYABNC; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
STUDY_YR	Study Year of Screen	0	T0
		1	T1
		2	T2
XRY_AB_NUM	Abnormality number (unique identifier) This will match up with the sct_ab_num in the Abnormality dataset.	Numeric	
XRY_AB_CODE	Abnormality code number from the Chest X-Ray Abnormality dataset Note that the LSS screening forms use a different numbering system than this.	51	Non-calcified nodule or mass
		53	Benign lung nodule(s) (benign calcification)
		54	Atelectasis, segmental or greater
		55	Pleural thickening or effusion
		56	Non-calcified hilar/mediastinal adenopathy or mass (>= 10 mm on short axis)
		57	Chest wall abnormality (bone destruction, metastasis, etc.)
		58	Consolidation
		59	Emphysema
		60	Significant cardiovascular abnormality
		61	Reticular/reticulonodular opacities, honeycombing, fibrosis, scar
		62	6 or more nodules, not suspicious for cancer (opacity >= 4 mm)
		63	Other potentially significant abnormality above the diaphragm
		64	Other potentially significant abnormality below the diaphragm

6. Comparison Info for CXR Screening Abnormalities Dataset (XRYABNC; One observation per participant-study year-abnormality number)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		65	Other minor abnormality noted
XRY_AB_PREEXIST	Was abnormality pre-existing?	1	No
		2	Yes
		9	Unable to determine
VISIBLE_DAYS	Number of days from randomization to the earliest date the abnormality was visible Pre-existing abnormalities only	Numeric	
		.M	Missing
		.N	Not applicable
XRY_AB_GWTH	Interval growth of abnormality Code 51 abnormalities only	1	No
		2	Yes
		9	Unable to determine
		.M	Missing
		.N	Not applicable
XRY_AB_ATTN	Interval suspicious change in attenuation Code 51 abnormalities only	1	No
		2	Yes
		9	Unable to determine
		.M	Missing
		.N	Not applicable
XRY_AB_INVG	Interval change warrants further investigation Other significant abnormalities only	1	No
		2	Yes
		9	Unable to determine
		.M	Missing
		.N	Not applicable
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

7. Diagnostic Procedure Dataset (Multiple observations per participant)

7. Diagnostic Procedure Dataset (PROCS; One observation per participant-procedure-procedure date)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
PROC_NUM	Procedure code	1	Biopsy - Endobronchial
		2	Biopsy - Percutaneous Liver
		3	Biopsy - Lymph node - other (specify)
		4	Biopsy - Lymph node - scalene nodes
		8	Biopsy - Other(SPECIFY)
		9	Biopsy - Open Surgical
		10	Biopsy - Transbronchial
		11	Radiograph - Bone
		13	Radiograph - Chest
		14	Clinical Evaluation
		15	Radiograph - Comparison with historical images
		17	CT - Abdomen and pelvis
		18	CT - Brain
		22	CT - Other (specify)
		23	CT - Chest, limited thin section of nodule
		25	Cytology - Sputum
		27	Fluoroscopy
		29	Lymphadenectomy/lymph node sampling
		30	Mediastinoscopy/Mediastinotomy
		31	MRI - Bone
		32	MRI - Brain
		33	MRI - Chest
		35	MRI - Other (specify)

7. Diagnostic Procedure Dataset (PROCS; One observation per participant-procedure-procedure date)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		36	Other (specify)
		37	Radiograph - Other (specify)
		39	Pulmonary function tests/spirometry
		40	Radionuclide scan - Bone
		41	Radionuclide scan - Brain
		42	Radionuclide scan - Liver
		43	Resection
		45	Thoracoscopy without Biopsy
		46	Thoracotomy
		47	Thoracentesis
		48	Ultrasound (specify)
		49	Thoracoscopy
		50	Biopsy - Thoracoscopic
		52	Biopsy - Percutaneous adrenal
		53	Biopsy - Percutaneous transthoracic yielding histology
		54	Bronchoscopy without biopsy or cytology
		55	CT - Abdomen (or liver)
		56	CT - Chest, plus nodule densitometry
		57	CT - Diagnostic chest
		58	Cytology - Bronchoscopic
		59	Cytology - Percutaneous transthoracic
		60	Cytology - Other (specify)
		61	Echocardiography
		62	MRI - Abdomen (or liver)
		63	Radionuclide scan - FDG-PET scan
		64	Radionuclide scan - Gallium
		65	Radionuclide scan - Somatostatin receptor

