STROBE Statement—checklist of items that should be included in reports of observational studies

	Item No.	Recommendation	Page No.	Relevant text from manuscript
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	1	The abstract states that "A multicenter retrospective pharmacological outcome study was conducted in 58 patients with stage IB–IIIB resectable NSCLC," and the Methods section states that "This study was designed as a retrospective multicenter observational cohort study conducted in two prominent oncology institutes in Turkey."
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	1	The abstract summarizes the background, methods, primary and secondary endpoints, biomarker evaluation, treatment outcomes, pathological response rates, safety findings and conclusion regarding neoadjuvant nivolumab combined with chemotherapy in resectable NSCLC.
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	1–3	The Introduction section explains the burden of NSCLC, limitations of standard therapies, the immunotherapeutic rationale for nivolumab, evidence from CheckMate 816 and NADIM trials and the need for real-world validation of neoadjuvant chemoimmunotherapy strategies.
Objectives	3	State specific objectives, including any prespecified hypotheses	3	The manuscript states that "The present multicenter study evaluates the real-world

				efficacy, safety and biomarker associations of neoadjuvant nivolumab combined with platinum-based chemotherapy in patients with resectable NSCLC."
Methods				
Study design	4	Present key elements of study design early in the paper	3	The Methods section clearly states that the study was designed as a "retrospective multicenter observational cohort study" involving two oncology institutions in Turkey.
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	3	The study was conducted at Acibadem Maslak Hospital and Şişli Hamidiye Etfal Training and Research Hospital using patient records collected between January 2022 and March 2025.
Participants	6	(*a*) *Cohort study*—Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up *Case-control study*—Give the eligibility criteria, and the sources and methods of case ascertainment and control selection. Give the rationale for the choice of cases and controls *Cross-sectional study*—Give the eligibility criteria, and the sources and methods of selection of participants	3-4	Eligible participants were patients aged 40–80 years with histologically confirmed stage IB–IIIB resectable NSCLC who received neoadjuvant nivolumab plus platinum-based chemotherapy. Inclusion and exclusion criteria, institutional multidisciplinary assessment and treatment eligibility were described in the Patient Selection section.
		(*b*) *Cohort study*—For matched studies, give matching criteria and number of exposed and unexposed *Case-control study*—For matched studies, give matching criteria and the number of controls per case		This study did not use a matched cohort design and therefore no matching criteria or exposed/unexposed groups were applicable.
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	4-5	The manuscript defines pathological complete response (pCR), major pathological response (MPR), PD-L1

				expression categories, KRAS mutation status and adverse events graded according to CTCAE version 5.0.
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	4	Clinical, pathological and treatment-related data were collected retrospectively from institutional electronic medical records, pathology reports and surgical records from both participating centers.
Bias	9	Describe any efforts to address potential sources of bias	10	The manuscript acknowledges that the retrospective design may introduce selection bias and discusses this limitation in the Strengths and Limitations section.
Study size	10	Explain how the study size was arrived at	3	The study included 58 patients with resectable NSCLC identified from institutional records who fulfilled eligibility criteria during the study period from January 2022 to March 2025.

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Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	5-6	Continuous variables were expressed as mean ± standard deviation or median (range), while categorical variables were presented as frequencies and percentages. PD-L1 expression was categorized into ≥50%, 1–49% and low/negative expression groups for subgroup comparison.
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	5	Statistical analysis was performed using SPSS version 26.0. Associations between categorical variables were analyzed using chi-square or Fisher's exact test, and a p-value <0.05 was considered statistically significant.
		(*b*) Describe any methods used to examine subgroups and interactions	6-8	Subgroup analyses were performed according to PD-L1 expression levels to evaluate associations with pathological complete response and major pathological response outcomes.
		(*c*) Explain how missing data were addressed	4,6	Biomarker variables including PD-L1 expression and KRAS mutation status were evaluated when available from institutional pathology records.
		(*d*) *Cohort study*—If applicable, explain how loss to follow-up was addressed *Case-control study*—If applicable, explain how matching of cases and controls was addressed *Cross-sectional study*—If applicable, describe analytical methods taking account of sampling strategy		Long-term follow-up analysis was not applicable because the study primarily evaluated perioperative treatment outcomes and pathological response.
		(*e*) Describe any sensitivity analyses		Sensitivity analyses were not performed in this retrospective observational study.
Results				
Participants	13*	(a) Report numbers of individuals at each stage of study—eg numbers potentially eligible, examined for eligibility, confirmed eligible, included in the study, completing follow-up, and analysed	3,6-8	The manuscript reports 58 patients initially enrolled, 45 patients completing four cycles of therapy, 13 treatment discontinuations and 45 patients proceeding to surgery

