STROBE Checklist

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

Manuscript title: Histologic Chorioamnionitis and Neonatal Outcomes in Preterm Infants: A Gestational Age- and Birth Weight-Matched Cohort Study

Journal: BMC Pregnancy and Childbirth

Study design: Retrospective matched cohort study

> This checklist is provided as Additional file 2. Section references point to the headings of the revised manuscript. Page and line numbers should be updated to match the final submitted PDF before uploading.

Item	Recommendation	Reported in manuscript
1a	Indicate the study's design with a commonly used term in the title or the abstract	Title page and Abstract (Methods): "single-center retrospective matched cohort study"
1b	Provide in the abstract an informative and balanced summary of what was done and what was found	Abstract: Background, Methods, Results, Conclusions
2	Explain the scientific background and rationale for the investigation being reported	Background, paragraphs 1 to 3
3	State specific objectives, including any prespecified hypotheses	Background, final paragraph ("with IVH designated a priori as the primary outcome of interest")
4	Present key elements of study design early in the paper	Methods, "Study design and population"
5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Methods, "Study design and population" (single tertiary referral center, 1 January 2018 to 31 December 2024)

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6a	Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up	Methods, "Study design and population" (all preterm infants < 37 weeks with placental histopathology; exclusion of major congenital anomalies or chromosomal abnormalities; controls frequency-matched on gestational age and birth weight)
6b	For matched studies, give matching criteria and number of exposed and unexposed	Methods, "Study design and population" (83 exposed, 88 unexposed; matched on gestational age and birth weight) — *recommend adding matching ratio, caliper/stratum widths and reasons for the 83:88 imbalance*
7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Methods, "Definitions and outcomes" and "Inflammatory markers"; exposure defined by placental histopathology
8	For each variable of interest, give sources of data and details of methods of assessment (measurement)	Methods, "Definitions and outcomes" (cranial ultrasonography and ROP screening per institutional criteria; BPD graded at 36 weeks of postmenstrual age) and "Inflammatory markers"
9	Describe any efforts to address potential sources of bias	Methods (matching on gestational age and birth weight); Discussion, limitations paragraph (selection bias in IVH and ROP analyses, residual

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		confounding)
10	Explain how the study size was arrived at	Not formally reported — *recommend stating that no a priori sample size calculation was performed and that all eligible infants during the study period were included*
11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Methods, "Statistical analysis" (continuous variables as median [IQR] or mean ± SD; gestational age stratified at 32 weeks)
12a	Describe all statistical methods, including those used to control for confounding	Methods, "Statistical analysis" (Mann–Whitney U, chi-square or Fisher exact test; logistic regression adjusted for gestational age and birth weight; extended model additionally adjusted for delivery mode, antenatal corticosteroids and fetal distress)
12b	Describe any methods used to examine subgroups and interactions	Methods and Results (gestational age-stratified analysis, < 32 vs ≥ 32 weeks; Figure 3)
12c	Explain how missing data were addressed	Methods and Table 3 footnote (analyses restricted to infants with available examinations; denominators reported throughout)
12d	If applicable, explain how loss to follow-up was addressed	Not applicable — no post-discharge follow-up; short-term in-hospital outcomes only
12e	Describe any sensitivity	Results, IVH section (additional adjustment for

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	analyses	antenatal antibiotic exposure left estimates unchanged)
13a	Report the numbers of individuals at each stage of the study	Results, "Baseline and peripartum characteristics"; Methods, "Definitions and outcomes" (150/171 with cranial ultrasonography; 85/171 with ROP screening)
13b	Give reasons for non-participation at each stage	Not applicable — retrospective study of routinely collected clinical data
13c	Consider use of a flow diagram	Not provided — *recommend adding a participant flow diagram (screened, eligible, exposed, unexposed, analyzed) as a supplementary figure*
14a	Give characteristics of study participants and information on exposures and potential confounders	Table 1
14b	Indicate the number of participants with missing data for each variable of interest	Table 1 footnote; Table 2 and Table 3 footnotes (denominators reported)
14c	Summarise follow-up time	Not applicable — outcomes measured during the birth hospitalisation; length of stay reported in Table 2
15	Report numbers of outcome events or summary measures over time	Table 2; Figures 1 and 2
16a	Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision. Make clear which confounders were adjusted for	Table 2 (crude and adjusted odds ratios with 95% confidence intervals); Methods, "Statistical analysis"

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	and why they were included	
16b	Report category boundaries when continuous variables were categorized	Table 2 and Figure 3 (gestational age cut-off at 32 weeks)
16c	If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Not applicable — relative measures only; absolute risks are reported as event rates per group in Table 2
17	Report other analyses done — e.g. analyses of subgroups and interactions, and sensitivity analyses	Results, GA-stratified analysis; extended multivariable model; additional adjustment for antenatal antibiotics
18	Summarise key results with reference to study objectives	Discussion, first paragraph
19	Discuss limitations of the study, taking into account sources of potential bias or imprecision	Discussion, limitations paragraph (retrospective single-center design, modest sample size, incomplete ultrasound and ROP screening, multiple comparisons without formal adjustment, absence of histologic staging and funisitis assessment, low culture positivity, residual confounding)
20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Discussion, and Conclusions
21	Discuss the generalisability (external validity) of the study results	Discussion, limitations paragraph and Conclusions

Item	Recommendation	Reported in manuscript
22	Give the source of funding and the role of the funders for the present study	Declarations, "Funding" (no specific grant)

Note on reporting guidelines: BMC Pregnancy and Childbirth encourages the use of recognized reporting guidelines for observational research but does not mandate the STROBE checklist. Please confirm with all co-authors whether this checklist is to be submitted as Additional file 2; if not, the corresponding entry in the "Additional files" section of the manuscript and the wording of the "Availability of data and materials" statement should be adjusted accordingly.