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.		n/a

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	not carried out	n/a
Primary cultures: Provide species, strain, sex of origin, genetic modification status.	not carried out	n/a

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	not carried out	n/a
Animal observed in or captured from the field: Provide species, sex and age where possible	not carried out	n/a
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID	not carried out	n/a

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)	not carried out	n/a
Microbes: provide species and strain, unique accession number if available, and source	not carried out	n/a

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.	Yes. Patients and Methods/ Line 80-81/page4	
Provide statement confirming informed consent obtained from study participants.	Yes. Patients and Methods/ Line 80-81/page 4	
Report on age and sex for all study participants.	Yes. Patients and Methods/ Line 87-88/page 4	

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 study is a retrospective study	n/a

Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.	10.1007/s00330-019-06084-0 10.21037/tlcr-20-370	

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.	Yes. Patients and Methods/ Line 132-177/page 7-9	
Sample size determination	Yes. Patients and Methods/ Line 86-88/page 4	
Randomisation	Yes. Patients and Methods/ Line158-161/page 8	
Blinding	Yes. Patients and Methods/ Line 110-111/page 4-5	
Inclusion/exclusion criteria	Yes. Patients and Methods/ Line 81-86/page 4	

Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory	Yes. Five-fold cross validation was performed/Table 3.	
Define whether data describe technical or biological replicates		n/a

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.	Yes. Patients and Methods/ Line 80-81/page 4	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	not carried out	n/a
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.	not carried out	n/a

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		n/a

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.	Yes. The criterial for exclusion were determined in advance. Patients and Methods/ Line 81-86/page 4	

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	Yes. Materials and Methods/Statistical Analysis/Line 162-172/page 8	

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.	Our team are building the lung cancer database in China, when it is done, the database will be open for the world.	
If data are publicly available, provide accession number in repository or DOI or URL.		n/a
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		n/a

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:	All the codes used in this study are available.	
State whether the code or software is available.	We would share “software, algorithms, protocols, models, methods” if need.	
If code is publicly available, provide accession number in repository, or DOI or URL.	10.1007/s00330-019-06084-0 10.21037/tlcr-20-370	

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 have followed the “minimum standards” for scientific reporting by: providing detailed description of the methods, analyses and materials used in this study. We would share “software, algorithms, protocols, models, methods” if need.	
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: http://dx.doi.org/10.21037/jtd-20-2981.