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14. ABSTRACT  The mission statement of the Lung Cancer Biospecimen Resource Network (LCBRN) states that the LCBRN will collect, annotate, store, and distribute human lung cancer biospecimens in a manner that embraces the highest ethical standards for human subjects research, that conforms to the best practices of biorepository science, and that furthers basic, translational and clinical research in the understanding, diagnosis, and treatment of this disease. Year 8 of the award has been spent collecting and completing follow-up data collection, conducting a thorough follow-up data audit on all LCBRN patients, serving biospecimens to LCBRN investigators and incorporating LCBRN data and specimens into the CHTN infrastructure.				
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## **Section I: Introduction**

The mission statement of the Lung Cancer Biospecimen Resource Network (LCBRN) states that the LCBRN “will collect, annotate, store, and distribute human lung cancer biospecimens in a manner that embraces the highest ethical standards for human subjects research, that conforms to the best practices of biorepository science, and that furthers basic, translational and clinical research in the understanding, diagnosis and treatment of this disease”. The specific aims to support this program include: 1) the creation of a Coordinating Center at The University of Virginia (UVA) that provides standard operating procedures (SOPs), standardized specimen collection kits, informatics infrastructure, quality control procedures and specimen storage as well as being the contact site for investigators using the resources of the LCBRN, 2) the creation of Biospecimen Resource Sites at UVA, the Medical University of South Carolina (MUSC) and Washington University in St. Louis (WUSTL) that will recruit subjects with lung cancer and procure the biospecimens, and 3) the establishment of a centralized biobank of high quality tissue, blood, urine, bronchoscopic washing and saliva samples from lung cancer subjects that are annotated to clinical, laboratory and radiographic data.

## **Section II: Progress**

### Subject Accrual

763 patients were enrolled in the LCBRN study from May 2011 until August 2014: UVA enrolled 254 subjects, MUSC 213 subjects, and WUSTL 296 subjects. An additional 122 subjects were recruited at the collective sites but were subsequently withdrawn from the study due to various reasons, including benign disease, non-lung cancer related disease, or insufficient sample collection. New enrollments ceased on 08/01/2014 and follow-up specimen collections ended on 09/05/2014. In March of 2014, the Lung Cancer Research Program (LCRP) voted to provide the LCBRN with additional funds for the continued collection of follow-up data only for LCBRN patients until September 2018.

### Conference calls

The LCBRN conference calls took place on a quarterly basis. Topics for conference calls dealt with follow-up data collection and the LCBRN’s participation in APOLLO 1, a sub-project of the NCI Moonshot Program. Calls occurred on the following dates: 11/17/2017, 02/16/2018, 05/25/2018, and 08/24/2018. All conference call minutes are available on the LCBRN Collab Resource Site located at <https://collab.itc.virginia.edu/portal>.

### Follow-up Data Collection

The LCBRN collected clinical follow-up data on all LCBRN patients at 6 months intervals for up to 5 years post baseline surgery. Each Resource Site was provided with a monthly report listing any patient who was more than 6 months past-due for their next follow-up data collection. Any patient who has not been successfully contacted for more than one year prior to the end of study was deemed “Lost to Follow-up”. A “LCBRN Subject Exit Report” was sent to each Resource Site for final review on

08/29/2018. This report outlined the final status of each patient as reflected by the LCBRN database. Table 1 below summarizes the final results of the report.

**Table 1: LCBRN Subject Exit Report**

	<b>UVA</b>	<b>WUSTL</b>	<b>MUSC</b>
Total # of patients enrolled	254	296	213
Total # of patients who completed follow-up	115	140	90
Total # of patients who died during the study	106	128	85
Total # of patients lost to follow-up	33	28	38

#### Follow-up Data Audit

The Coordinating Center performed a total of three data audits during this reporting period. The first audit focused on LCBRN patients who experienced recurrence and/or metastases in order to assess for missing adjuvant treatment data. Subsequent audits reviewed all LCBRN patients' data for accuracy and completion. All Resource Sites were provided feedback with a list of cases to review for possible corrections. Data audits were completed on 09/21/2017, 02/13/2018, and 06/29/2018.

#### Informatics

The LCBRN's central database stores subject identification, clinical data and tracks all aspects of biospecimen procurement and distribution. This database will remain in use after LCBRN samples are transferred to the CHTN. The LCBRN website (<http://lungbio.sites.virginia.edu>) will also remain active for several years and will direct investigators to the CHTN website ([www.chtn.org](http://www.chtn.org)) to access LCBRN resources.

#### Distribution

The Coordinating Center received a total of 203 inquiries from investigators seeking information about the LCBRN's resources since the start of distribution in June 2013. 45 investigators submitted applications: 36 were accepted without any changes, eight were accepted with modifications, and one was rejected. A list of approved LCBRN investigators along with project descriptions can be found in Appendix B. The investigators with applications that were accepted with modifications were given suggestions to make better use of LCBRN resources, or had research that was deemed too risky and were therefore offered a smaller sample set than was originally requested for the purpose of obtaining preliminary results. The application that was rejected was due to the rare type of tumor requested. A summary of LCBRN distributions are outlined in Table 2 below.

**Table 2: LCBRN Distributions (June 2013-November 2018)**

# Frozen tumor tissue	296	# Normal tissue RNA	99
# Frozen non-neoplastic tissue	156	# Tumor tissue DNA	220
# Serum aliquots	814	# Normal tissue DNA	109
# Plasma aliquots	1009	# Tumor tissue protein	10
# Urine aliquots	241	# Normal tissue protein	9
# Saliva aliquots	149	# Unstained slides	1096
# BAL fluid aliquots	205	<b>Total # of samples distributed</b>	<b>5132</b>
# BAL cell pellet	35	Request for LCBRN data only, per record	285
# Buffy coat	81	Request for additional charts/data, per record	630
# Buffy coat RNA	10	Total Amount Invoiced	\$213,136.00
# Buffy coat DNA	82	Total Amount Paid	\$213,136.00
#Tumor tissue RNA	511		

In collaboration with the NCI Cancer Moonshot program, the LCBRN provided 100 cases of pulmonary Adenocarcinoma; 50 cases with recurrence of disease following surgical resection and 50 cases with no evidence of recurrence following resection. 200 samples (matched tumor/normal) were shipped out as a part of the LCBRNs participation in APOLLO 1, the subgroup designated to use proteomics and genomics to analyze lung cancer. The initial results were reported at the APOLLO Cancer Moonshot Leadership meeting on March 9, 2018, held in Bethesda, MD. All 100 of the paired samples were able to have genomic libraries prepared that subsequently passed the quality metrics of a minimum of 35x DNA sequence reads. For the RNA libraries, 99 out of 100 tumor samples yielded sufficient RNA for library generation and 98 of the samples subsequently yielded libraries that met the desired quality threshold of 60 million discrete sequence reads, which represented approximately 20,000 gene transcripts identified in each sample. The initial results show 30,410 mutations identified in the entire cohort including 101 structural DNA alterations and 13 RNA fusion transcripts. In general the types of genes mutated agree with previous literature on lung cancer, but several novel types of mutations were identified that will be the subject of further investigation. The gene expression data corroborated previously described classification schemes of lung cancer, indicating the fidelity of the histologic grouping the LCBRN provided with these specimens. Novel correlations appear to be emerging between the gene expression subtypes and the demographic and clinical data provided by the LCBRN. Clear-cut gene expression signatures emerged from the comparison of the recurrent/non-recurrent groups, and

identifying and validating biomarkers and/or a refined gene expression signature that predicts lung cancer prognosis will be the efforts of work going forward.

#### Transfer of Legacy LCBRN Specimens to the CHTN

After the conclusion of the LCBRN funding period in September 2018, LCBRN samples were transferred to the Cooperative Human Tissue Network (CHTN), an NCI supported biorepository. Specimens will be distributed by the Mid-Atlantic Division of the Cooperative Human Tissue Network which is located at the University of Virginia. The LCBRN website has been updated to direct potential investigators to the CHTN website. They will need to submit a CHTN application to the division that manages their geographic area and will thus serve as their primary division. Once their application has been approved, their primary division will network their request for LCBRN samples to the Mid-Atlantic Division CHTN, which will then distribute the specimens.

#### **Section III: Key Research Accomplishments**

- Tracked and collected clinical data on all patients eligible for follow-up
- Successfully implemented quarterly conference calls with minutes recorded and retained on the LCBRN Collab online resource
- Shipped 5132 biospecimens to investigators, all with positive feedback
- Sought and obtained collaboration between the LCBRN and NCI Moonshot initiative (APOLLO 1)
- Contributed 217 samples along with clinical data and radiology reports to APOLLO 1
- Performed a data audit on clinical follow-up data from LCBRN patients with recurrence/mets (n=258)
- Performed two data audits on clinical follow-up data on all LCBRN patients (n=763)

#### **Section IV: Reportable Outcomes**

##### UVA - Cumulative Metrics

Number of subjects enrolled in study: 254

Number of subjects withdrawn from study: 64

Reasons for withdrawal from study: Benign disease (31), Ineligible to continue (27),

Withdrew consent (6)

Number of subjects withdrawn from follow-up: 106 (deceased)

Percentage of subjects who had tissue collection: 89%

Percentage of subjects who had at least 1 follow-up specimen collection: 72%

Percentage of subjects who had at least 1 follow-up data collection: 99%

##### WUSTL - Cumulative Metrics

Number of subjects enrolled in study: 296

Number of subjects withdrawn from study: 31

Reasons for withdrawal from study: Benign disease (18), Ineligible to continue (12), Withdrew consent (1)

Number of subjects withdrawn from follow-up: 128 (deceased)

Percentage of subjects who had tissue collection: 80%

Percentage of subjects who had at least 1 follow-up specimen collection: 50%

Percentage of subjects who had at least 1 follow-up data collection: 97%

#### MUSC - Cumulative Metrics

Number of subjects enrolled in study: 213

Number of subjects withdrawn from study: 26

Reasons for withdrawal from study: Benign disease (8), Ineligible to continue (17), Withdrew consent (1)

Number of subjects withdrawn from follow-up: 85 (deceased)

Percentage of subjects who had tissue collection: 85%

Percentage of subjects who had at least 1 follow-up specimen collection: 53%

Percentage of subjects who had at least 1 follow-up data collection: 83%

#### LCBRN Consortium - Cumulative Metrics

Number of subjects currently enrolled in study: 763

Number of subjects withdrawn from study: 121

Reasons for withdrawal: Benign disease (57), Ineligible to continue (56), Withdrew consent (8)

Number of subjects who died during the study: 319

Percentage of subjects who had tissue collection: 85%

Percentage of subjects who had tumor tissue collection: 78%

Percentage of subjects with a military history: 20%

Percentage of subjects who never smoked: 9%

Percentage of Caucasian subjects: 90%

Percentage of male subjects: 52%

Mean age of subjects: 65 years

Number of applications received: 45

Number of applications approved: 44

Number of samples distributed: 5132

Total amount invoiced: \$213,136.00

Total amount received: \$213,136.00

#### **Section V: Conclusion**

The mission of the LCBRN was to bank high quality and highly annotated biospecimens from lung cancer patients to support research into the molecular basis of this disease, the discovery of diagnostic and prognostic biomarkers, and the validation of new biomarker assays. The Department of Defense CDMRP provided the LCBRN with the opportunity to fulfill this goal, resulting in the successful collaboration of three academic institutions and the distribution of 5132 samples to lung cancer researchers worldwide. In addition, the LCBRN was granted an additional three year no cost funding extension, which allowed them to complete that target 5 year follow-up data collection on the majority of LCBRN patients. The availability of this detailed clinical and follow-up data along with biospecimens are what made the LCBRN such a unique and valuable asset to the research community. Although the LCBRN as a consortium is coming to an end, the biospecimens from this resource will continue to be available for

distribution under the Cooperative Human Tissue Network (CHTN), an NCI supported biorepository. The CHTN, which originated in 1987, has a longstanding history of providing human tissue and biofluids to researchers, therefore, it is without a doubt that they will ensure the judicious use of LCBRN biospecimens by projects with a significant likelihood of creating new knowledge of human lung cancer and innovative tools for the diagnosis and treatment of this pervasive disease.

## Appendix A: LCBRN Banked FFPE and Biofluids

Metric	EVENT	MUSC	UVA	WUSTL	TOTAL
# FFPE -- with tumor after QC	Baseline	109	170	137	416
# FFPE -- non neopl lung	Baseline	130	183	162	475
# FFPE -- non neopl bronchus	Baseline	92	141	70	303
# Aliq -- serum (presurg) in bank	Baseline	1186	1805	2162	5153
# Aliq -- plasma (presurg) in bank	Baseline	954	1417	1736	4107
# Aliq -- urine (presurg) in bank	Baseline	1563	1983	2135	5681
# Aliq -- saliva (presurg) in bank	Baseline	481	605	755	1841
# Aliq -- BAL fluid (presurg) in bank	Baseline	739	939	1480	3158
# Aliq -- buffy coat (presurg) in bank	Baseline	89	155	238	482
# Aliq -- cell pellet (presurg) in bank	Baseline	117	201	256	574
# Aliq -- serum (postsurg) in bank	FU 1	578	1000	598	2176
# Aliq -- serum (postsurg) in bank	FU 2	232	537	277	1046
# Aliq -- serum (postsurg) in bank	FU 3	140	391	216	747
# Aliq -- serum (postsurg) in bank	FU 4	53	197	125	375
# Aliq -- serum (postsurg) in bank	FU 5	13	15	39	67
# Aliq -- serum (postsurg) in bank	FU 6	10	0	24	34
# Aliq -- serum (postsurg) in bank	FU 7	0	9	7	16
# Aliq -- plasma (postsurg) in bank	FU 1	442	871	506	1819
# Aliq -- plasma (postsurg) in bank	FU 2	217	489	254	960
# Aliq -- plasma (postsurg) in bank	FU 3	127	324	189	640
# Aliq -- plasma (postsurg) in bank	FU 4	41	153	101	295
# Aliq -- plasma (postsurg) in bank	FU 5	12	13	30	55
# Aliq -- plasma (postsurg) in bank	FU 6	9	0	20	29
# Aliq -- plasma (postsurg) in bank	FU 7	0	7	6	13
# Aliq -- urine (postsurg) in bank	FU 1	685	1255	543	2483
# Aliq -- urine (postsurg) in bank	FU 2	358	692	236	1286
# Aliq -- urine (postsurg) in bank	FU 3	219	510	123	852
# Aliq -- urine (postsurg) in bank	FU 4	65	226	115	406
# Aliq -- urine (postsurg) in bank	FU 5	14	15	48	77
# Aliq -- urine (postsurg) in bank	FU 6	14	0	32	46
# Aliq -- urine (postsurg) in bank	FU 7	0	8	0	8
# Aliq -- saliva (postsurg) in bank	FU 1	296	544	387	1227
# Aliq -- saliva (postsurg) in bank	FU 2	0	9	8	17
# Aliq -- saliva (postsurg) in bank	FU 3	0	4	0	4

