

## **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](https://doi.org/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**

<b>Antibodies</b>	<b>Yes (indicate where provided:section/paragraph)</b>	<b>n/a</b>
For commercial reagents, provide supplier name, catalogue number and RRID, if available.	Yes. P53 (mouse monoclonal, ab2798793), GAPDH (ab 2799390), goat anti-mouse secondary antibodies (ab 2798582), Cell Signaling Technology (USA) Methods: Western blot analysis, paragraph 1	
<b>Cell materials</b>	<b>Yes (indicate where provided:section/paragraph)</b>	<b>n/a</b>
<b>Cell lines:</b> Provide species information, strain. Provide accession number in repository <b>OR</b> supplier name, catalog number, clone number, <b>OR</b> RRID	Yes. Ovarian cancer A2780 cells were purchased from BNCC (BeNa Culture Collection, Beijing, China) Methods: Cell culture and transfection, paragraph	
<b>Primary cultures:</b> Provide species, strain, sex of origin, genetic modification status.	Yes. Roswell Park Memorial Institute (RPMI)-1640 medium Methods: Cell culture and transfection, paragraph 1	
<b>Experimental animals</b>	<b>Yes (indicate where provided:section/paragraph)</b>	<b>n/a</b>
<b>Laboratory animals:</b> Provide species, strain, sex, age, genetic modification status. Provide accession number in repository <b>OR</b> supplier name, catalog number, clone number, <b>OR</b> RRID		No. We have not used animals.
<b>Animal observed in or captured from the field:</b> Provide species, sex and age where possible		No. We have not used animals.
<b>Model organisms:</b> Provide Accession number in repository (where relevant) <b>OR</b> RRID		No. We have not used animals.
<b>Plants and microbes</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
<b>Plants:</b> provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		No. We have not used plants.
<b>Microbes:</b> provide species and strain, unique accession number if available, and source		No. We have not used microbes.
<b>Human research participants</b>	<b>Yes (indicate where provided:section/paragraph)</b>	<b>n/a</b>
Identify authority granting ethics approval(IRB or equivalent committee(s), provide reference number for approval.	Yes. The study was approved by the Ethics Committee of Sichuan Provincial People's Hospital (No. 2015-46).	
Provide statement confirming informed consent obtained from study participants.	Yes. We state confirming informed consent obtained from study participants.	
Report on age and sex for all study participants.	Yes. We report on age and sex for all study participants.	

**Design**

<b>Studyprotocol</b>	<b>Yes (indicate where</b>	<b>n/a</b>
For clinical trials, provide the trial registration number ORcite DOI in manuscript.		No. This study is not a clinical trial.
<b>Laboratoryprotocol</b>	<b>Yes (indicate where</b>	<b>n/a</b>
Provide DOI or other citation details if detailed step-by-step protocols are available.	Yes. Methods: paragraph 3-8, 11-20	
<b>Experimental study design (statistics details)</b>	<b>Yes (indicate where</b>	<b>n/a</b>
State whether and how the following have been done, or if they were not carried out.		
Sample size determination		No. This study is not a clinical trial.
Randomisation		No. This study is not a clinical trial.
Blinding		No. This study is not a clinical trial.
Inclusion/exclusion criteria		No. This study is not a clinical trial.
<b>Sample definition and in-laboratory replication</b>	<b>Yes (indicate where</b>	<b>n/a</b>
State number of times the experiment was replicated in laboratory	Yes. We state triplate experiments in laboratory.	
Define whether data describe technical or biological replicates	The data were describe technical.	
<b>Ethics</b>	<b>Yes (indicate where</b>	<b>n/a</b>
Studies involving human participants: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	The study was approved by the Ethics Committee of Sichuan Provincial People’s Hospital (No. 2015-46).	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		No. We have not used animals.
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.	The study was approved by the Ethics Committee of Sichuan Provincial People’s Hospital (No. 2015-46).	
<b>Dual Use Research of Concern (DURC)</b>	<b>Yes (indicate where</b>	<b>n/a</b>
If study is subject to dual use research ofconcern, statethe authority granting approval and reference number for the regulatory approval		No.

**Analysis**

<b>Attrition</b>	<b>Yes (indicate where</b>	<b>n/a</b>
State if sample or data point from the analysis is excluded, and whether the criteria for exclusion were determined and specified in advance.		No.
<b>Statistics</b>	<b>Yes (indicate where</b>	<b>n/a</b>
Describe statistical tests used and justify choice of tests.	Yes. Methods: Statistical analysis, paragraph 1	
<b>Data Availability</b>	<b>Yes (indicate where</b>	<b>n/a</b>
State whether newly created datasets are available, including protocols for access or restriction on access.	Yes. Methods: Statistical analysis, paragraph 1	
If data are publicly available, provide accession number in repository or DOI or URL.		No.
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		No.
<b>Code Availability</b>	<b>Yes (indicate where</b>	<b>n/a</b>
For all newly generated code and software essential for replicating the main findings of the study:		
State whether the code or software is available.	Yes. Methods: Statistical analysis, paragraph 1	
If code is publicly available, provide accession number in repository, or DOI or URL.		No.

**Reporting**

<b>Adherence to community standards</b>	<b>Yes (indicate where provided: section/paragraph)</b>	<b>n/a</b>
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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