STROBE Statement—Checklist of items that should be included in reports of ***cohort studies***

	Item No	Recommendation	Page
Title and abstract	1	(*a*) Indicate the study's design with a commonly used term in the title or the abstract	Page1
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	Page1
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Page1-2
Objectives	3	State specific objectives, including any prespecified hypotheses	Page2:No prespecified hypotheses were formulated for this retrospective chart-review study
Methods			
Study design	4	Present key elements of study design early in the paper	Page2-3;study is described as a retrospective cohort study in the Methods section
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page2-3:single-center study at Department of Pediatrics, Qilu Hospital of Shandong University; patients recruited April 2017-April 2023; minimum 1-year follow-up after drug withdrawal; data abstracted retrospectively from medical records
Participants	6	(*a*) Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	Page2
		(*b*) For matched studies, give matching criteria and number of exposed and unexposed	N/A, this is an-unmatched retrospective cohort; no matching procedure was performed
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Page4;outcome defined as seizure recurrence after ASM withdrawal; predictors include interictal EEG abnormalities, comorbid ADHD, post-withdrawal EEG abnormalities and other clinical variables; relapse definition provided in manuscript
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	Page4;all clinical variables systematically extracted from hospital medical records; EEG, vEEG, MRI and CT examinations were performed locally in the hospital for all enrolled subjects
Bias	9	Describe any efforts to address potential sources of bias	Page7(Limitations); inherent recall bias of retrospective chart review is acknowledged; limitations of single-center design and moderate

			sample size are discussed
Study size	10	Explain how the study size was arrived at	Page3;consecutive eligible patients were included; no pre-calculated sample size for this retrospective chart-review study
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Page4-5;normally-distributed continuous variables presented as mean ± standard deviation; Mann-Whitney U test used for non-parametric continuous variables; categorical variables analysed with chi-square test
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	Page5;univariate chi-square test followed by binary logistic regression for significant predictors
		(*b*) Describe any methods used to examine subgroups and interactions	Page5;N/A, no subgroup or interaction analyses performed
		(*c*) Explain how missing data were addressed	No missing data among analysed variables
		(*d*) If applicable, explain how loss to follow-up was addressed	All included patients completed at least 1-year follow-up; no loss-to-follow-up
		(*e*) Describe any sensitivity analyses	N/A, no sensitivity analyses performed
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	Page5;total n=82 patients included, all completed ≥1-year follow-up and were analysed
		(b) Give reasons for non-participation at each stage	Reasons for exclusion are listed in exclusion criteria; no separate flow-chart reporting excluded cases
		(c) Consider use of a flow diagram	N/A, no formal participant flow diagram is provided in this manuscript
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Page 3-6, Table 1 & Table 2; demographic and clinical characteristics are presented separately for recurrence and non-recurrence groups
		(b) Indicate number of participants with missing data for each variable of interest	No missing data for all analysed variables
		(c) Summarise follow-up time (eg, average and total amount)	All participants had a minimum 1-year follow-up period after complete medication withdrawal
Outcome data	15*	Report numbers of outcome events or summary measures over time	Page1; 17 out of 82 patients experienced seizure recurrence after ASM withdrawal, corresponding to an overall recurrence rate of 20.73%

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	Page 6-8; Table 2 presents univariate unadjusted associations; Table 3 presents adjusted odds ratios and 95% confidence intervals from binary logistic regression
		(*b*) Report category boundaries when continuous variables were categorized	No continuous variables were categorized in this analysis
		(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Not performed
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	N/A, no additional subgroup, interaction or sensitivity analyses were conducted
Discussion			
Key results	18	Summarise key results with reference to study objectives	Page 7; findings are summarized at the opening of the Discussion section
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	Page7; limitations including single-center retrospective design, moderate sample size, unstable estimates due to limited relapse events, limited variables, short follow-up and recall bias are discussed
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page 6-7; findings are interpreted in the context of previous published literature, with cautious conclusions
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page7; external generalisability is limited by the single-center retrospective nature of the cohort
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	Page 7; the article processing charge was funded by a horizontal collaborative research project from Jinan Xuanke Biotechnology Co., Ltd.The funder had no role in study design, data collection, analysis, manuscript writing or publication decision

*Give information separately for exposed and unexposed groups.

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 http://www.strobe-statement.org.