### <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		It wasn't used in
name, catalogue number and RRID, if available.		the experiment
Cell materials	Yes (indicate where provided:	n/a
Cell lines: Provide species information, strain.	Melanoma cancer cell lines HS294T were	
Provide accession number in repository <b>OR</b>	purchased from the Shanghai Cell Bank	
supplier name, catalog number, clone number,	of the Chinese Academy of Sciences	
OR RRID	(Shanghai, China).	
Primary cultures: Provide species, strain, sex of		It wasn't used in
origin, genetic modification status.		the experiment
Experimental animals	Yes (indicate where provided:	n/a
Laboratory animals: Provide species, strain, sex, age,	· ·	It wasn't used in
genetic modification status. Provide accession		the experiment
number in repository <b>OR</b> supplier name, catalog		
number, clone number, <b>OR</b> RRID		
Animal observed in or captured from the		It wasn't used in
field: Provide species, sex and age where		the experiment
possible		
Model organisms: Provide Accession number		It wasn't used in
in repository (where relevant) <b>OR</b> RRID		the experiment
Plants and microbes	Yes (indicate where provided:	n/a
Plants: provide species and strain, unique accession		It wasn't used in
number if available, and source (including location		the experiment
for collected wild specimens)		
Microbes: provide species and strain, unique		It wasn't used in
accession number if available, and source		the experiment
Human research participants	Yes (indicate where provided:	n/a
Identify authority granting ethics approval (IRB or		It wasn't used in
equivalent committee(s), provide reference number		the experiment
for approval.		
Provide statement confirming informed consent		It wasn't used in
obtained from study participants.		the experiment
Report on age and sex for all study participants.		It wasn't used in
		the experiment

# <u>Design</u>

Study protocol	Yes (indicate where provided:	n/a
For clinical trials, provide the trial registration		It wasn't used in
number <b>OR</b> cite DOI in manuscript.		the experiment
Laboratory protocol	Yes (indicate where provided:	n/a
Provide DOI or other citation details if detailed step-		It wasn't used in
by-step protocols are available.		the experiment
Experimental study design (statistics details)	Yes (indicate where provided:	n/a
State whether and how the following have been		It wasn't used in
done <b>, or</b> if they were not carried out.		the experiment
Sample size determination		It wasn't used in
		the experiment
Randomisation		It wasn't used in
		the experiment
Blinding		It wasn't used in
		the experiment
Inclusion/exclusion criteria		It wasn't used in
		the experiment
Sample definition and in-laboratory replication	Yes (indicate where provided:	n/a
State number of times the experiment was	res (indicate where provided.	It wasn't used in
replicated in laboratory		the experiment
Define whether data describe technical or biological		It wasn't used in
replicates		the experiment
Ethics		
Studies involving human participants: State details of	Yes (indicate where provided:	n/a
authority granting ethics approval (IRB or equivalent		It wasn't used in
committee(s), provide reference number for		the experiment
approval.		
Studies involving experimental animals: State details		It wasn't used in
of authority granting ethics approval (IRB or		the experiment
equivalent committee(s), provide reference number		
for approval.		
		It wasn't used in
Studies involving specimen and field samples: State if		
relevant permits obtained, provide details of		the experiment
		the experiment
relevant permits obtained, provide details of authority approving study; if none were required, explain why.		
relevant permits obtained, provide details of authority approving study; if none were required, explain why. Dual Use Research of Concern (DURC)	Yes (indicate where provided:	n/a
relevant permits obtained, provide details of authority approving study; if none were required, explain why.	Yes (indicate where provided:	

# <u>Analysis</u>

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.		It wasn't used in the experiment
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Statistics	Yes (indicate where provided:	n/a
Describe statistical tests used and justify choice of	Statistical analysis, Kaplan-Meier	
tests.	survival analyses, and independent	
	sample <i>t</i> -tests were performed using the	
	software SPSS version 23.0 (IBM Corp.,	
	Armonk, NY, USA). A P value <0.05 was	
	considered statistically significant.	
Data Availability	Yes (indicate where provided:	n/a
State whether newly created datasets are available,		It wasn't used in
including protocols for access or restriction on		the experiment
access.		
If data are publicly available, provide accession		It wasn't used in
number in repository or DOI or URL.	The GEPIA is a tool created by Dr. Zhang	the experiment
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		
	with his team at the lab of Peking	
	University, adapting data from The	
	Cancer Genome Atlas (TCGA) database.	
	This paper used GEPIA to research the	
	expression of UCK2 in a variety of	
	tumors, and probe into the prognosis of	
	melanoma expression-related UCK2.	

Code Availability	Yes (indicate where provided:	n/a
For all newly generated code and software essential		It wasn't used in
for replicating the main findings of the study:		the experiment
State whether the code or software is available.		It wasn't used in
If code is publicly available, provide accession		It wasn't used in
number in repository, or DOI or URL.		the experiment

## **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,	ICMJE guidelines were followed, as the journal follows	
ARRIVE) have been followed, and whether a checklist	ICMJE recommendations for publication.	
(eg., CONSORT, PRISMA, ARRIVE) is provided with		
the manuscript.		

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