

Supplementary Table S1: The screening process for study subjects.

Study stage	Total, n	Short-course group, n	Standard-course group, n	Description
Assessed for eligibility	220	—	—	Children aged 1–14 years with suspected first-episode pneumonia were assessed for study eligibility.
Excluded before randomization	20	—	—	Children were excluded according to the predefined inclusion and exclusion criteria or because they did not meet screening requirements.
Randomized	200	100	100	Eligible children were randomized in a 1:1 ratio to short-course or standard-course ceftriaxone sodium therapy.
Received allocated intervention	200	100	100	All randomized participants received the allocated treatment regimen.
Lost to follow-up	5	3	2	Five children were lost during the 3-month follow-up period.
Included in intention-to-treat analysis	200	100	100	All randomized participants were included in the intention-to-treat analysis.
Included in 3-month recurrence and safety analysis	195	97	98	Participants who completed the 3-month follow-up were included in the recurrence and adverse event analysis.
Included in pulmonary function analysis	150	—	—	Spirometry was performed only in children aged ≥ 5 years; children aged < 5 years were excluded only from pulmonary function assessment because of poor reproducibility.

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	Page 1, lines 3–4; 9–10	Randomized trial; prospective, single-center, single-blind randomized controlled trial.
		(b) Provide in the abstract an informative and balanced summary of what was done and what was found	Page 1, lines 6–18	Abstract reports background, objective, methods, results, and conclusion.
Introduction				
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Page 1, lines 22–46	Pediatric pneumonia burden, ceftriaxone use, and uncertainty about optimal treatment duration.
Objectives	3	State specific objectives, including any prespecified hypotheses	Page 1, lines 8–9; 47–55	Objective was to compare short-course versus standard-course ceftriaxone therapy and related outcomes.
Methods				
Study design	4	Present key elements of study design early in the paper	Page 1, lines 9–10; Page 2, lines 88–91	Prospective randomized trial; 200 children assigned 1:1 by randomization.
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Page 1, line 5; Page 3, lines 137–140	Department of Pediatrics, Xi'an No.3 Hospital; three-month follow-up after discharge. Recruitment dates were not reported.
Participants	6	(a) <i>Cohort study</i> —Give the eligibility criteria, and the sources and methods of selection of participants. Describe methods of follow-up (b) <i>Case-control study</i> —Give the eligibility criteria, and the sources and methods of case	Page 2, lines 70–80; 83–87; Page 3, lines	Eligibility/exclusion criteria, ceftriaxone-susceptible pathogens, and three-month

		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	137–140	monthly follow-up.
		(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	Not applicable	Not applicable
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Page 2, lines 92–113; Page 3, lines 116–145	Treatment groups, severity criteria, clinical outcomes, recurrence, adverse events, lung function, and inflammatory markers.
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	Page 2, lines 83–87; Page 3, lines 117–145	Culture/susceptibility testing, symptom assessment, spirometry, and blood marker measurement.
Bias	9	Describe any efforts to address potential sources of bias	Page 2, lines 88–91; Page 3, lines 117–129; 147; 166–169	Randomization, allocation concealment, blinded assessment, and baseline comparability by SMD.
Study size	10	Explain how the study size was arrived at	Page 2, lines 60–66	Sample size calculated with PASS 15.0; final enrollment was 200 participants.

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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	Page 2, lines 106–113; Page 3, lines 144–157	Severity grouping, marker normalization cutoffs, and statistical handling of variables.
Statistical methods	12	(a) Describe all statistical methods, including those used to control for confounding	Page 3, lines 150–157	ITT analysis; chi-square/Fisher test, t-test, mixed-design ANOVA, LSD test, and Mann-Whitney U test.
		(b) Describe any methods used to examine subgroups and interactions	Not reported	Not reported
		(c) Explain how missing data were addressed	Page 2, lines 78–79; Page 3, lines 150; 161–163	Missing essential variables were a withdrawal criterion; ITT analysis was used. Detailed imputation was not reported.
		(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	Page 3, lines 150; 161–163	Five participants were lost to follow-up; all randomized participants were analyzed by ITT.
		(e) Describe any sensitivity analyses	Not applicable	Not applicable
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	Page 3, lines 161–163	220 assessed; 200 randomized; 100 per group; 5 lost to follow-up; analyzed by ITT.
		(b) Give reasons for non-participation at each stage		
		(c) Consider use of a flow diagram	Page 2, line 66; Page 3, lines 161–163	Screening process described in Supplementary File S1; CONSORT flow summarized.
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Page 3, lines 166–169; Page 6, Table 1, line	Baseline age, sex, disease course, antibiotic use, and parental smoking were reported.

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		(b) Indicate number of participants with missing data for each variable of interest	Page 3, lines 133–135; 161–163; Page 6, Table 3 below line 229	Spirometry included children ≥ 5 years only; 5 participants were lost to follow-up.
		(c) <i>Cohort study</i> —Summarise follow-up time (eg, average and total amount)	Page 3, lines 137–140	Three-month follow-up with monthly assessments.
Outcome data	15*	<i>Cohort study</i> —Report numbers of outcome events or summary measures over time	Not applicable	Not applicable
		<i>Case-control study</i> —Report numbers in each exposure category, or summary measures of exposure	Page 4, lines 171–193; Page 6, Tables 2–3 below line 229; Page 7, Table 4 above line 230	Clinical outcomes, recurrence, adverse reactions, lung function, and inflammatory markers were reported.
		<i>Cross-sectional study</i> —Report numbers of outcome events or summary measures	Not applicable	Not applicable
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 4, lines 171–193; Page 6, Tables 2–3 below line 229; Page 7, Table 4 above line	Group comparisons and P values were reported; adjusted estimates and 95% CIs were not reported.

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(b) Report category boundaries when continuous variables were categorized	Page 2, lines 106–113; Page 3, lines 144–145	Pneumonia severity categories and marker normalization cutoffs were reported.
(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Page 4, lines 222–224	Absolute risk reduction of 9% and NNT of approximately 11 were reported.

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Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses	Page 4, lines 177–193	Lung function and inflammatory marker analyses were reported; subgroup/sensitivity analyses were not reported.
Discussion				
Key results	18	Summarise key results with reference to study objectives	Page 7, lines 230–245; Page 8, lines 270–274	Standard course reduced relapse/normalized markers; short course reduced hospital stay/adverse events.
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	Page 7, lines 257–269	Single-center design, limited generalizability, spirometry exclusion, short follow-up, and residual confounding.
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence	Page 7, lines 247–255; Page 8, lines 270–274	Interpretation supports individualized ceftriaxone duration based on severity, symptoms, and inflammatory response.
Generalisability	21	Discuss the generalisability (external validity) of the study results	Page 7, lines 257–261	Generalizability was limited by the single-center urban Xi'an cohort and spirometry exclusion in children <5 years.
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 8, lines 281–282	“Funding: There was no funding.”

*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.