	<b>Approved Investigators</b>	<b>Investigator Institution</b>	<b>Project Title</b>	<b># of Specimens</b>
1	Adlrich, Melinda	Vanderbilt University Medical Center	Discerning benign disease from malignant lung cancer with the microbiome	0
2	Ali, Mehboob	Research Institute at Nationwide Children's Hospital	DHA inhibits lung cancer cell metastasis and cell viability through actin binding proteins modulation	56
3	APOLLO/Moskaluk	NIH/NCI	NCI Cancer Moonshot Program, Sub-project APOLLO 1	217
4	Bedard, Eric	University of Alberta, Canada	Translational application of microRNA profile to detect lung cancer	160
5	Beggs, Mike	MagArray, Inc.	Validation of a novel serum assay to identify lung cancer in patients with pulmonary nodules	269
6	Belani, Chandra	Penn State University	Oncogenic Mutations/Gene Rearrangements in Patients with Advanced Lung Adenocarcinoma and Squamous Cell Carcinoma	22
7	Cress, Doug	Moffitt Cancer Center	Development of a Nanostring-based Assay Reflecting Pathway-based Gene Signatures	275
8	De, Subhajyoti	Rutgers University	Genomic assessment of lung squamous cell carcinoma and adjacent benign tissues	20
9	Deng, Youping	Rush University Cancer Center	Early Detection of Lung Cancer Using Circulating MiRNA Expression Profiling	161
10	Deng, Youping	University of Hawaii	Identification of circulating ncRNA biomarkers for early stage lung cancer patients	136
11	Denlinger, Chad	Medical University of South Carolina	Analysis of Cell Surface Lipids and Glycans in Bronchoalveolar Lavage Fluids of Patients with Non-Small Cell Lung Cancer	185
12	Dowlati, Afshin	Case Comprehensive Cancer Center	Role of PIAS3 expression in Squamous Cell Lung Carcinoma and in patients' clinical course	137
13	Dutta, Anindya	University of Virginia	MicroDNAs as a novel blood-based biomarker for lung cancer	84
14	Farjah, Farhood	University of Washington	Predicting lung cancer recurrence	215
15	Fedarko, Neal	Johns Hopkins University School of Medicine	Biomarkers for Early Detection and Risk of Recurrence of Lung Cancer	135
16	Govindan, Ramaswamy	Washington University in St. Louis	Comprehensive Genomic Characterization of Adenocarcinoma of the Lung in Never Smokers	0
17	Grogan, Eric	Vanderbilt University Medical Center	Predicting Lung Cancer Prior to Surgical Resection in Patients with Lung Nodules	0
18	Gümüs, Zeynep	Icahn School of Medicine at Mount Sinai	Identifying the genomic mutational landscapes of lung cancer adenocarcinoma in military members and veterans exposed to military carcinogens	0
19	Harris, Curtis	NIH, NCI	Project 1: Urinary Metabolites as a Noninvasive Diagnostic and Prognostic Biomarker for Lung Cancer, Project 2: Identification of microbial biomarkers associated with lung cancer	607
20	Johanning, Gary	SRI International	Novel lung cancer early detection biomarkers based on endogenous retroviruses.	0
21	Junghans, Richard	Roger Williams Medical Center	Screening SCLC cell lines for GD3 ganglioside expression	16
22	Kankonde, Mutombo	Greater East Cancer Center, El Paso Texas	Early Detection of Lung Cancer in Heavy Smokers Through Detection of Mutation of PTEN, C-MYC, MDMR-2 in Blood and Sputum	297
23	Kasid, Usha	Georgetown University	Testing Nuclear TNFAIP8 as a Novel Prognosticator of Recurrent Lung Cancer	200

	<b>Approved Investigators</b>	<b>Investigator Institution</b>	<b>Project Title</b>	<b># of Specimens</b>
24	Kruusmaa, Kristi	Universal Diagnostics SL	Identification of a panel of biomarkers, with values of cutting, allowing to discriminate among patients with cancer, healthy patients, and patients with other types of diseases, to develop a test for early detection of cancer	71
25	Leavesley, Silas	University of South Alabama	Molecular contrast in screening markers for lung cancer	20
26	Li, Hui	University of Virginia	Investigation of AVIL, a novel oncogene in lung cancer	40
27	Liu, Yanhong	Baylor College of Medicine	Profiling of Lung Tissue and BAL Microbial Communities in Lung Cancer	0
28	Muldoon, Timothy	University of Arkansas	Imaging of morphologic features in exfoliated bronchial epithelial cells in bronchial lavage	20
29	Nana-Sinkam, Patrick	Virginia Commonwealth University	Profiling circulating small non-coding RNA expression and post-transcriptional modifications in lung cancer	164
30	Ostrer, Harry	Albert Einstein College of Medicine	Diagnosis and staging of lung cancer in bronchial lavage fluid	130
31	Qu, Julia (Zhaoxia)	University of Pittsburgh Medical Center	NF-kB and STAT Signaling in lung cancer	0
32	Rajaram, Narasimhan	University of Arkansas	Optical imaging of biomarkers of tumor recurrence	45
33	Reisman, David	University of Florida	BRM Polymorphism are highly predictive of lung cancer in African American as compared to Caucasian	47
34	Rojanasakul, Yon	West Virginia University	Predictive biomarkers for radio/chemo-sensitivity in non-small cell lung cancer	100
35	Semones, Marcus	WaveGuide Corporation	Novel glycoprotein epitopes for diagnosing Lung Cancer using micro-Nuclear Magnetic Resonance( $\mu$ NMR).	0
36	Szczesny, Bartosz	University of Texas Medical Branch	Project 1: Essentiality of hydrogen sulfide in maintenance of the mitochondrial DNA integrity and cellular bioenergetics in lung cancer cells Project 2: Mitochondrial DNA as a novel biomarker in detection of lung adenocarcinomas (2nd project)	574
37	Tung, Kenneth	University of Virginia	Detecting an immune response to a sperm tail cancer/testis antigen (CABYR), which is frequently expressed in human cancers.	0
38	Wang-Johanning, Feng	SRI International	Retroviral biomarkers for early diagnosis of lung cancer	10
39	Weber, Georg	University of Cincinnati	A Blood Test for Lung Cancer	10
40	Winn, Robert	University of Illinois at Chicago	Role of the Noncanonical Wnt Pathway in Non-Small Cell Lung Cancer	38
41	Wong, David	UCLA	Identifying Discriminative Saliva Biomarkers for Lung Cancer From Patients with Lung Nodules	53
42	Yan, Cong	Indiana University School of Medicine	Biomarkers for Lung Cancers	170
43	Yendamuri, Sai	Roswell Park Cancer Institute	Characterization of the lung cancer microbiome and its impact on recurrence after resection of early stage non-small cell lung cancer (NSCLC)	380
44	Yoo, Hyuntae	University of Texas at Dallas	Development of a small-molecule blood biomarker for lung cancer screening	20
45	Zhang, David	Rice University	Nucleic Acid-Based Assay for Detecting Lung Cancer Recurrence	48
				<b>5132</b>

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
S0001	Adenocarcinoma	Stage IIB	Y	N	0.38	70	50	15	1	3	0.21	1		0.035	2	No - Quit Smoking	10		None	None
S0002	Adenocarcinoma	Stage IIA	Y	N	0.32	70	40	0	2	3	0.57	2		0.3	2	Never Smoked			None	None
S0003	Adenocarcinoma	Stage IB	Y	N	0.027	100	60	0	1		0.084	1		0.3	2	No - Quit Smoking	38	AR	Second-hand smoke	Second-hand smoke
S0004	Squamous Cell Carcinoma	Stage IIB	Y	N	1.942	20	80	5	10	7	4.903	10	8	0.3	3	No - Quit Smoking	75	AR	Asbestos, Coal mining, Second-hand smoke	Asbestos, Coal mining, Second-hand smoke
S0004	Squamous Cell Carcinoma	Stage IIB	Y	N	1.942	100	75	5	10	7	4.903	10	8	0.3	3	No - Quit Smoking	75	AR	Asbestos, Coal mining, Second-hand smoke	Asbestos, Coal mining, Second-hand smoke
S0006	Adenocarcinoma	Stage IB	Y	N	0.38	80	40	0	2	3	0.31	2	4			No - Quit Smoking	37		None	None
S0007	Squamous Cell Carcinoma	Stage IB	Y	N	0.43	60	50	0	2	2	0.7	3	4	0.53	3	No - Quit Smoking	30		None	None
S0008	Adenocarcinoma	Stage IIB	Y	N	0.57	50	50	5	2	3	0.26	1	4	0.07	2	No - Quit Smoking	72		None	None
S0010	Adenocarcinoma	Stage IB	Y	N	0.18	40	70	0			0.21	1	3	0.17	2	Never Smoked			None	None
S0011	Adenocarcinoma	Stage IIIA	Y	N	0.86	80	50	0	2	3	0.12	1	4	0.17	2	No - Quit Smoking	45	AR	Second-hand smoke	Second-hand smoke
S0012	Adenocarcinoma	Stage IB	Y	N	1.8	50	40	10	3	3	0.12	2		0.12	2	Yes - Current Smoker	120		None	None
S0013	Adenocarcinoma	Stage IA	Y	N	0.108	50	70	0			0.532	2	3	0.392	1	Yes - Current Smoker			None	None
S0014	Adenocarcinoma	Stage IIB	Y	N	1.56	80	70	20	1	2	0.7	1		0.19	2	Yes - Current Smoker	20		None	None
S0015	Adenocarcinoma	Stage IA	Y	N	0.05	100	70	0	1		0.67	2		0.08	2	No - Quit Smoking	45		None	None
S0016	Squamous Cell Carcinoma	Stage IA	N	N							0.673	2		0.105	2	Yes - Current Smoker	58		None	None
S0017	Squamous Cell Carcinoma	Stage IA	Y	N	0.519	60	70	5	2	2	1.62	2		0.25	2	Yes - Current Smoker		AF	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
S0018	Squamous Cell Carcinoma	Stage IA	Y	N	0.056	97	80	0	2		0.14	1	3	0.038	2	No - Quit Smoking	58	AF	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
S0019	Adenocarcinoma	Stage IA	Y	N	0.054	100	70	0	1		0.058	2	3	0.023	2	Never Smoked			None	None
S0022	Squamous Cell Carcinoma	Stage IA	Y	N	0.499	60	60	15	3	3	0.718	3		0.196	2	No - Quit Smoking	62	AR	Second-hand smoke	Second-hand smoke
S0023	Adenocarcinoma	Stage IA	Y	N	0.022	10	70	0	2		0.32	2	3	0.18	2	No - Quit Smoking			None	None
S0024	Adenocarcinoma	Stage IB	Y	N	0.138	100	60	0	2	2	0.087	2				Yes - Current Smoker	52	MR	None	None

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
S0025	Squamous Cell Carcinoma	Stage IIA	Y	Y	0.049						0.083	2		0.022	2	No - Quit Smoking	50	AR	Second-hand smoke	Second-hand smoke
S0026	Bronchioalveolar Carcinoma	Stage IB	Y	N	0.215	100	50	0	1	3	0.115	1	4	0.103	2	No - Quit Smoking			None	None
S0027	Adenocarcinoma	Stage IA	Y	N	0.02	50	10	0	2			2	3			No - Quit Smoking	105	AR	Second-hand smoke	Second-hand smoke
S0028	Squamous Cell Carcinoma	Stage IIIB	N	N												No - Quit Smoking	150	AF	Jet fuel, Nuclear weapons, Second-hand smoke	Jet fuel, Nuclear weapons, Second-hand smoke
S0029	Squamous Cell Carcinoma	Stage IIA	Y	N	0.06	100	40	0	1	4	0.571	1	8	0.043	1	No - Quit Smoking		AR	Second-hand smoke	Second-hand smoke
S0030	Adenocarcinoma	Stage IA	Y	N	0.034	1	1	0	1		0.488	2	3	0.583	3	No - Quit Smoking	66		None	None
S0031	Adenocarcinoma	Stage IIA	Y	N	0.044	30	4	0	1		0.062	1				No - Quit Smoking	32		None	None
S0032	Adenocarcinoma	Stage IA	Y	N	0.066	30	20	0	1		1.5	3	3	0.047	1	No - Quit Smoking	15		None	None
S0033	Squamous Cell Carcinoma	Stage IA	Y	N	0.318	50	80	0	2		0.902	5	6	0.086	1	No - Quit Smoking			None	None
S0035	Adenocarcinoma	Stage IA	Y	Y	1.5	40	70	0	1		1.3	3	3	0.31	1	No - Quit Smoking	33		None	None
S0036	Squamous Cell Carcinoma	Stage IB	Y	N	0.016	55	40	0	1		0.07	1				No - Quit Smoking	60	AF	Second-hand smoke	Second-hand smoke
S0037	Squamous Cell Carcinoma	Stage IIIA	Y	N	1.2	100	70	50	3		0.802	3	3	0.07	1	No - Quit Smoking			None	None
S0038	Adenocarcinoma	Stage IB	Y	N	0.877	95	70	10	3	8	2.79	3	4	0.277	2	No - Quit Smoking	110	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
S0039	Small Cell Carcinoma	Stage IA	Y	N	0.288	100	80	15	2	10	0.417	2	4	0.098	1	No - Quit Smoking	53		None	None
S0040	Squamous Cell Carcinoma	Stage IA	Y	N	0.217	90	80	5	1	3	0.725	2	3	0.115	2	No - Quit Smoking	35	MR	Second-hand smoke	Second-hand smoke
S0041	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.443	90	60	10	1	4	0.797	2	4	0.311	2	Yes - Current Smoker	45		None	None
S0042	Adenocarcinoma	Stage IB	Y	N	0.99	80	70	5	2	3	2.39	4		0.15	1	No - Quit Smoking	45		None	None
S0043	Adenocarcinoma	Stage IIA	Y	N	0.181	80	70	0	1	21	0.22	1	12			Yes - Current Smoker	40		None	None
S0045	Adenocarcinoma	Stage IIIA	Y	N	0.15	25	80	0	1		0.162	1		0.11	1	No - Quit Smoking	30		None	None
S0046	Adenocarcinoma	Stage IB	Y	N	0.182	100	100	80		4	1.26	1	4	0.2	1	Yes - Current Smoker	25		None	None
S0047	Squamous Cell Carcinoma	Stage IA	Y	N	0.26				1		0.078	1		0.115	1	No - Quit Smoking	15		None	None
S0050	Squamous Cell Carcinoma	Stage IIB	Y	N	0.58	60	80	10	3	4	0.09		4	0.182	2	Yes - Current Smoker	75		None	None

