Materials Design Analysis Reporting (MDAR) Checklist for Authors

The MDAR framework establishes a minimum set of requirements in transparent reporting applicable to studies in the life sciences (see Statement of Task: doi:10.31222/osf.io/9sm4x.). The MDAR checklist is a tool for authors, editors and others seeking to adopt the MDAR framework for transparent reporting in manuscripts and other outputs. Please refer to the MDAR Elaboration Document for additional context for the MDAR framework.

Materials

Antibodies	Yes (indicate where	n/a
For commercial reagents, provide supplier name, catalogue number and RRID, if available.		N/A, this study has none business with antibodies

Cell materials	Yes (indicate where	n/a
Cell lines: Provide species information, strain. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID		N/A, this study has none business with cell lines
Primary cultures: Provide species, strain, sex of origin, genetic modification status.		N/A, this study has none business with primary cultures

Experimental animals	Yes (indicate where	n/a
Laboratory animals: Provide species, strain, sex, age, genetic modification status. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID		N/A, this study has none business with laboratory animals
Animal observed in or captured from the field: Provide species, sex and age where possible		N/A, this study has none business with animals observed in or captured from the field.
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID		N/A, this study has none business with model organisms.

Plants and microbes	Yes (indicate where	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		N/A, this study has none business with plants
Microbes: provide species and strain, unique accession number if available, and source		N/A, this study has none business with microbes

Human research participants	Yes (indicate where	n/a
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	Yes, this study was approved by the ethics committee of Fengning Manchu Autonomous County Hospital (approval number: 2021-01)(see Section Methods Paragraph Research Subjects)	
Provide statement confirming informed consent obtained from study participants.	Yes, all subjects signed the informed consent agreement (Section Methods Paragraph Research Subjects)	
Report on age and sex for all study participants.	Yes, age and sex for all study participants were reported (see Section Results Paragraph Characteristics of screening population)	

Design

Study protocol	Yes (indicate where	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.		N/A， this study is not a clinical trial

Laboratory protocol	Yes (indicate where	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.		N/A, this study has no detailed laboratory protocol

Experimental study design (statistics details)	Yes (indicate where	n/a
State whether and how the following have been done**, or** if they were not carried out.		
Sample size determination		N/A, this is a population screening study
Randomisation		N/A, this is a population screening study
Blinding		N/A, this is a population screening study
Inclusion/exclusion criteria	Yes, see Section Methods Paragraph Research Subjects	

Sample definition and in-laboratory replication	Yes (indicate where	n/a
State number of times the experiment was replicated in laboratory		N/A, this is not a laboratory experiment
Define whether data describe technical or biological replicates		N/A, this is not a laboratory experiment

Ethics	Yes (indicate where	n/a
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	Yes, this study was approved by the ethics committee of Fengning Manchu Autonomous County Hospital (approval number: 2021-01)(see Section Methods Paragraph Research subjects)	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		N/A, this study does not involve experimental animals.
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.		N/A, this study does not involve specimen and field samples.

Dual Use Research of Concern (DURC)	Yes (indicate where	n/a
If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval		N/A, this study is not subject to dual use research of concern

Analysis

Attrition	Yes (indicate where provided:	n/a
State if sample or data point from the analysis is excluded, and whether the criteria for exclusion were determined and specified in advance.	Yes, inappropriate subjects were excluded according to the exclusion criteria (see Section Methods Paragraph Research Subjects). the criteria for exclusion were	

Statistics	Yes (indicate where provided:	n/a
Describe statistical tests used and justify choice of tests.	Yes, see Section Methods Paragraph Statistical analysis	

Data Availability	Yes (indicate where provided:	n/a
State whether newly created datasets are available, including protocols for access or restriction on access.		N/A, newly created datasets are not available, including
If data are publicly available, provide accession number in repository or DOI or URL.		N/A, since the data will be used for further follow up, we would not share the data publicly
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		N/A, the data are original

Code Availability	Yes (indicate where provided:	n/a
For all newly generated code and software essential for replicating the main findings of the study:		
State whether the code or software is available.		N/A, the code is not available since the health-economic model is reused according to an published article we devised
If code is publicly available, provide accession number in repository, or DOI or URL.		N/A, the code is not publicly available

Reporting

Adherence to community standards	Yes (indicate where provided: section/paragraph)	n/a
MDAR framework recommends adoption of discipline-specific guidelines, established and endorsed through community initiatives. Journals have their own policy about requiring specific guidelines and recommendations to complement MDAR.		
State if relevant guidelines (eg., ICMJE, MIBBI, ARRIVE) have been followed, and whether a checklist (eg., CONSORT, PRISMA, ARRIVE) is provided with the manuscript.	ICMJE guidelines were followed, as the journal follows ICMJE recommendations for publication.	

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