7. Diagnostic Procedure Dataset (PROCS; One observation per participant-procedure-procedure date)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		66	Radionuclide scan - Ventilation/perfusion lung
		67	Radionuclide scan - Other (specify)
		68	Radionuclide scan - Fusion PET/CT scan
		69	CT - Chest, low dose spiral
		70	CT - Chest limited thin section of entire lung
		71	CT - Chest and abdomen
		72	CT - Chest, abdomen, and pelvis
		99	Unknown
PROC_DAYS	Number of days from randomization to procedure	Numeric	
		.N	No procedure date on record
SCR_LINK	Is the procedure linked to a positive screen?	0	No
		1	Yes
PROC_YEAR	Study year that the procedure is linked to	0	T0
		1	T1
		2	T2
		3	T3
		4	T4
		5-7	T5-T7
CAN_LINK	Is the procedure linked to a cancer diagnosis?	0	No
		1	Yes
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

8. Complication Dataset (Multiple observations per participant)

8. Complication Dataset (COMPS; One observation per participant-complication-complication date)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
COMPCODE	Complication code	1	Acute respiratory failure
		2	Allergic Reaction
		3	Anaphylaxis
		5	Blood loss requiring a transfusion
		6	Bronchopulmonary fistula
		7	Bronchospasm
		8	Cardiac arrest
		9	Cardiac arrhythmia requiring medical attention
		10	Cerebral vascular accident (CVA)/stroke
		11	Congestive heart failure (CHF)
		12	Death
		14	Fever requiring antibiotics
		16	Hemothorax requiring tube placement
		17	Hospitalization post procedure
		21	Myocardial infarction
		22	Pain requiring referral to a pain specialist
		23	Pneumothorax requiring tube placement
		25	Respiratory arrest
		26	Rib fracture(s)
		27	Vocal cord immobility/paralysis
		28	Wound dehiscence

8. Complication Dataset (COMPS; One observation per participant-complication-complication date)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		29	Bronchial stump leak requiring tube thoracostomy or other drainage for > 4 days
		30	Empyema
		31	Injury to vital organ or vessel
		32	Prolonged mechanical ventilation over 48 hours post-operatively
		33	Thromboembolic complications requiring intervention
		34	Vaso-vagal reaction/Hypotension
		35	Other (specify)
		36	Wound Infection
		37	Infections requiring antibiotics
		40	Subcutaneous emphysema
		41	Atelectasis
		42	Pneumothorax with no chest tube
		43	Cardiac ischemia/ST elevation
		44	Bronchitis
		45	Chylous fistula
		46	Ileus
		47	Pneumonia
		48	Seroma
		49	Brachial plexopathy
		50	Pleural effusion
		51	Lung collapse
		52	Sepsis
		53	Respiratory distress
		54	Splenomegaly with splenic infarcts
		55	Parasthesias/Hypersthesias
		56	Mucous plug requiring

