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.	No commercial reagents were used.	√

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	No cell lines were used.	√
Primary cultures: Provide species, strain, sex of origin, genetic modification status.	No cultures were performed.	√

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	No Laboratory animals were used.	√
Animal observed in or captured from the field: Provide species, sex and age where possible	There were no animals observed in or captured from the field.	√
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID	There were no model organisms.	√

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)	No plants were used.	√
Microbes: provide species and strain, unique accession number if available, and source	No microbes were used.	√

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.	Page 21, Paragraph 3: The Ethics Committee of Third Affiliated Hospital of Soochow University approved the study (2022-science-158).	
Provide statement confirming informed consent obtained from study participants.	Page 22, Paragraph 1: As this was a retrospective study, only tumor tissue samples were used, and the patient could not be contacted, the ethics committee approved this study to be exempt from the informed consent process.	
Report on age and sex for all study participants.	Page 5, last paragraph: in the Methods section, Sample collection.	

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.	This is not a 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.	There were no detailed step-by-step protocols.	√

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.	No	√
Sample size determination	The sample size did not need to be determined.	√
Randomisation	No randomisation was performed.	√
Blinding	No blinding was performed.	√
Inclusion/exclusion criteria	There were no inclusion/exclusion criteria.	√

Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory	Single-cell RNA sequencing was not replicated.	√
Define whether data describe technical or biological replicates	There was no technical or biological 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.	Page 21, Paragraph 3: The Ethics Committee of Third Affiliated Hospital of Soochow University approved the study (2022-science-158).	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	There were no 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.	Page 21, Paragraph 3: The Ethics Committee of Third Affiliated Hospital of Soochow University approved the study (2022-science-158).	

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	This study is not subject to dual use research of concern.	√

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.	Samples or data point in the analysis was not excluded. There were no inclusion/exclusion criteria.	√

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	Statistical analysis is not applicable to this paper because only one patient was selected in this study, which could not be performed.	√

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.	There are no newly created datasets.	√
If data are publicly available, provide accession number in repository or DOI or URL.	Data are not publicly available.	√
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.	Publicly available data are not reused.	√

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:	No	√
State whether the code or software is available.	There are no newly generated code or software.	√
If code is publicly available, provide accession number in repository, or DOI or URL.	There is no publicly available code.	√

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.	We present the article in accordance with the MDAR reporting checklist (Page 5, Paragraph 3).	
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/atm-22-5270