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.	Yes (Section: Material and Methods/paragraphs 1&2) CD1a Bio catalogs number 300129 Legend, USA CD83 catalogs number 305307 Bio Legend, USA CD86 catalogs number 305411 Bio Legend, USA CD40 catalogs number 334307 Bio Legend, USA HLA-DR catalogs number 307609 (Bio Legend, USA.) IL10 catalogs number 3430 (Mabtech, Sweden), IL12 catalogs number 3455 (Mabtech, Sweden) TGF-β catalogs number 835088 (Invitrogen, 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		√
Primary cultures: Provide species, strain, sex of origin, genetic modification status.	Yes (Section: Material and Methods /paragraph 1) Mesenchymal stem cells were isolated from human adipose tissue. In this study third passage MSCs were used.	

Experimental animals	No	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		√
Animal observed in or captured from the field: Provide species, sex and age where possible		√
Model organisms: Provide Accession number in repository (where relevant) **OR** RRID		√

Plants and microbes	NO	n/a
Plants: provide species and strain, unique accession number if available, and source (including location for collected wild specimens)		√
Microbes: provide species and strain, unique accession number if available, and source		√

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.	Yes (Section: Material and Methods /paragraph 7) IR.IUMS.FMD.REC 1396.9411127004	
Provide statement confirming informed consent obtained from study participants.	This study was approved by the ethics board of Iran University of Medical Sciences (IR.IUMS.FMD.REC 1396.9411127004) and informed consent was taken from all individual participants.	
Report on age and sex for all study participants.	Male and female – age 35-45	

Design

Study protocol	Yes (indicate where provided: section/paragraph)	n/a
For clinical trials, provide the trial registration number **OR** cite DOI in manuscript.		√

Laboratory protocol	Yes (indicate where provided: section/paragraph)	n/a
Provide DOI or other citation details if detailed step-by-step protocols are available.	Yes, the Material and Methods, paragraphs: Mesenchymal Stem Cell Isolation and culture, Monocyte-Derived Dendritic Cells, PBMC Isolation, Cell	

Experimental study design (statistics details)	Yes (Section: Material and Methods /paragraph)	n/a
State whether and how the following have been done**, or** if they were not carried out.		√
Sample size determination		√
Randomisation		√
Blinding		√
Inclusion/exclusion criteria		√

Sample definition and in-laboratory replication	Yes (indicate where provided: section/paragraph)	n/a
State number of times the experiment was replicated in laboratory	Yes**. (**Material and Methods /paragraph 8) The tests were repeated three times in duplicate	
Define whether data describe technical or biological replicates	Data describe technical replicates	

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.	Yes**. (**Material and Methods /paragraph 7) This study was approved by the ethics board of Iran University of Medical Sciences (IR.IUMS.FMD.REC 1396.9411127004) and informed consent was taken from all individual participants.	
Studies involving experimental animals: State details of authority granting ethics approval (IRB or equivalent committee(s), provide reference number for approval.		√
Studies involving specimen and field samples: State if 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: 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		√

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.		√

Statistics	Yes (indicate where provided: section/paragraph)	n/a
Describe statistical tests used and justify choice of tests.	Yes**. (**Material and Methods /paragraph **8**) Quantitative data were analyzed for normal distribution by the normalization test. The quantitative data presented in this study were non-parametric. For statistical analysis and comparison of the results of the data in the studied groups, Mann-Whitney (between two groups) and Kruskal-Wallis (more than two groups) were used.	

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.		√
If data are publicly available, provide accession number in repository or DOI or URL.		√
If publicly available data are reused, provide accession number in repository or DOI or URL, where possible.		√

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.	Yes	
If code is publicly available, provide accession number in repository, or DOI or URL.	Flowjo 7.6 – SPSS version23, Graph pad prism 6.01	

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/sci-2020-008