8. Complication Dataset (COMPS; One observation per participant-complication-complication date)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
			bronchoscopy
		57	Infarcted sigmoid colon
		58	Steroid induced diabetes
COMPCAT	Category of medical complications The following is the mapping from the CompCode: Major: 1, 3, 6, 8, 10, 11, 12, 16, 21, 25, 28, 29, 30, 31, 32, 33, 45, 49, 51, 57 Intermediate: 5, 9, 14, 17, 22, 23, 26, 27, 36, 37, 43, 44, 47, 50, 52, 53, 54, 56, 58 Minor: 2, 7, 34, 40, 41, 42, 46, 48, 55, 35	1	Major
		2	Intermediate
		3	Minor
COMP_DAYS	Number of days from randomization to complication	Numeric	
		.N	No date on record
SCR_LINK	Is the complication linked to a positive screen? Complications are linked to the procedure immediately prior to the complication. It takes on the SCR_LINK value from that Procedure. It takes on the SCR_LINK value from that procedure. That is, the complication is linked to a positive screen if and only if the prior procedure was linked to that screen.	0	No
		1	Yes
COMP_YEAR	Study year that the complication is linked to Complications are linked to the procedure immediately prior to the complication. It takes on the PROC_YEAR value from that Procedure.	0	T0
		1	T1
		2	T2
		3	T3
		4	T4
		5-7	T5-T7
CAN_LINK	Is the complication linked to a cancer diagnosis? Complications are linked to the procedure immediately prior to the complication. It takes on the CAN_LINK value from that Procedure.	0	No
		1	Yes
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

9. Lung Cancers (Multiple observations per participant)

9. Lung Cancer Dataset (LUNGCANC; one observation per lung cancer diagnosis)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
FIRST_LC	First primary lung cancer diagnosis? *ACRIN definition: Earliest diagnosis date. If multiple cancers were diagnosed on the same date, the cancer with first_lc=1 is the one designated as 'A' in response to the following question on the ZL form: "If this is a synchronous primary, please designate this Cancer as A, B, or C."* *LSS definition: Earliest form year. If multiples in same year, then earliest diagnosis date. If multiples with the same date, the cancer with the most severe stage (de_stag).*	1 0	Yes No
CANDX_DAYS	Number of days from randomization to lung cancer diagnosis *ACRIN Question (ZL form): Date of diagnosis: [Note this is character to capture partial dates]* *LSS Question (DE form): Date of primary invasive lung cancer diagnosis.*	Numeric .M	 Missing
STUDY_YR	Study year associated with the lung cancer diagnosis	0 1 2 3 4-7 .M	T0 T1 T2 T3 T4-T7 Missing

9. Lung Cancer Dataset (LUNGCANC; one observation per lung cancer diagnosis)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
DE_STAG CLINICAL_STAG PATH_STAG	Lung Cancer Stage (AJCC 6) *De_stag = best available stage (pathologic if available, else clinical)* *Clinical_stag = clinical stage* *Path_stag = pathologic stage*	0 1 2 3 4 5 6 7 8 9 10 11 94 96 98 99	No evidence of Tumor Stage 0 Stage I Stage IA Stage IB Stage II Stage IIA Stage IIB Stage IIIA Stage IIIB Stage IV Occult Carcinoma Carcinoid, cannot be assessed Cannot be assessed TNM not available Missing TNM
SOURCE_BEST_STAGE	Source of lung cancer stage (de_stag)	1 2 3 5 6 94 98 99	Pathological Clinical Mixture Reporting stage only Stage cannot be assessed Carcinoid, stage cannot be assessed TNM not available Missing TNM
DE_GRADE	Lung Cancer Grade The same variable as in the person dataset. It is a combination of two fields: *ACRIN question (ZL Form): ICD-O-3 grade* *LSS question (DE Form): Question C.15: Grade of primary invasive lung cancer*	1 2 3 4 5 6 7	Grade Cannot be Assessed (GX) Well Differentiated (G1) Moderately Differentiated (G2) Poorly Differentiated (G3) Undifferentiated (G4) Unspecified in Pathology Report Interim Complete

