<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	n/a
For commercial reagents, provide supplier	Methods/ Serological	
name, catalogue number and RRID, if available.	testing/Line131-138	

Cell materials	Yes (indicate where	n/a
Cell lines: Provide species information, strain.		n/a
Provide accession number in repository OR supplier name, catalog number, clone number,		No cell line was used in the present study.
Primary cultures: Provide species, strain, sex of		n/a
origin, genetic modification status.		There was no primary culture in this study.

Experimental animals	Yes (indicate where	n/a
Laboratory animals: Provide species, strain, sex, age,		n/a
genetic modification status. Provide accession		No laboratory animal was used
number in repository OR supplier name, catalog		in the present study.
number, clone number, OR RRID		
Animal observed in or captured from the		n/a
field: Provide species, sex and age where		There was no animal observed
possible		in or captured from the field in
Model organisms: Provide Accession number		n/a
in repository (where relevant) OR RRID		No model organism was used
		in the present study.

Plants and microbes	Yes (indicate where	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		n/a No plant was used in the present study.
Microbes: provide species and strain, unique accession number if available, and source		n/a No microbe was used in the present study.

Human research participants	Yes (indicate where	n/a
Identify authority granting ethics approval (IRB or equivalent committee(s), provide reference number	Methods/Study participants and samples/ Line111-	
for approval.	Line112	
Provide statement confirming informed consent obtained from study participants.	Methods/Study participants and samples/ Line112-	
Report on age and sex for all study participants.	Table2	

Design

Study protocol For clinical trials, provide the trial registration	Yes (indicate where	n/a n/a
number OR cite DOI in manuscript.		The study is not a clinical trial.
Laboratory protocol	Yes (indicate where	n/a

Laboratory protocol	Yes (indicate where	n/a
Provide DOI or other citation details if detailed step-		n/a
by-step protocols are available.		All the kits we used are commercial
		kits, and the operation process is in
		accordance with the instructions

Experimental study design (statistics details)	Yes (indicate where	n/a
State whether and how the following have been		
done, or if they were not carried out.		
Sample size determination	Methods/Study participants and sample collection/ Line94-Line99	
Randomisation		n/a The study is a cross-sectional study.
Blinding		n/a The study is a cross-sectional study.
Inclusion/exclusion criteria	Methods/Study participants and sample collection / Line94-Line99	

Sample definition and in-laboratory replication	Yes (indicate where	n/a
State number of times the experiment was replicated in laboratory		n/a The samples were tested only once, since the commercial kits were verified before application.
Define whether data describe technical or biological replicates		n/a The samples were tested only once, since the commercial kits were verified before application.

Ethics	Yes (indicate where	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 Only specimens were used in this study.
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		n/a Only specimens were used in this study.
Studies involving specimen and field samples: State if relevant permits obtained, provide details of authority approving study; if none were required, explain why.	Methods/Study participants and samples/ Line111-Line115	

Dual Use Research of Concern (DURC)	Yes (indicate where	n/a
If study is subject to dual use research of concern,		n/a
state the authority granting approval and reference		This study is not subject to dual
number for the regulatory approval		use research of concern.

<u>Analysis</u>

Attrition	Yes (indicate where provided:	n/a
State if sample or data point from the analysis is	Results/ Mass screening for	
excluded, and whether the criteria for exclusion were	SARS-CoV-2 exposure/Line158-	
determined and specified in advance.	Line159; Methods/ Study	

Statistics	Yes (indicate where provided:	n/a
Describe statistical tests used and justify choice of	Methods/ Statistical analysis/	
tests.	Line140-Line143	

Data Availability	Yes (indicate where provided:	n/a
State whether newly created datasets are available,		n/a
including protocols for access or restriction on		No new dataset was
access.		created in this study.
If data are publicly available, provide accession		n/a
number in repository or DOI or URL.		No public data was used in
		this study.
If publicly available data are reused, provide		n/a
accession number in repository or DOI or URL, where		No public data is used in
possible.		this study.

Code Availability	Yes (indicate where provided:	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.		n/a No new code and software were generated in this study.
If code is publicly available, provide accession number in repository, or DOI or URL.		n/a No new code and software were generated in this study.

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.		n/a
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. Introduction/Line79-Line80, Footnote Line370	

Article Information: http://dx.doi.org/10.21037/atm-20-7163