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 provided: section/paragraph)	n/a
For commercial reagents, provide supplier name, catalogue number and RRID, if available.	Antibodies were not used in our study.	

Cell materials	Yes (indicate where provided: section/paragraph)	n/a
Cell lines: Provide species information, strain. Provide accession number in repository **OR** supplier name, catalog number, clone number, **OR** RRID	Cell material were not used in our study.	
Primary cultures: Provide species, strain, sex of origin, genetic modification status.	Cell material were not used in our study.	

Experimental animals	Yes (indicate where provided: section/paragraph)	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	Experimental animals were not used in our study.	
Animal observed in or captured from the field: Provide species, sex and age where possible	Experimental animals were not used in our study.	
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID	Experimental animals were not used in our study.	

Plants and microbes	Yes (indicate where provided: section/paragraph)	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)	Plants and microbes were not used in our study.	
Microbes: provide species and strain, unique accession number if available, and source	Plants and microbes were not used in our study.	

Human research participants	Yes (indicate where provided: section/paragraph)	n/a
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	This study is a retrospective analysis and no human research was conducted.	
Provide statement confirming informed consent obtained from study participants.	This study is a retrospective analysis and no human research was conducted.	
Report on age and sex for all study participants.	This study is a retrospective analysis and no human research was conducted.	

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.	Our study is not clinical trial.	

Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.	We did not do laboratorial work in our study.	

Experimental study design (statistics details)	Yes (indicate where provided: section/paragraph)	n/a
State whether and how the following have been done**, or** if they were not carried out.		
Sample size determination	The size evaluation group depends on how many subjects we could use.	
Randomisation	Evaluation group were selected randomly and declaration was provided in the section of 'Data preparation' on Line 186.	
Blinding	No need to do blinding study.	
Inclusion/exclusion criteria	All data was used without extra exclusion or inclusion.	

Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory	We did not do laboratorial work in our study and no need to do the in-laboratory replication.	
Define whether data describe technical or biological replicates	We did not do laboratorial work in our study and no need to do the in-laboratory replication.	

Ethics	Yes (indicate where provided: section/paragraph)	n/a
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	This study was approved by the Institutional Review Board of the First Affiliated Hospital of Fujian Medical University, and individual consent for this retrospective analysis was waived. Declaration was provided in the section of *'Data preparation'* on Line 189.	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	No experimental animals were involved in our study.	
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.	No specimen and field samples were involved in our study.	

Dual Use Research of Concern (DURC)	Yes (indicate where provided: section/paragraph)	n/a
If study is subject to dual use research of concern, state the authority granting approval and reference number for the regulatory approval	Our study is not a dual use research.	

Analysis

Attrition	Yes (indicate where provided: section/paragraph)	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.	All the data from the evaluated patients were used without data exclusion.	

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	Paired t-test was used to assess the statistical significance. Description was provided on Line 231.	

Data Availability	Yes (indicate where provided: section/paragraph)	n/a
State whether newly created datasets are available, including protocols for access or restriction on access.	The datasets were only used to evaluate the proposed method and is not yet ready for public.	
If data are publicly available, provide accession number in repository or DOI or URL.	The datasets were only used to evaluate the proposed method and is not yet ready for public.	
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.	We did not use public data in our study.	

Code Availability	Yes (indicate where provided: section/paragraph)	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.	The code and software are not yet ready for public.	
If code is publicly available, provide accession number in repository, or DOI or URL.	The code and software are not yet ready for public.	

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.	

Article information:https://dx.doi.org/10.21037/qims-21-1005
*As the checklist was provided upon initial submission, the page number/line number reported may be changed due to copyediting and may not be referable in the published version. In this case, the section/paragraph may be used as an alternative reference.