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S0051	Adenocarcinoma	Stage IA	Y	N	0.063	55	80	0		8	0.545	1	8	0.398	2	No - Quit Smoking	42		None	None
S0052	Squamous Cell Carcinoma	Stage IA	Y	N	0.085	100	90	0	1		0.107	1				Yes - Current Smoker			None	None
S0053	Adenocarcinoma	Stage IA	Y	N	0.068	40	10	50	1		0.495	1		0.333	2	No - Quit Smoking	45		None	None
S0054	Carcinoid Tumor: Typical	Stage IB	Y	N	0.143	100	99	0	1	4	0.128	1	4	0.23	1	No - Quit Smoking	9.5		None	None
S0055	Adenocarcinoma: Mucinous Features	Stage IIB	Y	N	0.39	90	60	0	3	8	0.398	4	8	0.36	2	No - Quit Smoking	20	AF	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
S0056	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.436	90	80	15	1	2	0.312	1	3	0.118	1	No - Quit Smoking	22.5		None	None
S0057	Adenocarcinoma: BAC features	Stage IA	N	N						4	0.321	2	4	0.16	1	Yes - Current Smoker	19		None	None
S0058	Adenocarcinoma	Stage IIIA	Y	N	0.5	30	60	10		4	0.543	2	4	0.366	2	Yes - Current Smoker	3.5		None	None
S0061	Adenocarcinoma: BAC features	Stage IIA	N	N						4	0.234	1	4	0.088	1	No - Quit Smoking	15		None	None
S0062	Adenocarcinoma: BAC features	Stage IA	Y	N	0.354	85	75	0	1	8	0.145		4	0.14	1	No - Quit Smoking	30		None	None
S0063	Small Cell Carcinoma	Stage IA	Y	N		100	90	5	2	5		2	4			No - Quit Smoking	60		None	None
S0066	Undifferentiated Carcinoma: Large Cell	Stage IA	Y	N	0.01				1		0.01	1				No - Quit Smoking	49		None	None
S0067	Undifferentiated Carcinoma: Large Cell	Stage IIIA	Y	N	0.254	90	90	70	1	9	0.354	1	9	0.105	1	No - Quit Smoking	20		None	None
S0068	Adenocarcinoma	Stage IB	Y	N	0.065	90	70	5		8	0.643	2	8	0.133	1	No - Quit Smoking	165	AR	Second-hand smoke	Second-hand smoke
S0070	Squamous Cell Carcinoma	Stage IIB	Y	N	2.161	100	40	10	1	8	1.098	4	8	0.581	2	No - Quit Smoking	55		Second-hand smoke	Second-hand smoke
S0071	Adenocarcinoma	Stage IA	Y	N	0.138	100	70	0	1	4	0.231	1	4	0.089	1	No - Quit Smoking	30		None	None
S0072	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.046	100	70	0	1	16	0.188	3	16	0.075	1	No - Quit Smoking	19		None	None
S0073	Squamous Cell Carcinoma	Stage IIA	Y	N	0.1	100	50	5	1	16	0.166	4	16	0.206	1	Yes - Current Smoker	64		None	None
S0074	Adenocarcinoma	Stage IA	Y	N	0.201	100	40	0		8	0.298	2	8	0.22	1	No - Quit Smoking	60		None	None
S0077	Squamous Cell Carcinoma	Stage IB	Y	N	0.136	100	80	5	1	8	0.189	1	8	0.302	2	No - Quit Smoking	40		None	None
S0078	Adenocarcinoma	Stage IIIA	Y	N	0.611	100	70	0	2	8	0.99	3	8	0.12	1	No - Quit Smoking	20		None	None
S0080	Adenocarcinoma	Stage IA	Y	N	0.074	70	50	10	1		0.21	1		0.078	1	Never Smoked			None	None

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S0082	Adenocarcinoma: BAC features	Stage IB	Y	N	0.297	100	70	0	1	8	0.198	1	8	0.08	1	No - Quit Smoking	12		None	None
S0083	Adenocarcinoma: BAC features	Stage IA	Y	N	0.185	100	70	0	1	8	0.126	1	8	0.087	1	No - Quit Smoking	80	NV	Second-hand smoke	Second-hand smoke
S0084	Adenocarcinoma	Stage IA	Y	Y	0.175	100	0	100	1		0.257	2		0.074	1	Yes - Current Smoker	32		None	None
S0085	Adenocarcinoma: BAC features	Stage IA	Y	N	0.282	90	70	0	2	8	0.783	2	8	0.129	1	Yes - Current Smoker	40		None	None
S0088	Undifferentiated Carcinoma: Large Cell	Stage IB	Y	N	0.895	100	50	5	4	8	0.512	4	8	0.285	2	Yes - Current Smoker			None	None
S0090	Squamous Cell Carcinoma	Stage IB	Y	N	1.308	100	50	20	2	8	0.45	4	8	0.155	2	No - Quit Smoking	20.5	AR	Second-hand smoke	Second-hand smoke
S0091	Squamous Cell Carcinoma	Stage IIB	Y	N	0.149	100	70	0		12	0.132		8	0.092	1	No - Quit Smoking	50	AR	Agent Orange, Nuclear weapons, Second-hand smoke	Agent Orange, Nuclear weapons, Second-hand smoke
S0092	Squamous Cell Carcinoma	Stage IIB	Y	N	0.2	40	20	0			0.41	3		0.008	2	No - Quit Smoking	30		None	None
S0093	Adenocarcinoma	Stage IIB	Y	N	0.82	90	60	10	4	4	0.319	1	4	0.135	1	Yes - Current Smoker	8		None	None
S0094	Adenocarcinoma	Stage IB	Y	N	0.306	100	60	0	1	8	0.21	1	8	0.07	1	Yes - Current Smoker	55		None	None
S0095	Adenocarcinoma	Stage IIIA	Y	N	2.615	100	40	10	4		4.309	4		0.884	7	No - Quit Smoking	34		None	None
S0098	Undifferentiated Carcinoma: Large Cell	Stage IA	Y	N		100	80	5	2	8		2	9		1	No - Quit Smoking	50	AR	Agent Orange, Nuclear weapons, Second-hand smoke	Agent Orange, Nuclear weapons, Second-hand smoke
S0099	Carcinoid Tumor: Typical	Stage IIIA	Y	N	0.02	85	100	0		8	0.03		8	0.03	1	Never Smoked			None	None
S0100	Squamous Cell Carcinoma	Stage IB	Y	N	0.048	50	30	10		4	0.087		4			Never Smoked			None	None
S0105	Adenosquamous Carcinoma	Stage IIIA	Y	N	0.637	100	80	15	2	8	0.739	3	8	0.09	1	No - Quit Smoking	70.5		None	None
S0107	Adenocarcinoma: BAC features	Stage IIB	Y	N	4.747	80	60	0	12	4	6.678	13	4			Yes - Current Smoker	40		None	None
S0108	Squamous Cell Carcinoma	Stage IIIA	Y	N	11.59	40	40	15	7	4	12.2	9	4	0.25	1	No - Quit Smoking	63		None	None
S0109	Adenocarcinoma	Stage IIIA	Y	N	0.659	90	30	0	2	4	1.75	2	4	0.21	1	No - Quit Smoking	2		None	None
S0110	Adenocarcinoma		Y	Y	0.485	75	70	0	1	4	0.494	2	4			Yes - Current Smoker	60		None	None

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S0112	Squamous Cell Carcinoma	Stage IIA	Y	N	3.465	80	70	30	4	4	2.172	6	4	0.411	2	No - Quit Smoking	40		None	None
S0115	Adenocarcinoma: BAC features	Stage IA	Y	N	0.35	95	70	0	1	4	0.87	2	4	0.131	1	No - Quit Smoking	20		None	None
S0117	Small Cell Carcinoma	Stage IA	Y	N	0.093	95	80	10	1	12	1.916	5	9	0.25	2	Yes - Current Smoker	50		None	None
S0119	Adenocarcinoma	Stage IIA	Y	N	0.33	90	60	0	1	4	0.356	2	4	0.322	1	No - Quit Smoking	12		None	None
S0121	Undifferentiated Carcinoma: Large Cell	Stage IIB	Y	N	2.043	90	80	10	14	8	1.407	6	4	0.477	1	No - Quit Smoking	20		None	None
S0122	Small Cell Carcinoma	Stage IA	Y	N	0.181	40	90	0			0.134			0.138	1	No - Quit Smoking	7.5		None	None
S0124	Adenocarcinoma	Stage IB	Y	N	1.099	100	90	5	4	4	0.732	3	4	0.334	2	Yes - Current Smoker	80		None	None
S0125	Adenocarcinoma	Stage IA	Y	N	0.08	100	90	0			0.1	1		0.175	1	Yes - Current Smoker	27		None	None
S0126	Adenocarcinoma	Stage IIA	Y	N	1.462	85	90	0	4	4	0.521	3	4	0.226	1	Yes - Current Smoker	7.5		None	None
S0127	Squamous Cell Carcinoma	Stage IA	Y	N	0.151	90	85	0	1		1.25	1		0.33	1	No - Quit Smoking	37.5		Second-hand smoke	Second-hand smoke
S0128	Adenocarcinoma	Stage IIIA	Y	N	0.307	100	70	0	1	4	4.708	5	4			No - Quit Smoking	94	NV	Second-hand smoke	Second-hand smoke
S0129	Squamous Cell Carcinoma	Stage IIB	Y	N	4.618	100	98	10	15	4	1.777	6	4	1.01	4	No - Quit Smoking	28	NV	Second-hand smoke	Second-hand smoke
S0130	Squamous Cell Carcinoma	Stage IB	Y	N	2.278	100	50	10	7	4	1.734	7	4	0.483	2	Yes - Current Smoker	5.5		None	None
S0131	Adenocarcinoma	Stage IV	Y	N	0.21	70	60	0	1		0.38	1		0.13	1	No - Quit Smoking	48		None	None
S0134	Adenocarcinoma	Stage IA	Y	N	0.246	40	30	0	1		0.27	1		0.16	1	Never Smoked			None	None
S0135	Squamous Cell Carcinoma	Stage IIA	Y	N	0.302	90	80	0	1	4	1.936	1	4	0.35	1	Yes - Current Smoker	22		None	None
S0136	Adenocarcinoma: Mucinous Features	Stage IA	Y	N	0.334	95	90	0	1		0.305	1		0.035	1	No - Quit Smoking	40		None	None
S0137	Squamous Cell Carcinoma	Stage IB	Y	N	0.21	95	70	5	1		0.157	1		0.21	1	Yes - Current Smoker	80		None	None
S0138	Adenocarcinoma	Stage IB	Y	N	1.054	100	80	15	4	4						Yes - Current Smoker	13		None	None
S0142	Adenocarcinoma: BAC features	Stage IA	Y	N	0.12	75	50	0	1		0.43	1		0.2	1	No - Quit Smoking	29		None	None
S0143	Squamous Cell Carcinoma	Stage IIIA	Y	N	1.86	85	80	0	3	4	1.34	4	4	0.349	2	Yes - Current Smoker	16.200008		None	None
S0144	Squamous Cell Carcinoma	Stage IB	Y	N	0.64	100	75	10	2	4	0.581	3	4			Yes - Current Smoker	25		None	None

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S0145	Carcinoid Tumor: Typical	Stage IA	Y	N	0.01	100	100	0	1		0.105	1				No - Quit Smoking	20		None	None
S0146	Adenocarcinoma	Stage IIIA	Y	N	0.587	100	75	5	1	4	2.696	3	4	0.21	1	Yes - Current Smoker	16.2000008		None	None
S0148	Adenocarcinoma	Stage IA	Y	Y	0.03	25	30	0	1		0.065	1		0.039	1	Never Smoked			None	None
S0149	Adenocarcinoma	Stage IIA	Y	N	10.412	90	60	10	9	4	1.804	6	4	1.66	3	No - Quit Smoking	60		None	None
S0150	Adenocarcinoma	Stage IA	Y	N	0.12	10	70	0	1		0.045	1				No - Quit Smoking	13.5		None	None
S0153	Adenocarcinoma	Stage IIA	Y	N	0.561	100	70	0	2	4	0.604	3	4	0.13	1	No - Quit Smoking	0.42899999		None	None
S0154	Adenocarcinoma	Stage IA	Y	N	0.14	45	95	0			0.1	1				No - Quit Smoking	7.5		None	None
S0155	Carcinoid Tumor: Typical	Stage IA	Y	N	0.274	85	95	0	1	4	0.389	1	4	0.259	2	No - Quit Smoking	1		None	None
S0156	Squamous Cell Carcinoma	Stage IIB	Y	N	1.296	85	90	0	3	4	1.189	3	4	1.17	4	No - Quit Smoking	30		Agent Orange, Asbestos, Second-hand smoke	Agent Orange, Asbestos, Second-hand smoke
S0159	Squamous Cell Carcinoma	Stage IIB	Y	N	0.383	100	60	20	2	4	0.83	2	4	0.299	2	Yes - Current Smoker	40		None	None
S0160	Squamous Cell Carcinoma	Stage IIA	Y	N	1.974	80	25	0	4	4	0.758	5	4	0.68	2	Yes - Current Smoker	48	NV	None	None
S0167	Carcinoid Tumor: Atypical	Stage IIB	Y	N	0.759	90	95	0	2	4						Never Smoked			None	None
S0168	Squamous Cell Carcinoma	Stage IB	Y	N	6.561	90	40	0	12	4	2.411	13	4	0.557	2	Yes - Current Smoker	47		None	None
S0170	Squamous Cell Carcinoma	Stage IA	Y	N	0.019	100	30	0	1		0.086	1				No - Quit Smoking	84	NV	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered engines, Second-hand smoke	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered engines, Second-hand smoke
S0172	Adenocarcinoma	Stage IA	Y	N	0.11	100	95	0			1.424	3		0.12	1	No - Quit Smoking	7		None	None
S0173	Carcinoid Tumor: Atypical	Stage IIA	Y	N	0.349	100	90	0	1	4	0.258	1	4	0.15	1	Yes - Current Smoker	45		None	None
S0174	Squamous Cell Carcinoma	Stage IA	Y	N	1.705	95	85	20	5	4	3.408	9	4	0.13	1	No - Quit Smoking	40		None	None
S0175	Adenocarcinoma	Stage IB	Y	N	0.463	66	95	0		5	1.819	2	4	0.36	1	No - Quit Smoking	22.5	AF	Agent Orange, Jet fuel, Second-hand smoke	Agent Orange, Jet fuel, Second-hand smoke