9. Lung Cancer Dataset (LUNGCANC; one observation per lung cancer diagnosis)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		8	Unknown
		9	Missing
DE_TYPE	Lung Cancer Pathologic Type The same variable as in the person dataset. It is a combination of two fields: *ACRIN question (ZL Form): ICD-O-3 morphology* *LSS question (DE Form): Question C.14: Pathologic type of primary invasive lung cancer.*	##### .M	 Missing
LOCXXX LOCRUP LOCRMID LOCRLOW LOCLUP LOCLLOW LOCLIN LOCRHIL LOCLHIL LOCRMSB LOCLMSB LOCCAR LOCMED LOCOTH LOCUNK	Location of primary lung tumor: Right upper lobe Right middle lobe Right lower lobe Left upper lobe Left lower lobe Lingula Right hilum Left hilum Right main stem bronchus Left main stem bronchus Carina Mediastinum Other Unknown The same variable as in the person dataset. *ACRIN Question (ZL form): Anatomic location(s) of Primary Lung Cancer:* *LSS Question (DE form): Primary Tumor Location*	1 0	Yes No
LESIONSIZE	Tumor size (mm) The same variable as in the person dataset. *ACRIN Question (ZL form): Maximum Diameter Primary Lesion:* *LSS Question (DE form): Pathology Lesion Size (maximum dimension)*	##### .M	 Missing
LC_TOPOG	ICD-O-3 Topography of lung cancer diagnosis *ACRIN question (ZL Form): ICD-O-3 Topography* *LSS Question (DE form) : ICD-O-3 Topography*	C34.0 C34.1 C34.2 C34.3 C34.8	Main Bronchus Upper Lobe, Lung Middle Lobe, Lung Lower Lobe, Lung Overlapping Lesion of Lung

9. Lung Cancer Dataset (LUNGCANC; one observation per lung cancer diagnosis)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		C34.9	Lung NOS
		C38.3	Mediastinum NOS
LC_MORPH	ICD-O-3 Morphology of lung cancer diagnosis *ACRIN question (ZL Form): ICD-O-3 Morphology* *LSS Question (DE form): ICD-O-3 Morphology*	####	
LC_BEHAV	ICD-O-3 Behavior of non-lung cancer diagnosis *ACRIN question (ZL Form): ICD-O-3 Behavior* *LSS Question (DE form): ICD-O-3 Behavior*	1	Borderline Malignancy
		3	Invasive
		6	Metastatic
LC_GRADE	ICD-O-3 Grade of lung cancer diagnosis *ACRIN question (ZL Form): ICD-O-3 Grade* *LSS Question (DE form): ICD-O-3 Grade*	1	Well Differentiated; Grade I
		2	Moderately Differentiated; Grade II
		3	Poorly Differentiated; Grade III
		4	Undifferentiated; Grade IV
		9	Unknown
TOPOG_SOURCE	Source of samples for ICD-O-3 code *ACRIN question (ZL Form): Source of samples for ICD-O-3 code:* *LSS Question (DE form): ICD-O-3 Source* Note: The value 4 (clinical) is only available for LSS forms.	1	Cytology
		2	Histology
		3	Combined
		4	Clinical
		.M	Missing
CLINICAL_T PATH_T	Stage for lung cancer : T code *ACRIN question (ZL Form): TNM Clinical Stage/T Codes:* *ACRIN question (ZL Form): TNM Pathologic Stage/T Codes:* *LSS Question (DE form): TNM Clinical Staging/T Codes* *LSS Question (DE form): TNM Pathologic Staging/T Codes*	1	TX
		2	T0
		3	Tis
		4	T1
		5	T2
		6	T3
		7	T4
		.M	Missing
CLINICAL_N PATH_N	Stage for lung cancer : N code *ACRIN question (ZL Form): TNM Clinical Stage/N Codes:* *ACRIN question (ZL Form): TNM Pathologic Stage/N Codes:* *LSS Question (DE form): TNM Clinical Staging/N Codes* *LSS Question (DE form): TNM Pathologic Staging/N Codes*	1	NX
		2	N0
		3	N1
		4	N2
		5	N3
		.M	Missing

