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.		√ No antibodies used.

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		√ Cell lines information is obtained in database.
Primary cultures: Provide species, strain, sex of origin, genetic modification status.		√ Information of primary cultures is obtained in database.

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

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

Human research participants	Yes (indicate where	n/a
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		√ No Human research participants involved.
Provide statement confirming informed consent obtained from study participants.		√ No Human research participants involved.
Report on age and sex for all study participants.		√ No Human research

Design

Study protocol	Yes (indicate where	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.		√ No clinical trials involved.

Laboratory protocol	Yes (indicate where	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.		√ No laboratory experiments involved.

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.		√ No clinical trials involved.
Sample size determination		√ No clinical trials involved.
Randomisation		√ No clinical trials involved.
Blinding		√ No clinical trials involved.
Inclusion/exclusion criteria		√ No clinical trials involved.

Sample definition and in-laboratory replication	Yes (indicate where	n/a
State number of times the experiment was replicated in laboratory		√ No laboratory experiments involved.
Define whether data describe technical or biological replicates		√ No laboratory experiments involved.

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.		√ Data of our study is obtained from database.
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		√ Data of our study is obtained from database.
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.		√ Data of our study is obtained from database.

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		√ No 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.	√ Table S1,S2 and Figure S1	

Statistics	Yes (indicate where provided:	n/a
Describe statistical tests used and justify choice of tests.	√ "1.3 Cell line to patient tumor comparison"	

Data Availability	Yes (indicate where provided:	n/a
State whether newly created datasets are available, including protocols for access or restriction on access.	√ "1.1 Cell lines" and "1.2 mRNA expression data"	
If data are publicly available, provide accession number in repository or DOI or URL.	√ Gene Expression Omnibus (GEO, http://www.ncbi.nlm.nih.gov/geo/)	
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		√ No publicly available data are reused

Code Availability	Yes (indicate where provided:	n/a
For all newly generated code and software essential for replicating the main findings of the study:		√ No code used.
State whether the code or software is available.		√ No code used.
If code is publicly available, provide accession number in repository, or DOI or URL.		√ No code used.

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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