### <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: section/paragraph)	n/a
For commercial reagents, provide supplier name, catalogue number and RRID, if available.	Method section/paragraph 1 : MTT, Promega, G4100 Annexin V-FITC/PI Kit, BD Biosciences, 556547 Fas antibody, BD Biosciences, 555673 Fas-L antibody, BD Biosciences, 564262 qPCR SuperMIX, TOYOBO, QPK-201 Caspase 8 ELISA kit, RayBiotech, ELH-CASP8-1 Caspase 3 ELISA kit, RayBiotech, ELH-CASP3-1 Ligustrazine, Chengdu Herbpurify, C-045	
Cell materials	Yes (indicate where provided: section/paragraph)	n/a
<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	Method section/paragraph 2 : A549	
<b>Primary cultures:</b> Provide species, strain, sex of origin, genetic modification status.	No such content were involved	
Experimental animals	Yes (indicate where provided: section/paragraph)	n/a
<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 such content were involved	na
Animal observed in or captured from the field: Provide species, sex and age where possible	No such content were involved	na
Model organisms: Provide Accession number in repository (where relevant) <b>OR</b> RRID	No such content were involved	na
Plants and microbes	Yes (indicate where provided: section/paragraph)	n/a
<b>Plants:</b> provide species and strain, unique accession number if available, and source (including location for collected wild specimens)	No such content were involved	na
Microbes: provide species and strain, unique accession number if available, and source	No such content were involved	na
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.	No such content were involved	na
Provide statement confirming informed consent	No such content were involved	na
obtained from study participants.		

number for the regulatory approval

# <u>Design</u>

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number <b>OR</b> cite DOI in manuscript.	No such content were involved	na
Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step- by-step protocols are available.	No such content were involved	na
Experimental study design (statistics details)	Yes (indicate where provided: section/paragraph)	n/a
State whether and how the following have been done, <b>or</b> if they were not carried out.	No such content were involved	na
Sample size determination	No such content were involved	na
Randomisation	No such content were involved	na
Blinding	Method section/paragraph 6 : Experiment and analysis were bi-blinding.	
Inclusion/exclusion criteria	No such content were involved	na
Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory	No such content were involved	na
Define whether data describe technical or biological	Method section/paragraph 6 : All biological replicates	
replicates	were performed at least three times.	
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.	No such content were involved	na
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	No such content were involved	na
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.	No such content were involved	na
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	No such content were involved	

### <u>Analysis</u>

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.	No such content were involved	na
Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	Method section/paragraph 6 : Data for independent experiments were presented as means ± standard error of the mean (SEM) Normally distributed data were compared by unpaired Student's t-test for two groups comparisons and one-way analysis of variance (ANOVA). P values < 0.05 were considered significant difference.	
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.	No such content were involved	na
If data are publicly available, provide accession number in repository or DOI or URL.	No such content were involved	na
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.	No such content were involved	na
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:	No such content were involved	na
State whether the code or software is available.	Method section/paragraph 6 : GraphPad Prism 5.0 and SPSS were both open source software.	na
If code is publicly available, provide accession number in repository, or DOI or URL.	No such content were involved	na

### **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	Footnote section/paragraph 1	
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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