

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

	Item No	Recommendation
Title and abstract	1Page 1	(a) Indicate the study's design with a commonly used term in the title or the abstract ✓ (b) Provide in the abstract an informative and balanced summary of what was done and what was found ✓
Introduction		
Background/rationale	2 Page 1	Explain the scientific background and rationale for the investigation being reported ✓
Objectives	3Page 1	State specific objectives, including any prespecified hypotheses ✓
Methods		
Study design	4Page 1	Present key elements of study design early in the paper ✓
Setting	5Page 1-2	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection ✓
Participants	6Page 2	(a) <i>Cohort study</i> —Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up ✓ <i>Case-control study</i> —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 <i>Cross-sectional study</i> —Give the eligibility criteria, and the sources and methods of selection of participants (b) <i>Cohort study</i> —For matched studies, give matching criteria and number of exposed and unexposed <i>Case-control study</i> —For matched studies, give matching criteria and the number of controls per case
Variables	7Page 2	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable ✓
Data sources/ measurement	8*Page 2,Page 6	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 ✓ Neuroendocrine tumours located in the ampulla area of the duodenum were divided into the ampullary region group, and neuroendocrine tumours in any part of the duodenum outside the ampullary area were divided into the nonampullary region group. We recorded in detail the basic information and clinical data of all DNET patients, including patient sex, age at diagnosis, symptoms, reason for endoscopy (physical examination or not), endoscopic data, imaging data, histopathology, immunohistochemistry, tumour size (diameter), histological classification and grading, tumour staging, serum gastrin level (pg/ml), surgical conditions after tumour diagnosis, and chemotherapy of tumours. Tumour diameter at diagnosis is the largest diameter measured by endoscopy or imaging. Most DNETs are located in the first or second part of the duodenum, with only 20% occurring in the periampullary area[2]. The vater ampulla is composed of a common channel of the common bile duct, pancreatic duct, and duodenal papilla, which is the intersection of the intestinal, pancreatic, and biliary epithelium[3,4].

The ampulla area of the duodenum refers to the area with a diameter of 2 cm centred around the opening of the duodenal papilla. DNETs in the ampulla region are usually considered independent entities with strong invasiveness, high risk of local and distant metastasis, and poor prognosis. Their clinical behaviour is more similar to that of pancreatic tumours[5]. The volume of nonampullary DNETs is mostly less than 2 cm, with an average tumour size of 1.2-1.5 cm. After surgical treatment, it usually has a good survival prognosis of 5-10[6].

Bias	9Page 5, Page 6	Describe any efforts to address potential sources of bias ✓
Study size	10Page 5	Explain how the study size was arrived at ✓
Quantitative variables	11Page 5, Page 6	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why ✓
Statistical methods	12Page 6	(a) Describe all statistical methods, including those used to control for confounding ✓ (b) Describe any methods used to examine subgroups and interactions ✓ (c) Explain how missing data were addressed ✓ (d) <i>Cohort study</i>—If applicable, explain how loss to follow-up was addressed ✓ <i>Case-control study</i>—If applicable, explain how matching of cases and controls was addressed <i>Cross-sectional study</i>—If applicable, describe analytical methods taking account of sampling strategy (e) Describe any sensitivity analyses

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Results		
Participants	13*Page 2	(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 ✓ A total of 29 DNETs were screened out. The ampullary region group accounted for 24.1% (7/29), while the nonampullary region group accounted for 75.9% (22/29). (b) Give reasons for non-participation at each stage (c) Consider use of a flow diagram
Descriptive data	14*Page 6,7,8,9	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders. ✓ There are few studies on the survival prognosis analysis of DNETs, and some studies[5,6,7,11] suggest that the prognosis of DNETs is related to the tumour region (ampullary/nonampullary), function, classification and grading, staging, treatment, etc. However, there are no articles that comprehensively analyse the impact of these factors on the survival of DNETs. Due to the rarity of DNETs and insufficient knowledge of their natural history, their disease characteristics and prognostic factors are currently not well understood. Comprehensively analyses the basic characteristics, clinical symptoms, tumour characteristics, histological grading and classification, tumour clinical staging, treatment, and factors affecting the survival prognosis of patients with DNETs diagnosed at the First Affiliated Hospital of Air Force Military Medical University. (b) Indicate number of participants with missing data for each variable of interest ✓ Exclusion criteria: Incomplete clinical and pathological data. (c) <i>Cohort study</i>—Summarise follow-up time (eg, average and total amount) ✓ (83.75 ± 109.98)
Outcome data	15*Page 6,7,8,9	<i>Cohort study</i>—Report numbers of outcome events or summary measures over time ✓ Date of diagnosis was defined as the date the tumor was first diagnosed through tissue pathology. Length of follow-up was calculated from the date of diagnosis to the date of the doctor's last phone contact, or the date of death. Follow up termination event refers to the end of follow-up or death caused by tumor recurrence and metastasis. The survival status was followed up by phone, and the deadline was November 1, 2022. <i>Case-control study</i>—Report numbers in each exposure category, or summary measures of exposure <i>Cross-sectional study</i>—Report numbers of outcome events or summary measures
Main results	16Page 2	(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. ✓ A Cox regression model was used to analyse prognostic risk factors. Univariate analysis showed that tumour staging, whether surgery was performed after diagnosis, and tumour location (ampullary/nonampullary) affected the survival rate of DNET patients. Further multivariate analysis showed that whether surgery was performed, as well as the location of the tumour (ampullary/nonampullary), affected the overall survival rate of DNET patients, suggesting that surgical treatment is a protective factor for prolonging the survival period of DNET patients. (b) Report category boundaries when continuous variables were categorized (c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period

Other analyses	17Page 8,9	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses ✓
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Discussion

Key results	18Page 3,10,11,12	Summarise key results with reference to study objectives ✓
Limitations	19Page 11	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias ✓
Interpretation	20Page 10,11,12	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence ✓
Generalisability	21Page 1,2	Discuss the generalisability (external validity) of the study results ✓

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
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*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.