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S0176	Adenocarcinoma	Stage IIIA	Y	N	1.993	95	80	0	7	4	1.11	5	4	0.711	2	No - Quit Smoking	17	MB	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
S0177	Squamous Cell Carcinoma	Stage IA	Y	N	0.84	40	40	10	3	4	2.446	3	4	0.425	2	No - Quit Smoking	90	AR	Second-hand smoke	Second-hand smoke
S0178	Squamous Cell Carcinoma	Stage IIA	Y	N	1.506	100	90	25	6	4	1.971	6	4	1.196	4	No - Quit Smoking	50		None	None
S0179	Adenocarcinoma	Stage IB	Y	N	1.041	60	50	0	1	3	2.01	2	4	1.044	3	No - Quit Smoking	66	AR	Second-hand smoke	Second-hand smoke
S0180	Squamous Cell Carcinoma	Stage IA	Y	N	2.464	95	90	20	5	4	3.152	6	4	0.626	2	No - Quit Smoking	30		None	None
S0181	Carcinoid Tumor: Typical	Stage IA	Y	N	0.217	95	95	0	1	4	0.699	1	4	0.126	1	No - Quit Smoking	0.40000001		None	None
S0182	Undifferentiated Carcinoma: Large Cell	Stage IIA	Y	N	0.446	100	90	0	2	4	1.256	2	4	0.722	3	Yes - Current Smoker	49		None	None
S0184	Solitary Fibrous Tumor	Stage IIA	Y	N	8.033	55	90	25	9	4	4.464	9	4	0.669	3	No - Quit Smoking	67.5	MR	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
S0185	Adenocarcinoma: BAC features	Stage IIB	Y	N	4.353	10	50	0	5	4	0.37	1	4	0.56	1	Never Smoked			None	None
S0186	Adenocarcinoma	Stage IB	Y	N	0.478	70	50	5	1	4	0.444	1	4			No - Quit Smoking	40		None	None
S0187	Carcinoid Tumor: Typical	Stage IB	Y	N	2.346	100	98	0	7	4	2.025	7	4	0.25	1	No - Quit Smoking	50		None	None
S0188	Squamous Cell Carcinoma	Stage IIA	Y	N	2.936	90	60	5	6	4	4.89	6	4	0.509	2	No - Quit Smoking	45		None	None
S0190	Squamous Cell Carcinoma	Stage IB	Y	N	1.3	90	85	5	2	4	11.166	7	4	0.467		No - Quit Smoking	3.25		None	None
S0191	Adenocarcinoma	Stage IIIA	Y	N	0.96	60	70	0	1	4	0.525	1	4	1.218	2	No - Quit Smoking	1	AR	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
S0192	Carcinoid Tumor: Atypical	Stage IB	Y	N	2.577	97	95	0	7	4	1.248	5	4	0.36		No - Quit Smoking	35		None	None
S0193	Adenocarcinoma: BAC features	Stage IIB	Y	N	6.688	60	75	0	4	4	2.918	7	4	1.125	2	No - Quit Smoking	10	AF	Nuclear-powered engines, Second-hand smoke	Nuclear-powered engines, Second-hand smoke
S0195	Squamous Cell Carcinoma	Stage IIB	Y	N	3.557	100	80	50	6	4	0.629	1	4	0.05	1	No - Quit Smoking	40		None	None
S0196	Adenocarcinoma: BAC features	Stage IIA	Y	N	1.779	100	70	0	1	4	1.332	2	4	0.255	2	Never Smoked			None	None
S0200	Adenocarcinoma	Stage IA	Y	N	0.09	90	60	0	1	4	0.324	1	4	0.045	1	No - Quit Smoking	9	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke

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S0201	Adenocarcinoma: BAC features	Stage IB	Y	N	0.685	50	50	0	1	4	2.342	2	4	0.354	2	Yes - Current Smoker	20		None	None
S0206	Adenocarcinoma	Stage IA	Y	N	1.64	5	60	0		4	1.657	2	4	0.38	1	No - Quit Smoking	50	AR	Second-hand smoke	Second-hand smoke
S0208	Squamous Cell Carcinoma	Stage IB	Y	N	0.841	95	50	25	3	4	0.559	2	4	0.07	1	No - Quit Smoking	30	AR	Second-hand smoke	Second-hand smoke
S0213	Squamous Cell Carcinoma	Stage IB	Y	N	0.698	60	70	25	1	4	0.547	2	4	0.454	2	No - Quit Smoking	30		None	None
S0216	Adenocarcinoma	Stage IB	Y	N	0.83	100	30	0	4	4	1.039	5	3	0.401	1	No - Quit Smoking	106	AR	Second-hand smoke	Second-hand smoke
S0217	Adenocarcinoma	Stage IA	Y	N	0.09	90	60	5		4	0.13		3			No - Quit Smoking	33		None	None
S0219	Adenocarcinoma: BAC features		Y	Y	0.398	100	85	5	1	4	0.467	2	4			Never Smoked		NV	Asbestos, Jet fuel, Nuclear-powered engines, Radon, Second-hand smoke	Asbestos, Jet fuel, Nuclear-powered engines, Radon, Second-hand smoke
S0220	Carcinoid Tumor: Typical	Stage IA	Y	N	0.207	85	95	0	1	4	0.465	1	4	0.04	1	No - Quit Smoking	8		None	None
S0223	Adenocarcinoma: BAC features	Stage IA	Y	N	0.103	40	70	0		4	0.407	1	4	0.248	2	Never Smoked			None	None
S0224	Adenocarcinoma	Stage IA	Y	N	0.369	85	70	0		4	0.505	1	4	0.0145	1	Yes - Current Smoker	20		None	None
S0226	Squamous Cell Carcinoma	Stage IA	Y	N	0.284	100	50	10	1	4	0.203	1	4	0.1	1	No - Quit Smoking	30		None	None
S0227	Adenocarcinoma: BAC features	Stage IIB	Y	N	0.1				1		0.506	3		0.08	1	Never Smoked			None	None
S0228	Adenocarcinoma	Stage IIIA	Y	N	0.187	100	50	10	1	4	0.522	2	4	0.07	1	No - Quit Smoking	63		None	None
S0233	Adenocarcinoma: BAC features	Stage IA	Y	N	0.276	25	70	0	1	4	0.481	1	4	0.47	1	Yes - Current Smoker	40		None	None
S0234	Adenocarcinoma	Stage IA	Y	N	0.264	90	70	0	1	4	0.89	2	4	0.07	1	No - Quit Smoking	23		None	None
S0235	Adenocarcinoma: BAC features	Stage IIB	Y	N	0.091						0.5	2		0.15	1	No - Quit Smoking	50		None	None
S0236	Adenocarcinoma: Mucinous Features	Stage IIB	Y	N	1.867	40	60	0	2	4	0.399	1	4	0.21	1	No - Quit Smoking	49		Second-hand smoke	Second-hand smoke
S0237	Adenocarcinoma	Stage IB	Y	N	1.398	50	40	20	3	4	0.345	1	4	0.23	1	Yes - Current Smoker	24.5		None	None
S0239	Squamous Cell Carcinoma	Stage IIIA	Y	N	1.833	10	80	30	1	4	2.699	7	4	0.361		No - Quit Smoking	37.5		None	None
V0001	Squamous Cell Carcinoma	Stage IB	Y	N	0.59	100	60	20	2	7	0.89	2	4	0.76	2	Yes - Current Smoker	75		None	None

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V0002	Adenocarcinoma	Stage IIA	Y	N	0.53	100	70	2	2	8	0.4	2	4	0.37	2	No - Quit Smoking	70	AF	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
V0004	Adenocarcinoma	Stage IIIA	Y	N	0.47	20	70	0		3	1.57	1		0.31	2	Never Smoked		AR	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0006	Neuroendocrine Carcinoma: Large Cell	Stage IB	Y	N	2.56	100	80	25	5	7	0.67	3	4	0.37	1	No - Quit Smoking	30	NV	Agent Orange, Asbestos, Nuclear weapons, Second-hand smoke	Agent Orange, Asbestos, Nuclear weapons, Second-hand smoke
V0007	Adenocarcinoma	Stage IV	Y	Y	0.22	100	80	0		7	0.2	2	4			No - Quit Smoking	60		None	None
V0009	Bronchioalveolar Carcinoma	Stage IA	Y	N	1.35	70	50	0	5	8	0.8	3	4	0.43	2	Never Smoked		AF	Agent Orange, Jet fuel, Second-hand smoke	Agent Orange, Jet fuel, Second-hand smoke
V0010	Squamous Cell Carcinoma	Stage IIA	Y	N	0.64	95	70	5	3	8	1.06	4	4	0.23	2	Yes - Current Smoker	60		None	None
V0011	Squamous Cell Carcinoma	Stage IB	Y	N	0.49	60	40	20		7	0.2	1	4			No - Quit Smoking	35		None	None
V0012	Squamous Cell Carcinoma	Stage IB	Y	N	0.79	20	40	40		8	0.52	1	4	0.74	2	No - Quit Smoking	80	AR	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
V0013	Adenosquamous Carcinoma	Stage IIIA	Y	Y	0.64	70	75	5	1	7	0.68	2	4	0.22	2	Yes - Current Smoker	66		None	None
V0014	Squamous Cell Carcinoma		Y	N	0.43	100	80	15	2	6	0.67	2	4			Yes - Current Smoker	60		None	None
V0015	Adenocarcinoma	Stage IA	Y	N	0.24	60	70	0	1	6	0.22	1	4	0.26	3	No - Quit Smoking	40	AR	Agent Orange, Second-hand smoke	Agent Orange, Second-hand smoke
V0017	Adenocarcinoma	Stage IB	Y	N	0.88	50	70	5	2	6	0.39	2	4	0.27	2	Never Smoked		AR	Burn pits, Nuclear weapons, Nuclear-powered engines, Second-hand smoke	Burn pits, Nuclear weapons, Nuclear-powered engines, Second-hand smoke
V0020	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.74	70	80	5	3	3	2.35	3		0.19	3	No - Quit Smoking	30		None	None
V0021	Squamous Cell Carcinoma	Stage IA	Y	N	0.14	40	70	5	1	3	0.42	2		0.18	2	Yes - Current Smoker	102		None	None

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V0022	Adenosquamous Carcinoma	Stage IA	N	N												No - Quit Smoking			None	None
V0023	Adenocarcinoma	Stage IB	Y	N	0.44	60	60	0	1	3	0.138	1	4	0.139	2	No - Quit Smoking	45		None	None
V0024	Adenocarcinoma	Stage IIB	Y	N	0.76	100	90	50	1	3	0.74	2		0.2	2	Yes - Current Smoker	114		None	None
V0025	Adenocarcinoma	Stage IA	Y	N	0.357	60	60	5	3	3	1.48	3	4	0.15	3	No - Quit Smoking	66	AR	Agent Orange, Second-hand smoke	Agent Orange, Second-hand smoke
V0026	Adenocarcinoma	Stage IA	Y	N	0.22	85	60	0		3	0.73	2	3	0.67	2	No - Quit Smoking	98	NV	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered engines, Second-hand smoke	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered engines, Second-hand smoke
V0027	Adenocarcinoma	Stage IIA	Y	N	0.75	70	80	2	2	3	0.63	1	4	0.16	2	No - Quit Smoking	52		None	None
V0029	Squamous Cell Carcinoma	Stage IIB	Y	N	0.6	90	70	0	4	3	0.33	3				No - Quit Smoking	10		None	None
V0031	Squamous Cell Carcinoma	Stage IIA	Y	N	0.82	85	80	40	2	2	1.12	2	4	0.117	2	No - Quit Smoking	40		None	None
V0035	Squamous Cell Carcinoma	Stage IIB	Y	N	0.77	30	60	50	1	3	0.71	2		0.53	1	No - Quit Smoking	30		None	None
V0037	Adenocarcinoma	Stage IIIA	Y	Y	0.32				2		0.464	2		0.33	2	No - Quit Smoking			None	None
V0039	Adenocarcinoma	Stage IIIA	Y	N	0.61	70	70	10	2	3	0.69	5		0.48	3	No - Quit Smoking	60	AR	None	None
V0040	Squamous Cell Carcinoma	Stage IA	Y	N	0.17						1.01	2		0.145	2	Yes - Current Smoker			None	None
V0041	Adenocarcinoma	Stage IIB	Y	N	0.4	60	50	0	1	3	0.57	2		0.075	2	Yes - Current Smoker	46		None	None
V0042	Adenocarcinoma	Stage IA	Y	N	0.3	85	70	0	1	3	0.25	2	4	0.081	2	No - Quit Smoking	112		None	None
V0043	Adenocarcinoma	Stage IA	Y	N	0.2	30	40	0	1		1.37	2	6			No - Quit Smoking	76		None	None
V0044	Adenocarcinoma	Stage IIIA	Y	Y	0.6	30	40	0	1	4	0.33	2		0.128	2	No - Quit Smoking			None	None
V0045	Adenocarcinoma	Stage IIIA	Y	N	0.21	25	20	0	1		2.8	5	3	0.45	3	Yes - Current Smoker			None	None
V0050	Carcinoid Tumor: Typical	Stage IA	Y	N	0.15	90	99	0	2	3	0.42	4		0.15	1	No - Quit Smoking		AR	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
V0055	Squamous Cell Carcinoma	Stage IB	Y	N	0.86	100	75	5	3	3	1.12	3	4	0.466	1	No - Quit Smoking	111	AR	Asbestos, Nuclear weapons, Second-hand smoke	Asbestos, Nuclear weapons, Second-hand smoke

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V0056	Squamous Cell Carcinoma	Stage IIA	Y	N	0.67	90	80	10	3	3	1.81	4	4	0.072	1	No - Quit Smoking	100		None	None
V0057	Adenocarcinoma	Stage IA	Y	N	0.46	40	70	5		3	1.19	3		0.316	1	No - Quit Smoking		AF	Agent Orange, Depleted Uranium, Jet fuel, Nuclear weapons, Second-hand smoke	Agent Orange, Depleted Uranium, Jet fuel, Nuclear weapons, Second-hand smoke
V0058	Squamous Cell Carcinoma	Stage IB	Y	N	0.79	40	60	15	3	3	0.59	4		0.33	1	Yes - Current Smoker	22		None	None
V0059	Squamous Cell Carcinoma		Y	N	0.28	70	15	0	2		0.28	3	3			No - Quit Smoking	20		None	None
V0061	Squamous Cell Carcinoma	Stage IA	Y	N	0.54	40	30	10	2	3	0.97	4		0.29	3	No - Quit Smoking	45		None	None
V0064	Squamous Cell Carcinoma	Stage IB	Y	N	0.68	30	80	5	2	3	0.57	3		0.08	1	Yes - Current Smoker	35	AR	Burn pits, Second-hand smoke	Burn pits, Second-hand smoke
V0065	Adenocarcinoma	Stage IB	Y	N	0.61	60	20	0	3	4	0.82	2	4	0.053	1	No - Quit Smoking	40		None	None
V0066	Adenocarcinoma	Stage IIA	Y	N	0.66	100	40	0	3	3	1.09	3	4	0.23	1	No - Quit Smoking	2	NV	Asbestos	Asbestos
V0069	Carcinoid Tumor: Atypical	Stage IB	Y	N	0.18	80	80	0	4	6	0.98	2		0.06		Never Smoked			None	None
V0070	Squamous Cell Carcinoma	Stage IB	Y	N	0.71	100	70	40	3	3	0.92	3		0.39		Yes - Current Smoker			None	None
V0071	Adenocarcinoma	Stage IV	Y	N	0.81	70	70	5	2	3	1.08	3		0.15	2	No - Quit Smoking	75		None	None
V0071	Adenocarcinoma	Stage IV	Y	N	0.81	30	50	0	2	3	1.08	3		0.15	2	No - Quit Smoking	75		None	None
V0072	Adenocarcinoma	Stage IIIA	Y	Y	0.88	90	80	0	5	3	0.9	6		0.19	2	Yes - Current Smoker	62		None	None
V0072	Adenocarcinoma	Stage IIIA	Y	Y	0.88	90	80	0	5	3	0.9	6		0.19	2	Yes - Current Smoker	62		None	None
V0076	Bronchioalveolar Carcinoma	Stage IA	Y	N	1.66	30	80	0	3	3	2.29	4		0.85	6	No - Quit Smoking			None	None
V0077	Squamous Cell Carcinoma	Stage IIB	Y	N	1.24	60	50	30	2	4	1.55	3	3	0.59	2	No - Quit Smoking	100		None	None
V0078	Adenoid Cystic Carcinoma	Stage IIB	Y	N	0.8	80	95	0	3	5	0.26	2	4	0.08	1	No - Quit Smoking	4		None	None
V0079	Adenocarcinoma	Stage IIIA	Y	N	0.63	50	40	0	3	9	1.69	4	9	0.54	2	Never Smoked			None	None
V0080	Adenocarcinoma	Stage IIA	Y	N	0.88	90	90	40	2	8	1.17	3	4	0.54	2	Yes - Current Smoker	60		None	None
V0081	Carcinoid Tumor: Typical	Stage IIA	Y	N	0.09	90	80	0	1	4	0.64	1	4	0.18	1	No - Quit Smoking	54	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke

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V0083	Squamous Cell Carcinoma	Stage IA	Y	N	0.5	25	70	5		3	0.39	1	3			No - Quit Smoking			None	None
V0088	Squamous Cell Carcinoma	Stage IIB	Y	N	1.16	90	70	20	4	3	1.88	4	3	0.27	2	No - Quit Smoking	50	MR	Depleted Uranium, Nuclear weapons, Second-hand smoke	Depleted Uranium, Nuclear weapons, Second-hand smoke
V0089	Adenocarcinoma	Stage IIB	Y	N	0.8	90	50	30	3	4	0.3	3	4			No - Quit Smoking	42.75		None	None
V0090	Adenocarcinoma	Stage IB	Y	N	1.12	50	70	0	1	4	0.73	3	4	0.79	2	No - Quit Smoking	60		None	None
V0091	Adenocarcinoma	Stage IIIA	Y	N	0.57	30	15	0	1		0.85	3	8	0.19	2	Never Smoked			None	None
V0093	Squamous Cell Carcinoma	Stage IA	Y	N	1.6	90	90	10	4	4	1.4	5	4	0.136	1	Yes - Current Smoker	45		None	None
V0094	Bronchioalveolar Carcinoma	Stage IIB	Y	N	0.17	75	80	0	1	4	0.21	1	4	0.16	1	No - Quit Smoking	45	MR	Burn pits, Second-hand smoke	Burn pits, Second-hand smoke
V0095	Undifferentiated Carcinoma; Large Cell	Stage IA	Y	N	0.47	85	70	5	2	5	1.68	2	4	0.11	1	No - Quit Smoking	50		Asbestos	Asbestos
V0096	Squamous Cell Carcinoma	Stage IIA	Y	N	0.29	100	60	20	1	4	0.89	3	4	0.44	2	Yes - Current Smoker	88	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0097	Squamous Cell Carcinoma	Stage IB	Y	N	1.8	80	75	25	4	3	1.71	5	3	0.38	2	No - Quit Smoking	60		None	None
V0098	Squamous Cell Carcinoma	Stage IB	Y	N	0.8	60	50	25	3	4	1.84	3	4	0.17	1	Yes - Current Smoker	52		None	None
V0099	Carcinoid Tumor: Typical	Stage IA	Y	N	0.14	90	90	0	1	8	0.85	4	9	0.08	1	Yes - Current Smoker	69		None	None
V0100	Adenocarcinoma	Stage IIIA	Y	N	0.4	70	70	10		12	1.2	1	8	0.46	1	Never Smoked			None	None
V0101	Squamous Cell Carcinoma	Stage IA	Y	N	0.57	50	50	0	1	4	0.37	1	4			No - Quit Smoking	50		None	None
V0103	Adenosquamous Carcinoma	Stage IA	Y	N	0.07	50	80	25		4	0.28	1	4			No - Quit Smoking	60	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0105	Adenocarcinoma	Stage IA	Y	N	0.27	100	80	0		8	0.38		8	0.3	2	Never Smoked			None	None
V0106	Adenocarcinoma	Stage IB	Y	N	0.76	20	60	0	1	8	0.32	3	8			No - Quit Smoking	30		None	None
V0107	Carcinoid Tumor: Typical	Stage IB	Y	N	0.21	100	70	0	1	4	0.81	1	4	0.37	1	No - Quit Smoking	25		None	None
V0108	Adenosquamous Carcinoma	Stage IIIA	Y	N	1.27	100	80	0	3	8	0.89	4	8	0.058	1	No - Quit Smoking	2		None	None
V0110	Mucinous Cystic Neoplasm	Stage IA	Y	N	0.92	70	30	0	3	8	1.93	5	8			Never Smoked			None	None
V0111	Adenocarcinoma	Stage IB	Y	N	0.44	85	50	0	1	8	0.47	4	8	0.2	2	No - Quit Smoking	60		None	None

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V0112	Adenocarcinoma	Stage IA	Y	Y	0.18	70	50	0		8	0.58	4	8	0.62	3	Yes - Current Smoker	4		None	None
V0113	Carcinoid Tumor: Typical	Stage IA	Y	N	0.24	50	85	0	2		0.48	5	8			No - Quit Smoking	1.5		None	None
V0114	Squamous Cell Carcinoma	Stage IIIA	Y	N	1.39	90	70	15	3	8	0.89	6	8	0.3	1	No - Quit Smoking	40		None	None
V0115	Adenosquamous Carcinoma	Stage IA	Y	N	0.56	90	85	0	2	8	0.26	4	8			No - Quit Smoking	50	AR	Burn pits, Second-hand smoke	Burn pits, Second-hand smoke
V0116	Adenocarcinoma	Stage IIA	Y	N	0.85	60	60	5	1	8	1.58	4	8	0.54	1	No - Quit Smoking	70		None	None
V0117	Carcinoid Tumor: Typical	Stage IB	Y	N	1.56	100	95	0	4	9	1.73	4	8	1.07	3	No - Quit Smoking	15	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0118	Squamous Cell Carcinoma	Stage IIIA	Y	N	3.86	100	40	5	5	8	3.85	7	8	0.26	1	Yes - Current Smoker	104		None	None
V0119	Adenocarcinoma	Stage IIA	Y	N	1.01	80	70	0	3	8	1.09	6	8	0.2	2	No - Quit Smoking	30	MR	Second-hand smoke, Toxic waste sites	Second-hand smoke, Toxic waste sites
V0120	Adenocarcinoma	Stage IV	Y	Y	1.27	50	80	50	3	8	0.79	4	8	0.41	2	Yes - Current Smoker	40		None	None
V0121	Adenocarcinoma	Stage IIA	Y	N	1	80	60	0	5	8	2.25	7	8	0.27	1	No - Quit Smoking	80	AF	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
V0121	Adenocarcinoma	Stage IIA	Y	N	1	90	60	5	5	8	2.25	7	8	0.27	1	No - Quit Smoking	80	AF	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
V0124	Adenocarcinoma	Stage IIIA	Y	N	1.19	90	60	5	3	8	1.39	3	8	0.18	1	No - Quit Smoking	15		None	None
V0125	Adenocarcinoma	Stage IA	Y	N	0.15	60	50	0	2	8	1.11	5	12	0.38	1	No - Quit Smoking	42		None	None
V0125	Adenocarcinoma: BAC features	Stage IA	Y	N	0.15	85	70	0	2	8	1.11	5	12	0.38	1	No - Quit Smoking	42		None	None
V0126	Adenocarcinoma	Stage IA	Y	N	0.49	15	60	0	1	8	1.8	2	9	0.45	1	Yes - Current Smoker	50		None	None
V0128	Adenocarcinoma	Stage IA	Y	N	0.77	10	50	0		8	1.04	3	8	0.05		No - Quit Smoking	40		None	None
V0130	Adenocarcinoma	Stage IIB	Y	N	0.89	60	60	0	2	8	0.8	3	8	0.4		No - Quit Smoking	15		None	None
V0131	Adenocarcinoma: BAC features	Stage IB	Y	N	0.7	40	40	0	2	4	1.04	2	4	0.39	2	Yes - Current Smoker	75	AR	Second-hand smoke	Second-hand smoke
V0132	Adenocarcinoma	Stage IA	Y	N	0.36	90	70	0	1	4	0.91	4	4	0.16	1	No - Quit Smoking	15		None	None
V0133	Adenosquamous Carcinoma	Stage IA	Y	N	0.12	100	95	5	1		0.4	2				Yes - Current Smoker	75		None	None

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
V0135	Squamous Cell Carcinoma	Stage IB	Y	N	1.42	90	70	10	2	4	1.4	4	4	1.52	3	No - Quit Smoking	64	AR	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
V0138	Adenosquamous Carcinoma	Stage IIA	Y	N	0.98	25	80	5	1	4	1.43	4	4	0.35	2	No - Quit Smoking	22		None	None
V0139	Adenosquamous Carcinoma	Stage IIIA	Y	N	0.314	1	80	0			1.94	3		0.125	1	No - Quit Smoking	0.5		None	None
V0141	Adenocarcinoma	Stage IIA	Y	N	1.32	50	50	0	1	4	0.73	3	4	0.67	2	No - Quit Smoking	40		None	None
V0142	Adenocarcinoma: BAC features	Stage IIB	Y	N	1.73	100	70	0	3	4	1.49	4	4	0.2	1	No - Quit Smoking	50	AR	Agent Orange, Burn pits, Jet fuel, Second-hand smoke	Agent Orange, Burn pits, Jet fuel, Second-hand smoke
V0143	Adenocarcinoma	Stage IIB	Y	N	0.71	90	70	10	2	4	0.4	2	4	0.09	1	No - Quit Smoking	25		None	None
V0144	Squamous Cell Carcinoma	Stage IA	Y	N	0.055	60	70	0	1		0.28	1				No - Quit Smoking	25		None	None
V0145	Adenocarcinoma: BAC features	Stage IA	Y	N	0.36	1	40	0	1		0.25	1	4	0.32	1	No - Quit Smoking	60		None	None
V0146	Carcinoid Tumor: Typical	Stage IA	Y	N	0.47	100	99	0	3	4	0.95	3	4	0.51	2	No - Quit Smoking	40		None	None
V0148	Adenocarcinoma: BAC features	Stage IA	Y	N	0.52	90	60	0	4	4	0.48	6	4			Yes - Current Smoker	82.5		None	None
V0148	Adenocarcinoma: BAC features	Stage IA	Y	N	0.52	50	50	0	4	4	0.48	6	4			Yes - Current Smoker	82.5		None	None
V0148	Adenocarcinoma: BAC features	Stage IA	Y	N	0.52	60	60	0	4	4	0.48	6	4			Yes - Current Smoker	82.5		None	None
V0149	Squamous Cell Carcinoma	Stage IA	Y	N	0.22	70	70	25	1		0.15	1				Yes - Current Smoker	30		None	None
V0150	Carcinoid Tumor: Typical	Stage IA	Y	N	0.18	95	99	0	1		0.98	3	4			Yes - Current Smoker	60		None	None
V0151	Squamous Cell Carcinoma	Stage IIA	Y	Y	0.33	1			1		1.6	3	4	0.28	1	Yes - Current Smoker	90		None	None
V0152	Bronchioalveolar Carcinoma	Stage IA	Y	Y	0.29	50	60	0		4	0.75	1	4	0.07	1	No - Quit Smoking	15		None	None
V0153	Carcinoid Tumor: Typical	Stage IA	Y	N	0.018	5			1					0.025	1	No - Quit Smoking	18	MR	Second-hand smoke	Second-hand smoke
V0155	Adenocarcinoma	Stage IB	Y	N	0.26	60	70	0	1	4	0.28	1	4	0.2	1	No - Quit Smoking	42		None	None
V0156	Adenocarcinoma	Stage IIA	Y	N	1.44	40	90	0	2	4	1.82	3	4	0.78	2	No - Quit Smoking	15	AR	Second-hand smoke	Second-hand smoke
V0158	Adenocarcinoma	Stage IA	Y	N	0.15	85	75	0		4	0.5	2	4	0.07	1	Yes - Current Smoker	120		None	None

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V0164	Adenocarcinoma	Stage IIA	Y	N	0.45	100	85	0	2	4	1.02	4	4			Never Smoked			None	None
V0165	Undifferentiated Carcinoma: Large Cell	Stage IV	Y	N	1.29	100	90	33	8	8	1.42	11	4	0.21	2	No - Quit Smoking	22.5		None	None
V0165	Undifferentiated Carcinoma: Large Cell	Stage IV	Y	N	1.29	60	75	5	8	8	1.42	11	4	0.21	2	No - Quit Smoking	22.5		None	None
V0166	Squamous Cell Carcinoma	Stage IIA	Y	N	0.98	50	80	0	2	4	0.98	2	4	0.24	2	Yes - Current Smoker	60		None	None
V0167	Adenocarcinoma	Stage IA	Y	N	0.072	98	70	0	1		0.75	1		0.076	1	Yes - Current Smoker	40		None	None
V0168	Adenocarcinoma	Stage IA	Y	N	0.39	100	85	0	2	4	0.43	3	4	0.25	2	No - Quit Smoking	40		None	None
V0169	Adenocarcinoma	Stage IA	Y	N	0.2	75	80	0			0.09	1				No - Quit Smoking	52.5		None	None
V0171	Squamous Cell Carcinoma	Stage IIA	Y	N	0.62	50	85	5	1	4	1.14	2	4	1.01	2	No - Quit Smoking	45	NV	Agent Orange, Asbestos, Nuclear-powered engines, Second-hand smoke	Agent Orange, Asbestos, Nuclear-powered engines, Second-hand smoke
V0173	Adenocarcinoma	Stage IA	Y	N	0.03	100	80	0	1		0.075	1				Yes - Current Smoker	6		None	None
V0176	Squamous Cell Carcinoma	Stage IIA	N	N												No - Quit Smoking	104		None	None
V0178	Adenocarcinoma	Stage IIA	Y	Y	1.08	100	95	5	6	4	0.87	6	4	0.196	1	No - Quit Smoking	15		None	None
V0179	Adenocarcinoma	Stage IA	Y	N	0.73	50	50	0	1	4	1.43	4	4	0.08	1	No - Quit Smoking	8		None	None
V0180	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.085	100	90	0			1.46	3		0.29	2	Yes - Current Smoker	55		None	None
V0181	Small Cell Carcinoma	Stage IB	Y	N	1.28	100	60	5	6	5	1.51	6	4	0.6	2	No - Quit Smoking	75	AR	Second-hand smoke	Second-hand smoke
V0182	Squamous Cell Carcinoma	Stage IIA	Y	N	1.24	100	80	0	5	4	1.96	6	4	0.23	2	No - Quit Smoking	100		None	None
V0185	Squamous Cell Carcinoma	Stage IA	Y	N	0.24	50	75	20	1	4	1.68	1	4	0.25	1	No - Quit Smoking	67.5		None	None
V0189	Carcinoid Tumor: Typical	Stage IA	Y	N	0.42	100	98	0	2	4	1.1	2	4	0.087	1	Never Smoked			Second-hand smoke	Second-hand smoke
V0190	Squamous Cell Carcinoma	Stage IIB	Y	N	0.76	90	95	0	3	4	1.08	3	4			No - Quit Smoking	60	AR	Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
V0191	Squamous Cell Carcinoma	Stage IA	Y	N	0.13	100	90	30	1		0.63	2		0.167	1	Yes - Current Smoker	55		None	None
V0194	Adenocarcinoma	Stage IIA	Y	Y	1.71	1	90	85	3		1.76	4		0.15	1	No - Quit Smoking	40		None	None