9. Lung Cancer Dataset (LUNGCANC; one observation per lung cancer diagnosis)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
CLINICAL_M PATH_M	Stage for lung cancer : M code *ACRIN question (ZL Form): TNM Clinical Stage/M Codes:* *ACRIN question (ZL Form): TNM Pathologic Stage/M Codes:* *LSS Question (DE form): TNM Clinical Staging/M Codes* *LSS Question (DE form): TNM Pathologic Staging/M Codes*	1 2 3 .M	MX M0 M1 Missing
STAGE_ONLY	Stage Only *ACRIN question (ZL Form):Stage Only (Non-Small Cell and Small Cell Histology)* *LSS Question (DE form):Stage Only* Note: For all ACRIN lung cancers, this question was completed, i.e. not missing. For LSS lung cancers, this question was not expected to be completed unless T/N/M components of pathologic stage were unavailable.	0 1 2 3 4 5 6 7 8 9 10 11 94 96 98 99	No evidence of Tumor Stage 0 Stage I Stage IA Stage IB Stage II Stage IIA Stage IIB Stage IIIA Stage IIIB Stage IV Occult Carcinoma Carcinoid, cannot be assessed Cannot be assessed Not available Missing
VALCSG	VALCSG (Small cell only) *ACRIN question (ZL Form): VALCSG (Small Cell Only)* *LSS Question (DE form): VALCSG (Small Cell Only)* Note: For all ACRIN lung cancers, this question was completed, i.e. not missing, (even if they were not Small Cell). Therefore the code of 3 contains a combination of Small Cell LCs where the VALCSG is missing and non-Small Cell LCs where this question does not apply. No ACRIN participants have a code of .M for this variable.	1 2 3 .M	Limited Extensive Not Available Missing
STAGE_SUM	Summary staging *ACRIN question (ZL Form): Summary Staging:* *LSS Question (DE form): Summary Staging*	1 2 3 4	Localized Regional Distant Not Available

9. Lung Cancer Dataset (LUNGCANC; one observation per lung cancer diagnosis)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
	Note: For all ACRIN lung cancers, this question was completed, i.e. not missing. No ACRIN participants have a code of .M for this variable. For LSS lung cancers, this question was not expected to be completed unless T/N/M components of pathologic stage were unavailable.	.M	Missing
LC_ORDER	Order of this lung cancer among all lung cancers for this participant Order is from earliest diagnosis to latest.	Numeric	
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

10. Treatment Dataset (Multiple observations per participant)

10. Treatment Dataset (TREAT; One observation per participant-procedure)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
TREAT	Treatment category	1	Radiation
		2	Surgical
		3	Systemic Chemotherapy
		4	Other Treatment
TREATNUM	Treatment code The first digit of the code matches up with the TREAT variable value (i.e.: 1## = Radiation Treatments).	101	Radiation of Primary Chest Tumor and/or Regional Nodes
		102	Radiation of Hilar/Mediastinal Lymph Nodes
		103	Radiation of Prophylactic Brain
		104	Radiation of Therapeutic Brain
		188	Radiation (other specify)
		199	Radiation of Unknown Site
		201	Exploratory Thoracotomy without Resection
		202	Median Sternotomy
		203	Lobectomy
		204	Bilobectomy
		205	Pneumonectomy
		206	Wedge Resection
		207	Segmental Resection
		208	Lymphadenectomy/Lymph Node Sampling
		209	Chest Wall Resection
		210	Thoracentesis
		211	Partial Pleurectomy
		212	Multiple Wedge Resections

10. Treatment Dataset (TREAT; One observation per participant-procedure)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
		213	Multiple Segmental Resections
		214	Thoracotomy
		215	Thoracoscopy (VATS)
		216	Thoracoscopy (VATS) with conversion to Thoracotomy
		288	Surgical procedure/approach (other specify)
		299	Unknown Surgical procedure/approach
		300	Systemic Chemotherapy
		401	Immune Therapy
		402	Radiofrequency Ablation
		403	Thermal Ablation
		404	Chemical Ablation
		406	Brachytherapy
		488	Other Treatment (other specify)
		499	Unknown Treatment
TREAT_DAYS	Number of days from randomization to procedure	Numeric	
		.N	No date on record
TREAT_YEAR	Study year that the treatment is linked to. Treatments are linked to the study year of the cancer diagnosis.	0	T0
		1	T1
		2	T2
		3	T3
		4	T4
		5-7	T5-T7

