

**Hybrid STROBE & STROBE-ME Statement-** checklist of items that should be included in reports of observational studies

*\*Of note, given the nature of this work, which does not fit into an available equator checklist a hybrid between the STROBE and STROBE-ME was chosen as best fit. This said, all references to 'biomarkers' relate to the different formulations tested as it pertains to this manuscript.*

Section/Item	Item Number	Recommendation	Reported on Page/Line Number	Reported on Section/Paragraph
<b>Title and Abstract</b>	1	(a) Indicate the design of the study 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	(a) 1 (b) 3 (c) 3	- title and abstract
<b>Introduction</b>				
Background Rationale	2	Explain the scientific background of the paper how/why the specific biomarker(s) have been chosen, potentially among many others (e.g. others are studied but reported elsewhere or not studied at all)	7	Introduction
Objectives	3	State specific objectives, including any pre-specified hypotheses	7	Introduction, paragraph 3
<b>Methods</b>				
Study Design	4	Present key elements of study design early in the paper	8	Methods, paragraph 1
Setting	5	Describe the setting, locations, and relevant dates including periods of recruitment, exposure, follow-up and data collection	8	Methods, paragraph 1
Participants	6	Give any habit, clinical condition, physiological factor or working or living condition that might affect the characteristics or concentrations of the biomarker	8	Methods, paragraph 1
Variables	7	Clearly define all outcomes, exposures, predictors, potential confounders and effect modifiers. Give diagnostic criteria, if applicable	8, 9	Methods, paragraphs 1,2

Data Source/ Measurement	8	Laboratory methods: report type of assay used, detection limit, quantity of biological sample used, outliers, timing in the assay procedures (when applicable) and calibration procedures or any standard use.	8, 9	Methods
Bias	9	Describe any efforts to address potential sources of bias	9	Methods, paragraph 2
Study Size	10	Explain how the study size was arrived at	NA	NA
Quantitative Variables	11	Explain how quantitative variables were handled in the analyses. If applicable, describe which groupings were chosen and why	8,9	Methods
Validity/Reliability of measurement and internal/external Validation	12	Report on the validity and reliability of measurement of the biomarker(s) coming from the literature and any internal	9	Methods, paragraph 2
<b>Results</b>				
Participants	13	Give reason for loss of biological samples at each stage	NA	NA
Distribution of biomarker Measurement	14	Give the distribution of the biomarker measurement (including mean, median, range and variance)	9, 10	Results
Outcome Data	15	Cohort study- Reports numbers of outcome events or summary measures over time Case control study- reports numbers in each exposure category or summary measures of exposure Cross sectional study- report numbers of outcome events or summary measures	9,10	Results
Main Results	16	(a) Give unadjusted estimates and, if applicable, confounder-adjusted estimates and their precision (e.g. 95% confidence interval). Make clear which confounders were adjusted for and why they were included (b) Report category boundaries when continuous variables were categorized	9, 10	Results, paragraph 1, 2, 3, 4

		(c) If relevant, consider translating estimates of relative risk into absolute risk for a meaningful time period		
Other Analyses	17	Report other analyses done – e.g. analyses of subgroups and interactions and sensitivity analyses	9, 10	Results, paragraph 1, 2, 3, 4
<b>Discussion</b>				
Key Results	14	Summarize key results with reference to study objectives	11, 12, 13	Conclusion, paragraph 1, 2, 3, 4, 5
Limitations	15	Discuss limitations of the study, taking into account sources of potential bias or imprecision. Discuss both direction and magnitude of any potential bias	13, 14	Conclusion, paragraph, 6
Interpretation	16	Give a cautious overall interpretation of results considering objectives, limitations, multiplicity of analyses, results from similar studies and other relevant evidence	13, 14	Conclusion, paragraph, 6
Generalizability	18	Discuss the generalizability (external validity) of the study results	13, 14	Conclusion, paragraph, 6
<b>Other Information</b>				
Funding	19	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	6	Acknowledgements
Ethics	20		6	Ethics Statement