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V0195	Adenocarcinoma	Stage IB	Y	N	0.8	90	80	0	1	4	0.75	3	4	0.8	3	No - Quit Smoking	40		None	None
V0197	Squamous Cell Carcinoma	Stage IA	Y	N	0.75	100	70	2	2	4	1.55	3	4	0.69	2	No - Quit Smoking	60		None	None
V0198	Adenocarcinoma	Stage IIA	Y	N	0.41	95	80	0	1	4	1.35	2	4	0.098	1	No - Quit Smoking	37.5		None	None
V0201	Adenocarcinoma	Stage IIIA	Y	N	0.21	45	75	0			0.63	1				No - Quit Smoking	37.5		Jet fuel, Second-hand smoke	Jet fuel, Second-hand smoke
V0203	Adenocarcinoma: BAC features	Stage IA	Y	N	0.61	90	85	0	3	4	0.59	4	4	0.43	2	Never Smoked			None	None
V0204	Adenocarcinoma	Stage IIIA	Y	N	0.02	20	50	0			0.27	1				Yes - Current Smoker	75	AF	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
V0206	Adenocarcinoma	Stage IA	Y	N	0.08	90	90	0	1		0.97	1		0.057	1	No - Quit Smoking	72		None	None
V0208	Adenocarcinoma	Stage IA	Y	N	0.11	95	40	0	1		1.41	1		0.36	1	Yes - Current Smoker	80		None	None
V0209	Adenocarcinoma	Stage IB	Y	N	1.02	95	85	0	2	4	1.34	3	4	0.41	1	No - Quit Smoking	11		None	None
V0210	Squamous Cell Carcinoma	Stage IIIA	Y	N	2.96	100	20	40	5	4	3.29	6	4	0.26	1	No - Quit Smoking	20	NV	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
V0213	Squamous Cell Carcinoma	Stage IB	Y	N	0.3	100	98	0	1	4	0.74	1	4	0.172	1	Yes - Current Smoker	40		None	None
V0214	Adenocarcinoma	Stage IA	Y	N	0.85	15	90	0			0.35	1		0.098	1	Yes - Current Smoker	34		None	None
V0215	Carcinoid Tumor: Typical	Stage IA	Y	N	0.39	100	90	0	1	4	0.23	1	4	0.165	1	No - Quit Smoking	7.5		None	None
V0216	Adenocarcinoma	Stage IB	Y	N	0.71	90	50	0	2	4	0.76	3	4	0.078	1	Never Smoked			None	None
V0218	Adenocarcinoma: BAC features	Stage IA	Y	N	0.38	40	80	0			1.2	2		0.12	1	No - Quit Smoking	35		None	None
V0220	Adenocarcinoma	Stage IA	Y	N	1.01	45	80	0	1	4	2.25	5	4	0.22	1	No - Quit Smoking	60		None	None
V0221	Adenocarcinoma: BAC features	Stage IA	Y	N	0.99	80	90	0	1	4	0.95	5	4			No - Quit Smoking	60		None	None
V0224	Adenocarcinoma	Stage IA	Y	N	0.86	75	60	0		4	0.22					No - Quit Smoking	80		None	None
V0225	Squamous Cell Carcinoma	Stage IA	Y	N	0.75	33	70	0	1		2.97	6		1.18	2	No - Quit Smoking	40		None	None
V0226	Undifferentiated Carcinoma: Large Cell	Stage IB	Y	N	1.01	100	95	60	4	4	0.91	4	4	0.43	2	No - Quit Smoking	37.5		None	None

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V0229	Squamous Cell Carcinoma	Stage IB	Y	N	1.4	100	80	5	6	4	0.8	3	4	0.1		No - Quit Smoking	50	NV	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
V0231	Adenocarcinoma	Stage IIA	Y	N	0.35	33	70	0			0.25	1		0.31		Yes - Current Smoker	28		None	None
V0232	Squamous Cell Carcinoma	Stage IIIA	Y	N	1.8	75	50	5	3	4	1.3	4	4	0.33		Yes - Current Smoker	60		None	None
V0233	Squamous Cell Carcinoma	Stage IA	Y	N	0.32	90	50	5	1	4	0.7	2	4	0.17		Yes - Current Smoker	10		None	None
V0234	Adenocarcinoma	Stage IA	Y	Y	0.65	90	90	5	1	4	0.48	2	4			Never Smoked			None	None
V0235	Adenocarcinoma: BAC features	Stage IA	Y	N	1.24	25	85	0			0.49	2		0.12	1	No - Quit Smoking	22.5		None	None
V0236	Squamous Cell Carcinoma	Stage IA	Y	N	0.62	100	60	10	3	4	0.52	2	4	0.35	1	Yes - Current Smoker	106		None	None
V0237	Squamous Cell Carcinoma	Stage IIB	Y	N	2	75	70	10	8	4	1.73	9	4	0.06	1	No - Quit Smoking	33		None	None
V0240	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.13	40	95	0	1		0.56	3		0.23	2	No - Quit Smoking	4		None	None
V0241	Adenocarcinoma	Stage IIB	Y	N	0.68	5	95	0	1		0.33	1				No - Quit Smoking	80	AR	Second-hand smoke	Second-hand smoke
V0242	Squamous Cell Carcinoma	Stage IA	Y	N	0.06	100	70	20	1		0.16	1				No - Quit Smoking	51	MR	Second-hand smoke	Second-hand smoke
V0245	Adenocarcinoma	Stage IIB	Y	N	0.08	75	50	0	1		0.25	1				No - Quit Smoking	57		None	None
V0247	Adenocarcinoma	Stage IIIA	Y	N	0.15	100	80	0	1		0.48	1		0.11	1	No - Quit Smoking	10		None	None
V0248	Adenocarcinoma	Stage IA	Y	N	1.43	95	80	0	4	4	0.93	5	4	0.11	1	Never Smoked			None	None
V0249	Adenocarcinoma: Mucinous Features	Stage IIA	Y	N	0.56	99	85	0	1	4	1.17	3	4	0.25	1	No - Quit Smoking	25		None	None
V0251	Adenocarcinoma	Stage IA	Y	N	0.08	75	50	0	1		0.31	1				No - Quit Smoking	94		None	None
V0252	Squamous Cell Carcinoma	Stage IA	Y	N	0.83	20	50	10	1		0.32	1		0.13	1	No - Quit Smoking	30		None	None
V0253	Squamous Cell Carcinoma	Stage IA	Y	N	0.12	100	80	5	1		1.3	3		1.38	1	No - Quit Smoking	66		None	None
V0256	Adenocarcinoma	Stage IIA	Y	N	1.8	100	60	0	5	4	1.22	4	4	0.219	1	Never Smoked			None	None
V0257	Adenocarcinoma	Stage IIA	Y	N	0.69	100	85	0	2	4	0.68	2	4	0.187	1	No - Quit Smoking	68		None	None
V0259	Adenocarcinoma	Stage IIIA	Y	N	1.39	85	30	5	3	4	1.17	6	4	0.54	2	No - Quit Smoking	25		None	None
V0266	Squamous Cell Carcinoma	Stage IIB	Y	N	1.13	85	80	5	4	4	0.52	2	4			No - Quit Smoking	70		None	None

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V0269	Squamous Cell Carcinoma	Stage IIIA	Y	Y	0.077	1	90	0	1		0.5	2		0.4	1	No - Quit Smoking	50		None	None
V0273	Squamous Cell Carcinoma	Stage IIIB	Y	N	0.82	40	85	15	1	4	1.26	3	4	0.3	2	No - Quit Smoking	20		None	None
V0274	Squamous Cell Carcinoma	Stage IA	Y	N	0.15	20	30	10	2		0.39	3				No - Quit Smoking	90	AR	Second-hand smoke	Second-hand smoke
V0275	Squamous Cell Carcinoma	Stage IIA	Y	N	0.77	100	80	2	3	4	1.88	4	4	0.15	1	No - Quit Smoking	45		None	None
V0276	Adenocarcinoma: BAC features	Stage IB	Y	N	1.3	90	70	0	4	4	0.88	4	4	0.31	2	Never Smoked			None	None
V0279	Adenocarcinoma	Stage IIB	Y	N	0.29	95	60	0	1	4	1.32	3	4	0.48	2	Yes - Current Smoker	40		None	None
V0282	Squamous Cell Carcinoma	Stage IA	Y	N	0.4	30	40	0	1		0.16	1				Yes - Current Smoker	109.5		None	None
V0284	Adenocarcinoma	Stage IA	Y	N	0.57	50	60	0	2	4	1.06	4	4	0.2		Never Smoked			None	None
V0287	Adenocarcinoma	Stage IA	Y	N	0.14	85	60	5	1	4	1.51	4	4	0.45	2	No - Quit Smoking	60	AR	Second-hand smoke	Second-hand smoke
V0289	Squamous Cell Carcinoma	Stage IA	Y	N	0.22	90	50	0	1	4	1.35	5	4	0.17	2	Yes - Current Smoker	75		None	None
V0290	Adenocarcinoma: BAC features	Stage IA	Y	N	0.07	85	70	0	1		0.1	1				No - Quit Smoking	12.5		None	None
V0291	Adenocarcinoma: BAC features	Stage IA	Y	N	0.32	35	40	0	1	4	1.07	3	4	0.28	1	No - Quit Smoking	64.5		None	None
V0292	Adenocarcinoma	Stage IA	Y	N	0.09	60	70	0	1		0.78	3		0.11	1	Yes - Current Smoker	15		Second-hand smoke	Second-hand smoke
V0293	Adenocarcinoma: BAC features	Stage IA	Y	N	0.37	95	70	0	2	4	0.37	2	4			No - Quit Smoking	50		None	None
V0295	Adenocarcinoma	Stage IA	N	N							1.26	4		0.11	1	No - Quit Smoking	50		None	None
V0297	Adenocarcinoma: BAC features	Stage IIA	Y	N	0.92	90	50	0	2	4	0.87	3	4	0.42	2	Never Smoked			None	None
V0299	Adenocarcinoma: BAC features	Stage IA	Y	N	0.32	80	40	0	2	4	0.53	2	4			No - Quit Smoking	2.5		None	None
V0302	Carcinoid Tumor: Typical	Stage IA	Y	N	0.2	60	95	0	1	4	0.99	1	4	0.24	1	No - Quit Smoking	6	NV	Nuclear-powered engines	Nuclear-powered engines
V0304	Carcinoid Tumor: Typical	Stage IA	Y	N	0.33	70	95	0	2	4	0.6	2	4	0.083	1	Never Smoked			None	None
V0311	Adenocarcinoma	Stage IA	Y	N	0.73	40	40	5	3	4	0.94	3	4	0.13	1	Yes - Current Smoker	40		None	None
V0314	Adenocarcinoma	Stage IIIA	Y	N	0.66	85	70	10	2	4	0.2	2	4	0.06	1	Yes - Current Smoker	39		None	None
V0317	Squamous Cell Carcinoma	Stage IB	Y	N	0.61	95	70	0	3	4	1.51	4	4	0.62	2	No - Quit Smoking	70		None	None

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W0001	Squamous Cell Carcinoma	Stage IB	Y	N	0.98	40	80	5	1	2	1.71	2		0.25	2	Yes - Current Smoker			None	None
W0002	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.24	80	50	0	1	3	0.37	1	4	0.05	2	No - Quit Smoking	35		None	None
W0004	Adenocarcinoma	Stage IB	Y	N	1.25	95	60	10	8	2	0.63	1		0.83	3	No - Quit Smoking	45	AR	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0007	Adenocarcinoma	Stage IA	Y	N	0.14	60	70	5	2	3	0.53	2		0.37	2	Yes - Current Smoker			None	None
W0008	Small Cell Carcinoma	Stage IIIA	Y	N	0.2	85	90	30	2	7	0.37	1	8	0.09	2	Yes - Current Smoker			None	None
W0010	Carcinoid Tumor: Typical	Stage IA	Y	N	0.16	100	95	0	3	3	0.09	4		0.03	1	Never Smoked			None	None
W0011	Neuroendocrine Carcinoma: Large Cell	Stage IA	Y	N	0.24	90	90	30	2	3	0.22	3				Yes - Current Smoker			None	None
W0013	Adenocarcinoma	Stage IB	Y	N	0.8	100	70	25	2		1.13	4	3	0.36	3	No - Quit Smoking	44		None	None
W0014	Squamous Cell Carcinoma	Stage IB	Y	N	0.26	100	80	30	2	2	0.23	3				Yes - Current Smoker			None	None
W0015	Adenocarcinoma	Stage IA	Y	N	0.06	100	40	0	2		0.07	2				Yes - Current Smoker			None	None
W0016	Adenocarcinoma	Stage IA	Y	N		100	60	0	1	3	0.1	2		0.05	2	Never Smoked			None	None
W0019	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.8	100	60	0	2	3	0.98	3		0.63		No - Quit Smoking	22.5		None	None
W0020	Squamous Cell Carcinoma	Stage IIA	Y	N	0.98	80	80	10	3	3	0.71	3	4	0.18	3	No - Quit Smoking	15		None	None
W0021	Adenocarcinoma	Stage IA	Y	N	0.19	95	90	0		3	0.3	1				No - Quit Smoking	60		None	None
W0022	Squamous Cell Carcinoma	Stage IA	Y	N	0.23	100	60	20	2	2	0.46	3				Yes - Current Smoker			None	None
W0023	Squamous Cell Carcinoma	Stage IB	Y	N	0.65	60	50	5	3	3	0.28	4				Yes - Current Smoker			None	None
W0024	Adenocarcinoma	Stage IIIB	Y	N	0.37	60	70	0	1	3	0.42	2	4			No - Quit Smoking	30		None	None
W0025	Adenocarcinoma	Stage IA	Y	N	0.15	90	50	20	1	3	0.1	1	4			No - Quit Smoking	24		None	None
W0026	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.89	70	70	25	2	3	0.68	4		0.25	3	Yes - Current Smoker	36		None	None
W0028	Squamous Cell Carcinoma		Y	N	0.11	100	40	50	1	3	0.25	2	4			No - Quit Smoking	90		None	None
W0029	Neuroendocrine Carcinoma: Large Cell	Stage IA	Y	N	0.35	100	85	40	2	3	1.24	3	4	0.25	2	No - Quit Smoking			None	None