10. Treatment Dataset (TREAT; One observation per participant-procedure)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
DISEASE_POST_SURG	Extent of local or regional residual disease after surgery *ACRIN Question: Record the extent of local or residual disease (margins of surgical resection) after surgery* *LSS Question: Any local or regional residual disease after surgery:* Note: the LSS forms do not refer specifically to margins or the R classification.	0	No residual disease (R0)
		1	Microscopically positive margins / microscopic residual disease (R1)
		2	Macroscopic residual disease / gross tumor (R2)
		3	Unknown
		.N	Not applicable (not a surgical treatment)
		.M	Missing
RAD_STOP_DAYS	Number of days from randomization to end of radiation treatment *ACRIN Question: Complete the following for each site receiving radiotherapy treatment: End date* *LSS Question: Details of Radiotherapy Treatment: End Date*	Numeric	
		.N	Not applicable (not a radiotherapy treatment)
		.M	Missing
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

11. Lung Cancer Progression (Multiple observations per participant)

11. Lung Cancer Progression Dataset (PROGRESSION; one observation per follow-up period after lung cancer diagnosis)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
START_DAYS	Number of days from randomization to start of follow-up period *For LSS, the start date for the first follow-up period after diagnosis is set equal to the last date of treatment (or date of diagnosis if no treatment). Subsequent periods begin at the completion date of the previous CP form.*	Numeric	
STOP_DAYS	Number of days from randomization to end of follow-up period *For LSS, the stop date is the completion date of the CP form.*	Numeric	
PROG_STAT	Progression status for this follow-up period *ACRIN question (CX form): During this interval, did the participant develop progressive disease (e.g., progression at primary site, metastases, other recurrence) following treatment for lung cancer?* *LSS question (CP form): Did the participant develop progressive disease (progression of primary site, metastatic disease, recurrence) following treatment for lung cancer?*	1 0 99	Yes No Unknown
PROG_DAYS	Number of days from randomization to first documentation of progression *ACRIN question (CX form): Date of first documentation of progressive lung cancer (for this interval):* *LSS question (CP form): Date of the first documentation of progressive lung cancer*	Numeric .M .N	 Missing No/Unknown progression
SITE_XXXX	Site of progression of lung cancer:	1 0 .N	Yes No No/Unknown progression
ORIG_LUNG	Original Lung Site		
OTHER_LUNG	Other Lung Site		
PLEURA	Pleura		
BRAIN	Brain		
BONE	Bone		
LIVER	Liver		
ADRENAL	Adrenal		
OTHER	Other		
SKIN	Skin/subcutaneous tissue (ACRIN only)		
LYMPH_N1	N1 regional lymph nodes (ipsilateral hilar/intrapulmonary) (ACRIN only)		
LYMPH_N2	N2 Ipsilateral mediastinal lymph nodes(ACRIN only)		
LYMPH_N3	N3 distant lymph nodes (contralateral mediastainal or hilar/supraclavicular/scalene) (ACRIN Only)		

11. Lung Cancer Progression Dataset (PROGRESSION; one observation per follow-up period after lung cancer diagnosis)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
MEDIASTINUM UNK	Mediastinum Unknown *ACRIN question (CX form): Site(s) of progression of lung cancer* *Date of first documentation of progressive lung cancer (for this interval)* *LSS question (CP form): Site(s) of progression*		
PROGFORM_ORDER	Order of this form's follow-up period among all forms for this participant. Order is from earliest form to latest.	Numeric	
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

12. Cause of death Dataset (Multiple observations per participant)

Note that a participant's EVP cause of death is lung cancer, an ACRIN participant will not have a record in this dataset, but an LSS participant will. The variable EVPDEATH in the Participant dataset indicates for both ACRIN and LSS participants whether lung cancer was the EVP cause of death.