				with curative intent.
		(b) Give reasons for non-participation at each stage	8	Treatment discontinuation occurred due to treatment-related adverse events, patient preference, disease progression and newly developed medical conditions preventing continuation of therapy.
		(c) Consider use of a flow diagram	3	Figure 1 presents a flow diagram illustrating patient enrollment, neoadjuvant treatment, discontinuation and surgical evaluation.
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	5-6	Baseline demographic data including age, sex, smoking history, ECOG performance score, histological subtype, PD-L1 expression and KRAS mutation status were reported.
		(b) Indicate number of participants with missing data for each variable of interest	6	Biomarker analyses for PD-L1 expression and KRAS mutation status were performed using available institutional pathology data.
		(c) *Cohort study*—Summarise follow-up time (eg, average and total amount)	3	Patients were evaluated during the institutional study period from January 2022 to March 2025.
Outcome data	15*	*Cohort study*—Report numbers of outcome events or summary measures over time	7-8	Pathological complete response was observed in 13 patients (22.4%) and major pathological response in 22 patients (37.9%). Surgical resection was performed in 45 patients (77.6%).
		Case-control study—Report numbers in each exposure category, or summary measures of exposure		
		Cross-sectional study—Report numbers of outcome events or summary measures		
Main results	16	(*a*) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (eg, 95% confidence interval). Make clear which confounders were adjusted for and why they were included	5-9	Treatment outcomes, pathological response rates, surgical feasibility and adverse event frequencies were reported as percentages and frequencies.
		(*b*) Report category boundaries when continuous variables were categorized	6	PD-L1 expression categories were

				defined as ≥50%, 1–49% and low/negative expression. ECOG performance status was categorized as 0, 1 and 2.
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period		Relative risk and survival-based risk estimation analyses were not performed in this study.

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Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	7-8	Comparative analyses with international cohorts including Mayo Clinic, Guy's Cancer Centre and Israeli registry data were presented to evaluate external validity of the findings.
Discussion				
Key results	18	Summarise key results with reference to study objectives	9-10	The Discussion section summarizes the efficacy, pathological response, surgical feasibility and safety findings of neoadjuvant nivolumab plus chemotherapy in resectable NSCLC.
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	10	The manuscript acknowledges limitations including retrospective design, possible selection bias, relatively small sample size and lack of long-term survival follow-up.
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	9-10	Results were interpreted in comparison with CheckMate 816, NADIM II and other international studies while acknowledging the limitations of retrospective real-world analysis.
Generalisability	21	Discuss the generalisability (external validity) of the study results	9-10	The Discussion highlights that inclusion of heterogeneous real-world patients improves the external validity and applicability of the findings to routine clinical practice.
Other information				
Funding	22	Give the source of funding and the role of the funders for the present study and, if applicable, for the original study on which the present article is based	11	The manuscript states that "The authors declare that no external funding was received for this study."

*Give information separately for cases and controls in case-control studies and, if applicable, for exposed and unexposed groups in cohort and cross-sectional studies.

Note: An Explanation and Elaboration article discusses each checklist item and gives methodological background and published examples of transparent reporting. The STROBE checklist is best used in conjunction with this article (freely available on the Web sites of PLoS Medicine at http://www.plosmedicine.org/, Annals of Internal Medicine at http://www.annals.org/, and Epidemiology at http://www.epidem.com/). Information on the STROBE Initiative is available at www.strobe-statement.org.