STROBE Statement—Checklist of items that should be included in reports of ***case-control studies***

	Item No	Recommendation	Page No
Title and abstract	1	(*a*) Childhood Asthma Biomarkers including Zinc, an exploratory case-control study	
		(*b*) Provide in the abstract an informative and balanced summary of what was done and what was found	Reported page 1-2
Introduction			
Background/rationale	2	Explain the scientific background and rationale for the investigation being reported	Reported page 3
Objectives	3	State specific objectives, including any prespecified hypotheses	Research question : Is there any difference in serum levels of zinc between cases and controls
Methods			
Study design	4	Present key elements of study design early in the paper	Reported in page 4 - 5,section methodology
Setting	5	Describe the setting, locations, and relevant dates, including periods of recruitment, exposure, follow-up, and data collection	Reported in page 4 - 5,section methodology
Participants	6	(*a*) 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	Reported in page 4 - 5,section methodology
		(*b*) For matched studies, give matching criteria and the number of controls per case	Reported in results section,page 6
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders, and effect modifiers. Give diagnostic criteria, if applicable	Reported in the methodology and results section, page 4-6
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	Reported in methodology section ,[age 4-5
Bias	9	Describe any efforts to address potential sources of bias	Reported in methodology section ,[age 4-5
Study size	10	Explain how the study size was arrived at	Reported in methodology section ,[age 4-5
Quantitative variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	Reported in methodology section ,[age

			4-6
Statistical methods	12	(*a*) Describe all statistical methods, including those used to control for confounding	
		(*b*) Describe any methods used to examine subgroups and interactions	Reported in methodology section ,[age 4-5
		(*c*) Explain how missing data were addressed	Not applicable
		(*d*) If applicable, explain how matching of cases and controls was addressed	Reported in result section
		(*e*) Describe any sensitivity analyses	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	Reported in result section
		(b) Give reasons for non-participation at each stage	Reported in th methodology section , exclusion criteris
		(c) Consider use of a flow diagram	Not applicabe
Descriptive data	14*	(a) Give characteristics of study participants (eg demographic, clinical, social) and information on exposures and potential confounders	Reported in results section
		(b) Indicate number of participants with missing data for each variable of interest	Not applicable
Outcome data	15*	Report numbers in each exposure category, or summary measures of exposure	Reported in results section

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	Not applicable
			(*b*) Report category boundaries when continuous variables were categorized	Reported in methodology (reference ranges)
			(*c*) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period	Not applicable
Other analyses	17	Report other analyses done—eg analyses of subgroups and interactions, and sensitivity analyses		Reported in results section
Discussion				
Key results	18	Summarise key results with reference to study objectives		Reported in 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		Not applicable
Interpretation	20	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies, and other relevant evidence		Reported in discussion section
Generalisability	21	Discuss the generalisability (external validity) of the study results		A study is externally valid
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		Not applicable

*Give information separately for cases and controls.

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.