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
W0030	Adenocarcinoma	Stage IIA	Y	N		100	30	30	4	3		1	4	0.156	2	No - Quit Smoking	35	AF	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
W0032	Adenocarcinoma	Stage IA	Y	N	0.45	100	80	0	1	3	0.145	2				No - Quit Smoking	30		None	None
W0033	Adenocarcinoma	Stage IB	Y	N	0.76	100	60	0	3	3	1.18	2	4	0.35	2	No - Quit Smoking	81		None	None
W0036	Squamous Cell Carcinoma	Stage IIIA	Y	N	1.12	60	50	5	1	3	1.3	2		0.5	2	Yes - Current Smoker	96		None	None
W0038	Adenocarcinoma	Stage IIA	Y	N	0.33	60	50	0	1	3	0.08	1	4			No - Quit Smoking	50	MR	None	None
W0039	Squamous Cell Carcinoma	Stage IB	Y	N	0.76	100	70	5	2	3	0.59	2	4	0.21	2	No - Quit Smoking	30		None	None
W0042	Adenocarcinoma	Stage IIB	Y	N	0.31	60	60	0	1	3	0.12	1	4			No - Quit Smoking			None	None
W0043	Adenocarcinoma	Stage IIIA	Y	N	0.34	60	40	0	1	3	0.48	2		0.15	2	No - Quit Smoking	33		None	None
W0044	Adenocarcinoma	Stage IA	Y	N	0.27	60	70	0		3	0.17	2				Yes - Current Smoker	80		None	None
W0045	Adenocarcinoma	Stage IB	Y	N	0.36	85	50	0	2	3	0.55	1	4	0.1	2	No - Quit Smoking	40	MR	None	None
W0046	Adenocarcinoma	Stage IIB	Y	N	0.96	100	30	0	5	3	0.38	4		0.2	2	No - Quit Smoking			None	None
W0047	Squamous Cell Carcinoma	Stage IIA	Y	N	1.31	100	60	5	5	3	1.31	5	4	0.23	2	No - Quit Smoking	120		None	None
W0051	Adenocarcinoma	Stage IA	Y	N	0.22	90	40	0	1	3	0.4	3				Yes - Current Smoker			None	None
W0052	Adenocarcinoma	Stage IB	Y	N	0.08	100	50	0	2		0.056	2				No - Quit Smoking	100		None	None
W0053	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.29	95	70	5	2	3	0.63	2	4			No - Quit Smoking	50		None	None
W0054	Adenocarcinoma	Stage IIA	Y	N	0.026	60	40	5	2		0.067	2		0.017	2	No - Quit Smoking			None	None
W0055	Squamous Cell Carcinoma	Stage IIA	Y	N	0.54	100	70	80	3	3		2		0.077	1	Yes - Current Smoker	40		None	None
W0057	Adenocarcinoma	Stage IIIA	Y	N	0.32	1	2	0	1		0.32	2		0.25	2	No - Quit Smoking	50		None	None
W0058	Squamous Cell Carcinoma	Stage IV	Y	Y	0.22	95	70	15	2	2	0.19	2		0.08	1	Yes - Current Smoker	50		None	None
W0060	Adenocarcinoma	Stage IB	Y	N	0.25	60	50	0	2	3	0.31	2		0.19	1	Never Smoked			None	None
W0062	Adenocarcinoma	Stage IIIA	Y	N	0.14	90	60	0	1	3	0.23	1		0.11	1	Never Smoked			None	None
W0063	Adenocarcinoma	Stage IA	Y	N		90	25	0	2	3	0.22	2	4			No - Quit Smoking			None	None
W0064	Adenocarcinoma	Stage IA	Y	N	0.3	100	30	0	2	3	0.09		4			No - Quit Smoking	50	AR	Second-hand smoke	Second-hand smoke
W0066	Adenocarcinoma	Stage IIB	Y	N	0.36	85	40	15	3	3	0.49	4		0.13	1	No - Quit Smoking			None	None
W0067	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.14	90	70	0		3	0.23	1		0.08	1	No - Quit Smoking	24		None	None

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
W0070	Adenocarcinoma	Stage IIB	Y	N	1.03	95	75	0	2	10	0.75	3	8			No - Quit Smoking		AR	None	None
W0071	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.56	90	50	5	1	8	0.57	3	10	0.25	2	No - Quit Smoking	50		None	None
W0072	Adenocarcinoma	Stage IIIA	Y	N	0.2	90	30	0		5	0.62	1	5	0.29	2	No - Quit Smoking	45		None	None
W0074	Squamous Cell Carcinoma	Stage IIIA	Y	N	1.89	100	25	10		2	0.92	1	5	0.16	2	No - Quit Smoking	35	AR	Second-hand smoke	Second-hand smoke
W0076	Adenocarcinoma	Stage IV	Y	N	0.32	100	20	0	1	8	0.34	1	5			No - Quit Smoking	50		None	None
W0079	Squamous Cell Carcinoma	Stage IA	Y	N	0.28	70	60	2		5		3	4	0.15	1	No - Quit Smoking			None	None
W0079	Squamous Cell Carcinoma	Stage IA	Y	N	0.28	70	60	2		5		3	4	0.15	1	No - Quit Smoking			None	None
W0080	Adenocarcinoma	Stage IV	Y	N	0.18	20	10	50	1	4	0.26	1	4			No - Quit Smoking	27		None	None
W0080	Adenocarcinoma	Stage IV	Y	N	0.18	20	10	50	1	4	0.26	1	4			No - Quit Smoking	27		None	None
W0081	Adenocarcinoma	Stage IIA	Y	N	0.77	100	70	30	2	4	0.58	3	8	0.086	1	Yes - Current Smoker	140	NV	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
W0082	Adenocarcinoma	Stage IB	Y	N	0.18	90	60	2		10	0.34		10			No - Quit Smoking	88.5	AF	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
W0082	Adenocarcinoma	Stage IB	Y	N	0.18	90	60	2		10	0.34		10			No - Quit Smoking	88.5	AF	Agent Orange, Asbestos, Jet fuel, Second-hand smoke	Agent Orange, Asbestos, Jet fuel, Second-hand smoke
W0084	Squamous Cell Carcinoma	Stage IA	Y	N	0.21	70	70	20	1	4	0.22	1	4			No - Quit Smoking	60	AF	Second-hand smoke	Second-hand smoke
W0087	Small Cell Carcinoma	Stage IIB	Y	N	0.26	65	85	5	1	5	0.84	1	4			No - Quit Smoking	40	MR	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0089	Squamous Cell Carcinoma	Stage IA	Y	N	0.46	20	75	15	2	4	3.07	3	4	0.23	1	No - Quit Smoking	40		Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0094	Adenocarcinoma	Stage IA	Y	N	0.36	90	70	2	1	4	0.21	5	8		2	Yes - Current Smoker			None	None
W0095	Adenocarcinoma	Stage IA	N	N							1.35	3		0.11	1	Yes - Current Smoker			Second-hand smoke	Second-hand smoke
W0096	Squamous Cell Carcinoma	Stage IIA	Y	N	0.49	90	70	20	2	3	0.84	3	3	0.21	1	Yes - Current Smoker			None	None

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W0097	Undifferentiated Carcinoma: Large Cell		Y	N	0.57	100	50	10	3	9	1.18	3	8	0.32	1	No - Quit Smoking	94		None	None
W0098	Adenocarcinoma	Stage IA	Y	N	0.26	40	75	2		8	2.26	2	8	0.256	1	Yes - Current Smoker		AR	Second-hand smoke	Second-hand smoke
W0100	Adenocarcinoma	Stage IIIA	Y	N	0.25	60	60	2	1	8	1.9	2	8	0.335	1	No - Quit Smoking	120		None	None
W0102	Adenocarcinoma	Stage IIIA	Y	N	1.27	60	60	15	2	8	0.75	3	8	0.17	1	No - Quit Smoking	20	AR	Second-hand smoke	Second-hand smoke
W0103	Adenocarcinoma	Stage IA	Y	N	0.2	60	40	40	1		0.53	2	8	0.138	1	No - Quit Smoking	60		None	None
W0105	Bronchioalveolar Carcinoma	Stage IIB	Y	N	1.69	95	80	0	5	9	1.08	4	8	0.051	1	No - Quit Smoking	25		None	None
W0107	Adenocarcinoma	Stage IB	Y	N	0.52	95	60	0	3	8	0.44	3	8	0.1	1	Never Smoked			None	None
W0109	Adenocarcinoma	Stage IIB	Y	N	1.2	100	60	15	3	4	0.78	3	4	0.27	1	No - Quit Smoking	20		None	None
W0111	Adenocarcinoma	Stage IA	Y	N	0.22	60	70	0		4	0.9	2	3	0.018	1	No - Quit Smoking	33.75		None	None
W0112	Adenocarcinoma	Stage IB	Y	Y	0.39	90	50	30		4	1.03	2	4	0.26	1	No - Quit Smoking	24	AR	Second-hand smoke	Second-hand smoke
W0113	Adenocarcinoma	Stage IIIA	Y	N	0.16	70	80	10			0.195	1				No - Quit Smoking	30		None	None
W0114	Adenocarcinoma	Stage IIIA	Y	N	0.39	100	80	10	1	4	1.52	2	4			No - Quit Smoking	7	AF	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0115	Squamous Cell Carcinoma	Stage IA	Y	N	0.045	100	85	5	1		0.137	1				No - Quit Smoking			None	None
W0116	Adenocarcinoma	Stage IIA	Y	N	0.24	20	40	0	1		0.64	2		0.15	1	No - Quit Smoking	25		None	None
W0119	Adenocarcinoma	Stage IA	Y	N	0.29	100	10	0	1	4	0.75	1	4	0.11	1	No - Quit Smoking	60		None	None
W0120	Bronchioalveolar Carcinoma	Stage IA	Y	N	0.09	25	70	0	1		0.28	1		0.12	1	Never Smoked			None	None
W0122	Undifferentiated Carcinoma: Large Cell	Stage IB	Y	N	0.31	100	80	10	1	4	0.61	1	8			Never Smoked		AF	Asbestos, Jet fuel, Second-hand smoke	Asbestos, Jet fuel, Second-hand smoke
W0124	Adenocarcinoma	Stage IB	Y	N	0.09	100	50	0		4	0.21		4			Yes - Current Smoker	25		None	None
W0125	Mucoepidermoid Carcinoma	Stage IA	Y	N	0.124	70	40	0	1		0.26	1				No - Quit Smoking	15		None	None
W0127	Squamous Cell Carcinoma	Stage IA	Y	N	0.22	40	50	10	1		0.14	1				Yes - Current Smoker	43		None	None
W0128	Small Cell Carcinoma	Stage IIA	Y	N	0.55	90	70	15	3	9	0.52	3	8	0.26	2	Yes - Current Smoker	40	NV	Asbestos, Nuclear weapons, Second-hand smoke	Asbestos, Nuclear weapons, Second-hand smoke

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
W0129	Undifferentiated Carcinoma: Large Cell	Stage IIA	Y	N	0.32	100	50	40	1		0.4	1		0.18	1	No - Quit Smoking	90		None	None
W0131	Adenocarcinoma	Stage IIA	Y	N	0.12	90	75	0			0.126	1				Yes - Current Smoker	5	AR	Second-hand smoke	Second-hand smoke
W0133	Squamous Cell Carcinoma	Stage IA	Y	N	0.16	85	80	20	1		0.2	1				No - Quit Smoking	67.5	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0135	Squamous Cell Carcinoma	Stage IB	Y	N	0.3	100	50	20	1	4	0.16	1	4	0.05	1	No - Quit Smoking	125	CG	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0139	Squamous Cell Carcinoma	Stage IB	Y	N	0.51	50	60	10	1	4	0.54	1	4			No - Quit Smoking	67.5		Asbestos, Second-hand smoke	Asbestos, Second-hand smoke
W0140	Adenocarcinoma: BAC features	Stage IB	Y	N	0.22	100	50	0	1	4	1.96	3	4	0.245	1	No - Quit Smoking	80		None	None
W0141	Squamous Cell Carcinoma	Stage IB	Y	N	0.23				1		0.23	1				No - Quit Smoking	47		None	None
W0142	Adenocarcinoma	Stage IIIA	Y	N	0.42	60	40	10	1	4	0.78	2		0.13	1	Yes - Current Smoker	75		None	None
W0143	Adenocarcinoma	Stage IIA	Y	N	0.5	60	70	0	1	4	0.52	2	4	0.14	1	Yes - Current Smoker	18		None	None
W0144	Adenocarcinoma	Stage IIIA	Y	N	0.29	90	70	5	1	4	0.7	1	4	0.1	1	Never Smoked			None	None
W0145	Squamous Cell Carcinoma	Stage IIA	Y	N	0.25	100	90	5	1	4	0.26	1	4			No - Quit Smoking	40		None	None
W0151	Adenocarcinoma		Y	N	0.51	100	30	0	2	4	0.76	2	4	0.1	1	No - Quit Smoking	43		None	None
W0152	Adenocarcinoma	Stage IIIA	Y	N	1.17	95	90	0	2	4	0.77	2	4	0.4	1	Never Smoked			None	None
W0153	Adenocarcinoma	Stage IIIA	Y	N	1.18	100	95	5	4	4	1.04	5	4	0.185	1	No - Quit Smoking	150	AR	Second-hand smoke	Second-hand smoke
W0159	Carcinoid Tumor: Typical	Stage IA	Y	N	0.04	100	95	0	1		0.36	1		0.025	1	Never Smoked			None	None
W0161	Adenocarcinoma	Stage IA	Y	N	0.05	100	50	0	1		0.094	1				Yes - Current Smoker	112		None	None
W0162	Adenocarcinoma: Mucinous Features	Stage IA	Y	N	0.23	90	80	0			0.22	1				Never Smoked			None	None
W0163	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.9	100	95	50	3	4	1.06	3	4	0.16	1	Yes - Current Smoker	75		None	None
W0165	Squamous Cell Carcinoma	Stage IIB	Y	N	0.39	100	80	0	1	4	0.29	1	4			Yes - Current Smoker			None	None

