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.	Rabbit polyclonal antibody against human VPAC1 receptor- BioWorld, USA Mouse polyclonal antibody against human VPAC2 receptor- Abgent, USA Mouse polyclonal antibody against human PAC1 receptor- Abgent, USA	

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	Cell lines not used	N
Primary cultures: Provide species, strain, sex of origin, genetic modification status.	**Primary cultures** not used	N

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	**Laboratory animals** not used	N
Animal observed in or captured from the field: Provide species, sex and age where possible	**animals** not used	N
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID	**Model organisms** not used	N

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)	**Plants** not used	N
Microbes: provide species and strain, unique accession number if available, and source	**Microbes** not used	N

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.	The experimental scheme has been approved by the research ethics committee of the Handan Central Hospital, China. The reference number for approval is 20200122.	
Provide statement confirming informed consent obtained from study participants.	Written informed consent was obtained from all subjects. We can provide these statements at any time.	
Report on age and sex for all study participants.	Refer to informed consent	

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.	clinical trials not used	N

Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.	step-by-step protocols not used	n

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.		
Sample size determination	Not used	N
Randomisation	Methods/Paragraph1	
Blinding	Methods/Paragraph1	
Inclusion/exclusion criteria	Methods/Paragraph1	

Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory	**experiment was not replicated**	N
Define whether data describe technical or biological replicates	**No technical or biological replicates**	N

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.	The experimental scheme has been approved by the research ethics committee of the Handan Central Hospital, China. The reference number for approval is 20200122.	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.	**animals** not used	N
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.	**pecimen and field samples** not used	N

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	**dual use research** not used	N

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.	Methods/Paragraph1	

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	Methods/Paragraph10	

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.	data are not publicly available	N
If data are publicly available, provide accession number in repository or DOI or URL.	data are not publicly available	N
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.	data are not publicly available	N

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:		
State whether the code or software is available.	The code or software is not available	N
If code is publicly available, provide accession number in repository, or DOI or URL.	code is not publicly available	N

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, 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/apm-21-193