# STROBE Checklist for Cohort Study: Impact of surgical approach on Stage I Small Cell Lung Cancer

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|---|---|---|---|
| **Title and Abstract** | 1 | (a) Indicate the study's design with a commonly used term in the title or the abstract.<br>(b) Provide in the abstract an informative and balanced summary of what was done and what was found. | (a) Title: "A Population-Based Study"<br>(b) Abstract Section |
| **Introduction** | | | |
| Background/Rationale | 2 | Explain the scientific background and rationale for the investigation being reported. | Introduction, Paragraphs 1-3 |
| Objectives | 3 | State specific objectives, including any prespecified hypotheses. | Introduction, Final Paragraph |
| **Methods** | | | |
| Study Design | 4 | Present key elements of study design early in the paper. | Methods, Sections 2.1 & 2.2 |
| Setting | 5 | Describe the setting, | Methods, Sections |

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| | | locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection. | 2.1 & 2.2 (SEER database 2004-2019) |
| Participants | 6 | (a) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up.<br>(b) For matched studies, give matching criteria and the number of exposed and unexposed. | (a) Methods, Section 2.2 "Study Population"<br>(b) Methods, Section 2.3 "Statistical Analysis" (PSM 1:1, 130 pairs) |
| Variables | 7 | Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable. | Methods, Sections 2.2 & 2.3 (Surgery type, OS, LCSS, covariates for PSM) |
| Data sources/Measurement | 8 | For each variable of interest, give sources of data and details of methods of assessment (measurement). Describe comparability of assessment methods if there is more than one group. | Methods, Section 2.2 (SEER codes for surgery, histology, staging) |

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| Bias | 9 | Describe any efforts to address potential sources of bias. | Methods, Section 2.3 (Use of PSM, sensitivity analyses, competing risk model) |
| Study size | 10 | Explain how the study size was arrived at. | Methods, Section 2.2 (Final inclusion of 560 patients after applying criteria) |
| Quantitative variables | 11 | Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why. | Methods, Section 2.2 (e.g., age categorized as <65/≥65, tumor size) |
| Statistical methods | 12 | (a) Describe all statistical methods, including those used to control for confounding.<br>(b) Describe any methods used to examine subgroups and interactions.<br>(c) Explain how missing data were addressed.<br>(d) If applicable, explain how loss to follow-up was addressed.<br>(e) Describe any sensitivity analyses. | (a) Methods, Section 2.3 (PSM, Cox regression, competing risk model)<br>(b) Methods, Section 2.3 (Subgroup analysis by histology, tumor size)<br>(c) Methods, Section 2.2 (Exclusion of cases with missing data)<br>(d) Not explicitly |

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| | | | stated (SEER tracks mortality well).<br>(e) Methods, Section 2.3 (Sensitivity Analysis: IPTW, E-value, landmark analysis) |
| **Results** | | | |
| Participants | 13 | (a) Report numbers of individuals at each stage of study—e.g., numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed.<br>(b) Give reasons for non-participation at each stage. | (a) Results, Section 3.1 (560 included, 260 after PSM)<br>(b) Methods, Section 2.2 (Exclusion criteria listed) |
| Descriptive data | 14 | (a) Give characteristics of study participants (e.g., demographic, clinical, social) and information on exposures and potential confounders.<br>(b) Indicate number of participants with missing data for each variable of | (a) Results, Section 3.1 & Tables 1 & 2<br>(b) Not explicitly stated for all variables. |

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| | | interest. | |
| Outcome data | 15 | Report numbers of outcome events or summary measures over time. | Results, Sections 3.2, 3.3, 3.4 (5-year OS and LCSS rates) |
| Main results | 16 | (a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g., 95% confidence interval). Make clear which confounders were adjusted for and why they were included.<br>(b) Report category boundaries when continuous variables were categorized.<br>(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period. | (a) Tables 3, 4, 5, 6 & corresponding text in Results.<br>(b) Methods, Section 2.2 (e.g., Age ≥65, Tumor size ≤2cm, Stage IA/IB).<br>(c) Presented as survival rates (e.g., 5-year OS). |
| Other analyses | 17 | Report other analyses done—e.g., analyses of subgroups and interactions, and sensitivity analyses. | Results, Sections 3.5 (Sensitivity Analysis) & 3.6 (Subgroup Analysis) |

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| **Discussion** | | | |
| Key results | 18 | Summarise key results with reference to study objectives. | Discussion, First Paragraph |
| Limitations | 19 | Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias. | Discussion, "Limitations" Paragraph |
| Interpretation | 20 | Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence. | Discussion, throughout |
| Generalisability | 21 | Discuss the generalisability (external validity) of the study results. | Discussion, Final Paragraph |
| **Other Information** | | | |
| Funding | 22 | Give the source of funding and the role of the funders for the present study and, if applicable, | Funding Statement |

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| | | for the original study on which the present article is based. | |
| Ethics | 23 | State ethical approval and informed consent procedures. | Ethics Statement |