Supplementary

Table S1 MEDLINE complete (EbscoHOST) search terms and results for biomarkers in LCS

#	Query	Limiters/expanders	Results
S10	S3 AND S6 AND S9	Limiters—English language; expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	569
S9	S7 OR S8	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	580,144
S8	TI ((("computed tomography" OR "ct" OR cat) N2 (screen* OR imag* OR scan*)) OR "pet*ct") OR AB ((("computed tomography" OR "ct" OR cat) N2 (screen* OR imag* OR scan*)) OR "pet*ct")	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	217,001
S7	(MH "Tomography Scanners, X-Ray Computed") OR (MH "Tomography, X-Ray Computed+")	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	481,270
S6	S4 OR S5	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	872,063
S5	TI (marker* OR biomarker* OR genom*)	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	427,584
S4	(MM "Biomarkers, Tumor") OR (MM "Genome+") OR (MM "Whole Genome Sequencing+") OR (MM "Genome-Wide Association Study")	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	562,561
S3	S1 OR S2	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	263,304
S2	TI (((lung OR pulmonary OR bronch*) N2 (cancer* OR tumor* OR tumour* OR lymphoma* OR sarcoma* OR neoplasm* OR carcinoma* OR adenocarcinoma* OR adenoma* OR blastoma* OR malignanc*)) OR mesothelioma)	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	194,619
S1	(MM "Lung Neoplasms+")	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	213,399

Table S2 MEDLINE Complete (EbscoHOST) search terms and results for biomarkers in never-smokers

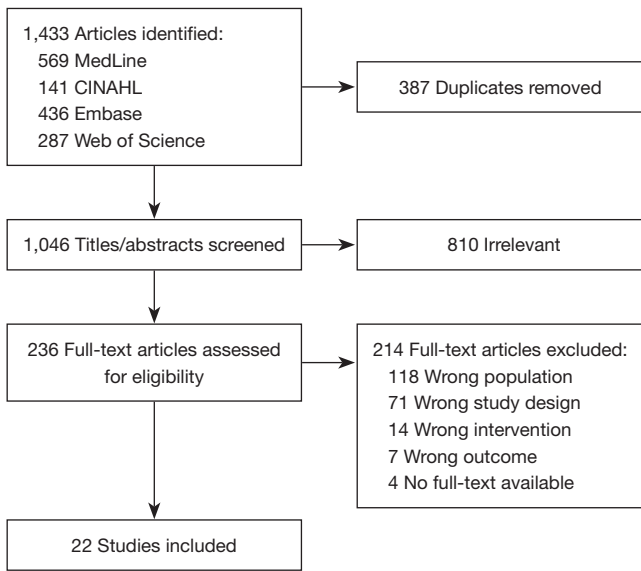| #	Query	Limiters/expanders	Results
S11	S3 AND S6 AND S9	Limiters—English language; expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	457
S10	S3 AND S6 AND S9	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	479
S9	S7 OR S8	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	41,445
S8	TI (nonsmoker* or "non-smoker*" or "never smoker*") OR AB (nonsmoker* or "non-smoker*" or "never smoker*")	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	41,346
S7	(MH "Non-Smokers")	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	634
S6	S4 OR S5	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	871,839
S5	TI (marker* OR biomarker* OR genom*)	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	427,393
S4	(MM "Biomarkers, Tumor") OR (MM "Genome+") OR (MM "Whole Genome Sequencing+") OR (MM "Genome-Wide Association Study")	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	562,504
S3	S1 OR S2	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	263,179
S2	TI (((lung OR pulmonary OR branch*) N2 (cancer* OR tumor* OR tumour* OR lymphoma* OR sarcoma* OR neoplasm* OR carcinoma* OR adenocarcinoma* OR adenoma* OR blastoma* OR malignance*)) OR mesothelioma)	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	194,532
S1	(MM "Lung Neoplasms+")	Expanders—apply related words, apply equivalent subjects; search modes—find all my search terms	213,269

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┌─────────────────────────┐
│ 1,433 Articles identified: │        ┌──────────────────────┐
│   569 MedLine            │───────▶│ 387 Duplicates removed │
│   141 CINAHL             │        └──────────────────────┘
│   436 Embase             │
│   287 Web of Science     │
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐        ┌──────────────────────┐
│ 1,046 Titles/abstracts   │───────▶│ 810 Irrelevant       │
│       screened           │        └──────────────────────┘
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐        ┌───────────────────────────────┐
│ 236 Full-text articles   │───────▶│ 214 Full-text articles excluded: │
│   assessed for eligibility│        │   118 Wrong population         │
└─────────────────────────┘        │    71 Wrong study design       │
            │                       │    14 Wrong intervention       │
            ▼                       │     7 Wrong outcome            │
┌─────────────────────────┐        │     4 No full-text available   │
│ 22 Studies included      │        └───────────────────────────────┘
└─────────────────────────┘
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Figure S1 Flow chart indicating lung cancer screening article inclusion and exclusion with reasons for exclusion.

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┌─────────────────────────┐
│ 958 Articles identified:  │        ┌──────────────────────┐
│   457 MedLine            │───────▶│ 272 Duplicates removed │
│    54 CINAHL             │        └──────────────────────┘
│   215 Embase             │
│   232 Web of Science     │
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐        ┌──────────────────────┐
│ 686 Titles/abstracts     │───────▶│ 332 Irrelevant       │
│     screened             │        └──────────────────────┘
└─────────────────────────┘
            │
            ▼
┌─────────────────────────┐        ┌───────────────────────────────┐
│ 354 Full-text articles   │───────▶│ 263 Full-text articles excluded: │
│   assessed for eligibility│        │   193 Wrong population         │
└─────────────────────────┘        │    50 Wrong study design       │
            │                       │    18 Too old                  │
            ▼                       │     2 Not biomarker focussed   │
┌─────────────────────────┐        └───────────────────────────────┘
│ 91 Studies included      │
└─────────────────────────┘
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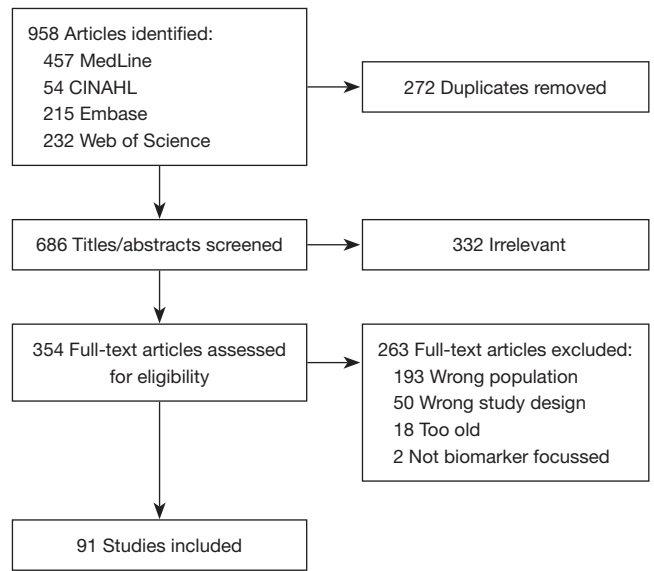**Figure S2** Flow chart indicating lung cancer in never-smoker article inclusion and exclusion with reasons for exclusion.