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
W0166	Sarcomatoid Carcinoma	Stage IB	Y	N	0.5	100	95	5	2	4	0.37	2	4			No - Quit Smoking	74		Sarin or chemical weapons, Second-hand smoke	Sarin or chemical weapons, Second-hand smoke
W0168	Adenocarcinoma	Stage IA	Y	N	0.16	80	75	0		4	0.024		4			No - Quit Smoking	67.5		None	None
W0173	Squamous Cell Carcinoma	Stage IA	Y	N	0.137	100	20	0	1		0.33	1		0.1	1	Yes - Current Smoker	52		None	None
W0177	Carcinoid Tumor: Typical	Stage IA	Y	N	0.065	100	98	0	1		0.185	1				Never Smoked			None	None
W0179	Carcinoid Tumor: Typical	Stage IIB	Y	N	0.14	100	100	0	1		0.1	1				Never Smoked			None	None
W0180	Adenocarcinoma	Stage IIIB	Y	N	0.08	100	40	5	1		0.16	1				No - Quit Smoking	40		None	None
W0181	Squamous Cell Carcinoma	Stage IA	Y	N	0.05	100	70	5	1		0.25	1				No - Quit Smoking	76		None	None
W0182	Squamous Cell Carcinoma		Y	N	0.11	90	20	0	1		0.31	1				No - Quit Smoking	31		None	None
W0183	Adenocarcinoma	Stage IIA	Y	N	0.085	100	90	0			0.055	1				Never Smoked			None	None
W0185	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.73	50	60	10	1	4	1.42	2	4	0.29	1	No - Quit Smoking	81		None	None
W0187	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.31	90	85	0	1	4	0.67	1	4	0.16	1	No - Quit Smoking	4.5		None	None
W0189	Squamous Cell Carcinoma	Stage IA	Y	N	0.07	100	90	5			0.065	1				No - Quit Smoking	67.5	AR	Second-hand smoke	Second-hand smoke
W0190	Carcinoid Tumor: Typical	Stage IA	Y	N	0.18	85	98	0	1		0.26	1		0.21	1	Never Smoked			None	None
W0194	Adenocarcinoma	Stage IIB	Y	N	0.24	85	75	80			0.2	1		0.1	1	No - Quit Smoking	102.5		None	None
W0196	Carcinoid Tumor: Typical	Stage IIB	Y	N	0.2	100	80	0	1	4	0.21	1	4	0.08	1	Never Smoked			None	None
W0197	Squamous Cell Carcinoma	Stage IIA	Y	N	0.38	100	45	10	1	4	0.22	1	4			Yes - Current Smoker	16		None	None
W0199	Adenocarcinoma	Stage IIB	Y	N	1.16	100	90	0	3	4	0.62	2	4			Yes - Current Smoker	51		None	None
W0200	Adenocarcinoma: Mucinous Features	Stage IIB	Y	N	0.43	100	95	0	1	4	0.42	1	4	0.1	1	Yes - Current Smoker	40		None	None
W0201	Bronchioalveolar Carcinoma	Stage IIB	Y	N	0.29	95	90	0		4	0.24	1	4	0.12	1	Never Smoked			None	None
W0202	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.55						0.45	4		0.215	1	Yes - Current Smoker	100		None	None
W0203	Squamous Cell Carcinoma	Stage IB	Y	N	0.41	100	50	0	3	4	0.92	3	4	0.23	1	Yes - Current Smoker	20		None	None

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W0208	Adenocarcinoma	Stage IIA	Y	N	0.21	100	40	0	1	4	0.33	1	4	0.118	1	No - Quit Smoking	68		None	None
W0209	Adenocarcinoma	Stage IB	Y	N	0.22	33	30	0	1		0.13	1		0.33	1	No - Quit Smoking	60		None	None
W0210	Adenocarcinoma	Stage IIA	Y	N	0.26	45	50	0			0.147	1				No - Quit Smoking	56	AF	Agent Orange, Asbestos, Burn pits, Jet fuel, Radon, Second-hand smoke, Toxic waste sites	Agent Orange, Asbestos, Burn pits, Jet fuel, Radon, Second-hand smoke, Toxic waste sites
W0211	Sarcomatoid Carcinoma	Stage IIA	Y	N	0.63	100	95	5	3	4	0.5	2	4	0.15	1	Yes - Current Smoker	60		None	None
W0213	Adenosquamous Carcinoma	Stage IA	Y	N	0.24	100	95	0		4	0.18	1	4			Never Smoked			None	None
W0215	Adenocarcinoma	Stage IB	Y	N	0.12	100	75	0			0.22	1				No - Quit Smoking	120		Second-hand smoke	Second-hand smoke
W0216	Adenocarcinoma	Stage IB	Y	N	0.14						0.16			0.04		Never Smoked			None	None
W0217	Adenocarcinoma	Stage IA	Y	N	0.35	80	30	0	1	4	0.22	1	4			No - Quit Smoking	40	MB	Asbestos, Depleted Uranium, Jet fuel, Nuclear weapons, Nuclear-powered engines, Radon, Second-hand smoke	Asbestos, Depleted Uranium, Jet fuel, Nuclear weapons, Nuclear-powered engines, Radon, Second-hand smoke
W0218	Squamous Cell Carcinoma	Stage IA	Y	N	0.098	100	80	0	1		0.2	1				No - Quit Smoking	20	NG	Second-hand smoke	Second-hand smoke
W0220	Adenocarcinoma	Stage IA	Y	N	1.26	100	33	0	2	4	1.2	2	4			No - Quit Smoking	60	NV	Second-hand smoke	Second-hand smoke
W0221	Carcinoid Tumor: Typical	Stage IA	Y	N	0.08	100	99	0	1		0.05	1				Never Smoked		AR	Burn pits, Jet fuel, Sarin or chemical weapons, Second-hand smoke	Burn pits, Jet fuel, Sarin or chemical weapons, Second-hand smoke
W0222	Squamous Cell Carcinoma	Stage IIB	Y	N	0.55	90	90	20	2	4	0.32	1	4			No - Quit Smoking	75		None	None
W0224	Squamous Cell Carcinoma	Stage IA	Y	N	0.12	100	90	0	1		0.1	1				No - Quit Smoking	35		None	None
W0228	Squamous Cell Carcinoma	Stage IB	Y	N	0.46	40	70	25	1		0.36	1				No - Quit Smoking	48		None	None

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
W0231	Adenocarcinoma	Stage IA	Y	N	0.107	95	80	0			0.16	1				No - Quit Smoking	80		Agent Orange, Jet fuel, Second-hand smoke	Agent Orange, Jet fuel, Second-hand smoke
W0232	Adenocarcinoma	Stage IA	Y	N	0.28	90	85	0		4	0.52	1	4			No - Quit Smoking	50	AR	Sarin or chemical weapons, Second-hand smoke	Sarin or chemical weapons, Second-hand smoke
W0233	Sarcomatoid Carcinoma	Stage IA	Y	N	0.086	100	95	0	1		0.15					Yes - Current Smoker	41.25		None	None
W0234	Adenocarcinoma	Stage IA	Y	N	0.03	100	80	0	1		0.06	1				No - Quit Smoking	20	NG	Second-hand smoke	Second-hand smoke
W0235	Adenocarcinoma	Stage IA	Y	N	0.14	100	50	0	1		0.115	1				Never Smoked			None	None
W0236	Squamous Cell Carcinoma	Stage IIIA	Y	N	0.098	100	50	0	1		0.16	1				Yes - Current Smoker	100		None	None
W0237	Adenocarcinoma	Stage IA	Y	N	0.082	100	30	0	1		0.14	1				Never Smoked			None	None
W0238	Squamous Cell Carcinoma	Stage IB	Y	N	1.36	100	30	10	6	4	0.87	5	4	0.25	1	Yes - Current Smoker	126		None	None
W0241	Adenocarcinoma	Stage IA	Y	N	0.097	40	75	0			0.24					No - Quit Smoking	30		None	None
W0243	Squamous Cell Carcinoma	Stage IA	Y	N	0.25	95	50	5	1	4	0.7	1	4			Yes - Current Smoker	150		None	None
W0244	Adenocarcinoma	Stage IA	Y	N	0.1	98	75	0			0.24	1		0.14	1	No - Quit Smoking	60		None	None
W0246	Squamous Cell Carcinoma	Stage IB	Y	N	0.14	90	30	5	1		0.39	1				No - Quit Smoking	75	CG	Second-hand smoke	Second-hand smoke
W0247	Squamous Cell Carcinoma	Stage IIB	Y	N	0.08	95	50	5	1		0.14	1				No - Quit Smoking	102	NV	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered engines, Radon, Second-hand smoke	Asbestos, Jet fuel, Nuclear weapons, Nuclear-powered engines, Radon, Second-hand smoke
W0248	Squamous Cell Carcinoma	Stage IIA	Y	N	0.24	100	40	20	1	4	0.23	1	4			No - Quit Smoking	60		Second-hand smoke	Second-hand smoke
W0250	Adenocarcinoma	Stage IA	Y	N	0.07	100	50	0		4	0.1		4			No - Quit Smoking	20		None	None
W0253	Adenocarcinoma	Stage IA	Y	N	0.26	70	50	0	1	4	0.16	1	4			Yes - Current Smoker	50		None	None
W0254	Adenocarcinoma: BAC features	Stage IA	Y	N	0.15	45	70	0		4	0.1		4			No - Quit Smoking	90	AR	Second-hand smoke	Second-hand smoke
W0255	Small Cell Carcinoma	Stage IIA	Y	N	0.17	90	70	25	1	6	0.11		4			Yes - Current Smoker	46	NV	Asbestos, Second-hand smoke	Asbestos, Second-hand smoke

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
W0256	Squamous Cell Carcinoma	Stage IIA	Y	N	0.21	100	60	5	2	4	0.2	1	4	0.25	2	No - Quit Smoking		AF	Second-hand smoke	Second-hand smoke
W0257	Squamous Cell Carcinoma	Stage IIA	Y	N	0.48	90	70	20	2	4	0.44	2	4			No - Quit Smoking	105		None	None
W0258	Adenocarcinoma	Stage IB	Y	Y	0.42	2	80	0			0.78	1	4			Yes - Current Smoker	20		None	None
W0259	Adenocarcinoma: BAC features	Stage IA	Y	N	0.12	30	70	0	1		0.24	1		0.11	1	Never Smoked			None	None
W0261	Adenocarcinoma	Stage IA	Y	N	0.1	35	70	0	1		0.2	1		0.35	2	No - Quit Smoking	21		None	None
W0262	Squamous Cell Carcinoma	Stage IA	Y	N	0.27	70	70	30	1	4	0.36	1	4			Yes - Current Smoker	25	NV	Asbestos, Jet fuel, Nuclear-powered engines, Second-hand smoke, Toxic waste sites	Asbestos, Jet fuel, Nuclear-powered engines, Second-hand smoke, Toxic waste sites
W0266	Adenocarcinoma	Stage IA	Y	N	0.2	50	70	0	1		0.33	1				No - Quit Smoking	15		None	None
W0280	Small Cell Carcinoma	Stage IA	Y	N	0.16	90	70	10	1	4	0.35		4	0.15	1	Yes - Current Smoker	90		None	None
W0283	Adenocarcinoma	Stage IA	Y	N	0.23	100	50	0	1	4	0.21	1	4	0.11	1	No - Quit Smoking	40		None	None
W0284	Carcinoid Tumor: Typical	Stage IA	Y	N	0.08	85	95	0	1		0.34	2				No - Quit Smoking	67.5		None	None
W0286	Carcinoid Tumor: Typical	Stage IA	Y	N		100	99	0	1	4		2	4			Never Smoked			None	None
W0287	Adenocarcinoma	Stage IIIA	Y	N	0.61	100	50	15	2	5	0.45	3	5	0.23	2	Yes - Current Smoker	40		None	None
W0288	Squamous Cell Carcinoma	Stage IA	Y	N	0.25	50	50	15	1	4	0.31	1	4	0.15	1	Yes - Current Smoker	66		None	None
W0289	Squamous Cell Carcinoma	Stage IIA	Y	N	1.08	70	60	15	4	4	0.42	2	4			Yes - Current Smoker	32		None	None
W0292	Adenocarcinoma	Stage IA	Y	N	0.06	100	50	0	1		0.26	1				No - Quit Smoking	60	NV	Agent Orange, Asbestos, Second-hand smoke	Agent Orange, Asbestos, Second-hand smoke
W0295	Adenocarcinoma: BAC features	Stage IA	Y	N	0.32	40	50	0	1	4	0.5	2	4			No - Quit Smoking	30		None	None
W0298	Carcinoid Tumor: Atypical	Stage IA	Y	N	0.21	100	95	5	1	4	0.14	1	4	0.09	1	Never Smoked			None	None
W0299	Adenocarcinoma	Stage IA	Y	N	0.58	45	70	2	1	4	1.06	1	4	0.41	2	Yes - Current Smoker	50		None	None
W0304	Squamous Cell Carcinoma	Stage IIA	Y	N	0.24	80	50	0	1	4	0.44	2	4			Yes - Current Smoker	150		None	None

Subject ID	QC Diagnosis	Stage	Tumor Avail.	Preop TX	Initial Tumor Weight (g)	Whole Tumor Area (%)	Tumor Cellularity %	Tumor Necrosis %	# Tumor Aliquots	# Tumor Molecular Aliquots	Initial Normal Weight (g)	# Normal Aliquots	# Normal Molecular Aliquots	Initial Bronchus Weight (g)	# Bronchus Aliquots	Smoking Hx	Pack/Yr	Military Hx	Exp/MIL	Exp/CIV
W0305	Adenocarcinoma	Stage IIIA	Y	N	0.24	90	75	10		4	0.38	1	4	0.05	1	Yes - Current Smoker	30		None	None
W0306	Adenocarcinoma	Stage IIIA	Y	N	0.23	90	70	5	1	4	0.71	3	4			Yes - Current Smoker	30		None	None
W0309	Adenocarcinoma	Stage IA	Y	N	0.18	100	60	5		4	0.24	1	4			No - Quit Smoking	34		None	None
W0312	Adenocarcinoma	Stage IA	Y	N	0.12	40	50	0	1		0.12	1		0.05	1	Yes - Current Smoker	69	AR	None	None
W0314	Squamous Cell Carcinoma	Stage IA	Y	N	0.15	85	40	5	1	4	0.31	1	4	0.45	1	No - Quit Smoking	12.600004		None	None
W0317	Adenocarcinoma: BAC features	Stage IA	Y	N	0.22	75	30	0	1	4	0.49	1	4	0.136	1	No - Quit Smoking	51		None	None
W0318	Sarcomatoid Carcinoma	Stage IIB	Y	N	1.02	100	80	5	3	4	1.69	3	4	0.15		No - Quit Smoking	100		None	None
W0320	Adenocarcinoma	Stage IB	Y	N	0.17	85	70	0	1	4	0.12	1	5	0.08	1	No - Quit Smoking	4		None	None
W0323	Adenocarcinoma	Stage IIB	Y	Y	0.09	90	10	0	1		0.24	1				Yes - Current Smoker	20		None	None
W0324	Adenocarcinoma	Stage IIA	Y	N	0.31	40	50	0	1	4	0.41	1	4			Never Smoked			None	None
W0326	Adenocarcinoma	Stage IA	Y	N	0.12	90	70	0	1	4	0.26	1	4			Yes - Current Smoker	30		None	None