12. Cause of death dataset (COD; One observation per cause of death / other condition; Multiple observations per participant)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
COD	ICD-10 code	X###	ICD-10 code
CODTYPE	Type of code Type 1 is from the EVP (Endpoint Verification Process). Type 2 is derived from information on the death certificate using rules established by the National Center for Health Statistics. Types 3 - 5 correspond to conditions listed on the death certificate.	1	EVP underlying cause of death (authoritative if present) Includes lung cancer deaths for LSS, but not for ACRIN.
		2	Death certificate's underlying cause of death
		3	Immediate cause of death from death certificate
		4	Antecedent cause of death from death certificate (LSS only)
		5	Other significant conditions from death certificate
DCFLINE	Line of Death Certificate The immediate and antecedent causes of death are captured on the death certificate on different lines (A - D), with up to 5 causes of death captured on each line (1-5). Other significant conditions are also captured on the death certificate (O1 - O5). The underlying cause of death from death certificate is derived from the immediate and antecedent causes of death, according to specific rules. The EVP	A1,A2,A3,A4,A5 B1,B2,B3,B4,B5 C1,C2,C3,C4,C5 D1,D2,D3,D4,D5	Position on death certificate (for codtype in 3,4)
		O1,O2,O3,O4,O5	Position on death certificate (for codtype=5)
		EV	Underlying cause of death from EVP (Not from death certificate: codtype=1)

12. Cause of death dataset (COD; One observation per cause of death / other condition; Multiple observations per participant)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
	underlying cause of death comes from the NLST Endpoint Verification Process, not directly from the death certificate.	UN	Underlying cause of death from Death Certificate (Not from a specific line on the death certificate: codtype=2)
COD_COUNT	Count of this cause of death record among all cause of death records for this participant Participants with multiple cause of death records with the same value of dcfline are then ordered from lowest to highest value of COD.	Numeric	
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

13. LSS Non-cancer conditions diagnosed during the diagnostic work-up (Multiple observations per participant)

13. LSS Non-cancer conditions diagnosed during the diagnostic work-up dataset (LSS_NONC; One observation per non-cancer condition recorded during diagnostic work-up for suspected lung cancer)			
VARIABLE NAME	**Variable Definition**	**Value**	**Possible Returned Result Values**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
DX	ICD-9-CM classification (up to 5 digits or V and up to 4 digits) *For LSS: this is from the DE form: Non-cancer diagnosis. There is room for 1 code on the form.*	##### V####	ICD-9-CM code
DX_DAYS	Number of days from randomization to diagnosis *LSS Question: Date of Diagnosis*	Numeric	
STUDY_YR	Study year of diagnosis	-1	Non-cancer condition diagnosed before randomization
		0-7	T0-T7
POS_FU	Is the diagnosis due to follow-up of a positive screen?	0	No
		1	Yes
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	

14. ACRIN Non-lung-cancer conditions diagnosed during the diagnostic work-up (Multiple observations per participant)

This dataset does not systematically document cancers. The ACRIN cancer pathology dataset does that. The main use of this dataset is for non-cancer outcomes (e.g. pulmonary fibrosis and emphysema).

14. ACRIN Non-lung-cancer conditions diagnosed during the diagnostic work-up dataset (ACRIN_NONC; One observation per non-lung-cancer condition recorded during diagnostic work-up for suspected lung cancer)			
VARIABLE NAME	**Variable Definition**	**Value**	**Label**
PID	Participant identifier	1xx,xxx	LSS Participants
		2xx,xxx	ACRIN Participants
DX	ICD-9-CM classification (up to 5 digits or V and up to 4 digits) *For ACRIN: this is from the ZX Form: Diagnosis information for any condition other than primary lung cancer. There is room for 10 codes on the form.*	##### V####	ICD-9-CM code
DX_DAYS	Number of days from randomization to diagnosis	Numeric	
STUDY_YR	Study year of diagnosis	-1	Non-cancer condition diagnosed before randomization
		0-7	T0-T7
POS_FU	Is the diagnosis due to follow-up of a positive screen?	0	No
		1	Yes
DATASET_VERSION	Version of the dataset	Investigator_2012_02_14	