<u>Materials Design Analysis Reporting (MDAR)</u> 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:	n/a
For commercial reagents, provide supplier	Immunohistochemistry and evaluation	
name, catalogue number and RRID, if available.	Line 247-259, Page 12	

Cell materials	Yes (indicate where provided:	n/a
Cell lines: Provide species information, strain. Provide accession number in repository OR supplier name, catalog number, clone number, OR RRID		n/a
Primary cultures: Provide species, strain, sex of		n/a
origin, genetic modification status.		

Experimental animals	Yes (indicate where provided:	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
Animal observed in or captured from the field: Provide species, sex and age where possible		n/a
Model organisms: Provide Accession number in repository (where relevant) OR RRID		n/a

Plants and microbes	Yes (indicate where provided:	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		n/a
Microbes: provide species and strain, unique accession number if available, and source		n/a

Human research participants	Yes (indicate where provided:	n/a
Identify authority granting ethics approval (IRB or	Footnote /Compliance with Ethics	
equivalent committee(s), provide reference number	Requirements:	
for approval.	Line 687-691, Page 31-32	
Provide statement confirming informed consent	Footnote /Compliance with Ethics	
obtained from study participants.	Requirements:	
	Line 690-191, Page 31-32	
Report on age and sex for all study participants.	Supplementary Table S1	

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration		n/a
number OR cite DOI in manuscript.		

Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step-		n/a
by-step protocols are available.		

Experimental study design (statistics details)	Yes (indicate where provided: section/paragraph)	n/a
State whether and how the following have been		n/a
done, or if they were not carried out.		
Sample size determination		n/a
Randomisation		n/a
Blinding		n/a
Inclusion/exclusion criteria		n/a

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

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.		n/a
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		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.		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,		n/a
state the authority granting approval and reference		
number for the regulatory approval		

Analysis

Attrition	Yes (indicate where provided: section/paragraph)	n/a
State if sample or data point from the analysis is		n/a
excluded, and whether the criteria for exclusion were		
determined and specified in advance.		

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of	Materials and Methods / Statistical analysis	
tests.	Line 260-274, Page 12-13	

Data Availability	Yes (indicate where provided: section/paragraph)	n/a
State whether newly created datasets are available,	All data were from TCGA and GEO databases. which	
including protocols for access or restriction on	are publicly available.	
access.		
If data are publicly available, provide accession	All data were from TCGA , GEO, and cBioPortal	
number in repository or DOI or URL.	databases. which are publicly available.	
If publicly available data are reused, provide		n/a
accession number in repository or DOI or URL, where		
possible.		

Code Availability	Yes (indicate where provided: section/paragraph)	n/a
For all newly generated code and software essential		n/a
for replicating the main findings of the study:		
State whether the code or software is available.	Materials and Methods / Statistical analysis	
	Line 260-272, Page 12	
If code is publicly available, provide accession		n/a
number in repository, or DOI or URL.		

Reporting

Adherence to community standards	Yes (indicate where provided: section/paragraph)	n/a
MDAR framework recommends adoption of		n/a
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,	ICMJE guidelines were followed, as the	
ARRIVE) have been followed, and whether a checklist	journal follows ICMJE recommendations for	
(eg., CONSORT, PRISMA, ARRIVE) is provided with	publication.	
the manuscript.		

Article Information: https://dx.doi.org/10.21037/tlcr-21-715